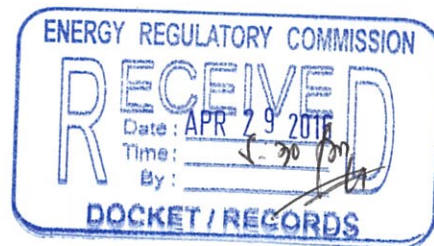


Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

IN THE MATTER OF THE  
APPLICATION FOR THE  
APPROVAL OF THE POWER  
SUPPLY AGREEMENT (PSA)  
BETWEEN MANILA ELECTRIC  
COMPANY (MERALCO) AND  
REDONDO PENINSULA  
ENERGY, INC. (RPE), WITH  
MOTION FOR CONFIDENTIAL  
TREATMENT OF  
INFORMATION,



ERC CASE NO. 2016 – 084RC

MANILA ELECTRIC COMPANY  
(MERALCO) AND REDONDO  
PENINSULA ENERGY, INC.  
(RPE),

*Applicants.*

X-----X

**JOINT APPLICATION**  
**WITH MOTION FOR CONFIDENTIAL TREATMENT**  
**OF INFORMATION**

Applicants **MANILA ELECTRIC COMPANY** ("MERALCO") and **REDONDO PENINSULA ENERGY, INC.** ("RPE"), through their respective undersigned counsel, respectfully state:

1. Applicant MERALCO is a private corporation existing under the laws of the Republic of the Philippines, with principal office located at Ortigas Avenue, Barangay Ugong, Pasig City. It may be served with notices and other processes of this Honorable Commission through its counsel at the address indicated herein.

2. MERALCO has a legislative franchise to operate and maintain a distribution system in the cities/municipalities of Metro Manila, Bulacan, Cavite and Rizal and certain cities, municipalities and barangays in Batangas, Laguna, Quezon and Pampanga, pursuant to Republic Act No. 9209, and is authorized to charge all its

customers for their electric consumption at the rates approved by this Honorable Commission.

3. Applicant RPE is a corporation duly organized and existing under the laws of the Republic of the Philippines, with its office address at Unit 310, The Venue, Rizal Highway, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport Zone, Philippines. It may be served with notices and other processes of this Honorable Commission through its counsel at the address indicated herein.

4. RPE shall construct, own, operate, manage and maintain a 300 MW (net) sub-critical circulating fluidized-bed coal-fired power generating facility in Sitio Naglatore, Barangay Cawag, Municipality of Subic in the Province of Zambales, within the Subic Bay Freeport Zone (the "**Plant**").

5. Based on MERALCO's Distribution Development Plan, "from 2015 to 2024, energy sales is forecasted to grow by a compounded average growth rate of 3.7%."

6. In order to ensure continuous and reliable electricity for MERALCO's customers with the expected continuous increase in demand and load growth, and mitigate exposure to the Wholesale Electricity Spot Market ("**WESM**"), there is a need for MERALCO to source additional capacity through bilateral power supply contracts.

7. Under Section 45(b) of Republic Act No. 9136 ("**EPIRA**"), it is provided that "*Distribution utilities may enter into bilateral power supply contracts subject to review by the ERC xxx*".

8. Accordingly, following extensive negotiations, on 20 April 2016, MERALCO executed a Power Supply Agreement ("**PSA**") with RPE, for the purchase of 225 MW Contract Capacity and Associated Energy from the Plant that RPE shall construct, own, operate, manage and maintain.

9. The PSA, a copy of which is attached as **ANNEX "A"** and made an integral part hereof, contains the following salient features:

## **“ARTICLE 2 PURPOSE; TERM**

xxx

### **Section 2.2 Term of Agreement**

2.2.1 This Agreement shall become effective upon the satisfaction (or the waiver by the relevant Party) of the conditions set out in Section 3.1 (the “**Effective Date**”).

2.2.2 The term of this Agreement (the “**Term**”) shall commence on the Effective Date and shall expire on the date falling twenty (20) years after the Operations Effective Date xxx.

xxx

## **ARTICLE 3 EFFECTIVE DATE, COMMENCEMENT DATE AND COMMERCIAL OPERATIONS DATE**

### **Section 3.1 Effective Date**

3.1.1 The Effective Date shall be the date that the following conditions shall have been satisfied or waived by the relevant Party, as certified by Power Supplier and Meralco xxx.

xxx

### **Section 3.2 Commencement Date**

3.2.1 The “**Commencement Date**” shall occur upon the satisfaction of the conditions below;

- (a) the conditions set out in Section 3.1 have been fulfilled;
- (b) each Party has delivered to the other Party a certification dated no earlier than two (2) Days prior to the proposed Commencement Date to the effect that its representations and warranties contained herein shall be true and correct in all material respects on and as of the Commencement Date;
- (c) on or before the Longstop Date, (i) the ERC shall have approved in the ERC Final Approval this Agreement, including the pricing structure as set out herein (or as otherwise acceptable to Power Supplier), and (ii) the Acceptance Date has occurred; and

- (d) Financial Close or NTP Issuance shall have occurred within the period contemplated under Section 3.2.2.

Power Supplier shall deliver written notice to Meralco of the satisfaction of these conditions and Meralco shall confirm in writing the occurrence of the Commencement Date.

3.2.2 Power Supplier covenants to achieve Financial Close or NTP Issuance within ninety (90) Days from the Acceptance Date (the "**Required Financial Completion Date**").

xxx

### **Section 3.3 Operations Effective Date**

3.3.1 Subject to the occurrence of the Commencement Date, Operations Effective Date shall occur on the date that is forty-four (44) months from the Commencement Date. From and after the Operations Effective Date, the obligations of Power Supplier and Meralco under this Agreement with respect to the sale and purchase of Contract Capacity and Associated Energy shall become effective.

3.3.2 If, at any time after the occurrence of the Operations Effective Date, Power Supplier fails to supply Meralco with Contract Capacity and Associated Energy, Meralco shall be entitled to procure Replacement Power from the WESM and Power Supplier shall be liable to pay Meralco the amount equivalent to the difference between (i) the WESM cost of the Replacement Power and (ii) the amount Meralco would have paid for the Replacement Power had it been paid at the Price (the "**WESM Differential**"). For the avoidance of doubt, if the WESM Differential is a negative number, Meralco shall have no liability whatsoever to Power Supplier.

3.3.3 After Meralco receives the invoice from the WESM that includes the WESM Differential, Meralco shall be entitled to invoice Power Supplier for payment of the WESM Differential. Power Supplier shall pay the WESM Differential within five (5) Days from receipt of such invoice.

3.3.4 In the event Power Supplier fails to pay Meralco the WESM Differential within the period stated in Section 3.3.3, Meralco shall be entitled to draw on the Performance Security, subject to the obligation of Power Supplier to replenish the Performance Security in accordance with Section 4.5.



3.3.5 In the event that Power Supplier fails to supply Contract Capacity and Associated Energy to Meralco for sixty (60) Days, Meralco shall have the right, by written notice to Power Supplier, to terminate this Agreement. In case of such termination, Meralco shall have the right to forfeit as liquidated damages the amount of the Performance Security and to draw on the Performance Security for the settlement of such liquidated damages.

#### **Section 3.4 Commercial Operations Date and Scheduled Commercial Operations Date**

3.4.1 The "**Commercial Operations Date**" shall occur upon delivery by Power Supplier of the documents enumerated below, in each case, in the form and substance satisfactory to Meralco:

- (a) Capacity Test Certificate xxx;
- (b) a Net Plant Heat Rate Test Certificate xxx;
- (c) all permits, licenses, authorizations and other approvals from all Government Authorities and third parties needed for the operation of the Plant and the supply of electricity by the Power Supplier to Meralco xxx;
- (d) a Commercial Operations Date Certificate; and
- (e) certification by Power Supplier's insurance advisor or broker that the insurances required for the Plant under this Agreement relevant for at least the first Contract Year have been obtained.

xxx

#### **Section 3.5 Early Occurrence of the Commercial Operations Date**

3.5.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Operations Effective Date ("Early Commercial Operations Date"), Power Supplier shall promptly deliver to Meralco written notice (the "Early COD Notice") of such anticipated Early Commercial Operations Date, indicating the anticipated date thereof, at least three (3) months prior to the then anticipated date of the Early Commercial Operations Date.

3.5.2 Upon receipt of such Early COD Notice, Meralco shall, by written notice to Power Supplier, choose between the following options:

- (a) Consider that the Operations Effective Date shall occur on the Early Commercial Operations Date or on such other date as the Parties may agree; or
- (b) Elect to have Power Supplier deliver, on a non-firm basis during the Interim Supply Period and until the occurrence of the Operations Effective Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

xxx

## **ARTICLE 6**

### **SALE AND PURCHASE OF CONTRACT CAPACITY AND ASSOCIATED ENERGY**

#### **Section 6.1      Sale and Purchase of Power**

6.1.1 Subject to the terms and conditions of this Agreement, from the Operations Effective Date until the expiration of the Term, Power Supplier shall:

- (a) make available to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Contract Capacity of the Plant; and
- (b) sell and Deliver to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Associated Energy, to the extent of Meralco's relevant day-ahead nominations as provided in Appendix H;

provided that, Power Supplier may make available Contract Capacity and Deliver Associated Energy to Meralco from other sources, including the WESM, at the Price; and any such Associated Energy Delivered from such other sources shall be deemed Delivered by Power Supplier by declaration made from the Plant.

The Dispatch of Contract Capacity and Associated Energy shall meet the requirements set out in Appendix B.

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent, sell, divert, grant, transfer, dedicate, reserve or assign all or any portion of the Contract Capacity and Associated Energy to any Person other than Meralco.

6.1.3 The supply of Contract Capacity and Associated Energy by Power Supplier to Meralco shall be in accordance with the WESM Rules. Each Party shall, during the Term, always keep and maintain its registration as a Direct WESM Member.

6.1.4 Power Supplier shall source its supply for Meralco from the Plant except during (i) the Interim Supply Period; (ii) Outages; (iii) any curtailment due to Dispatch Instructions; (iv) ramping limitations and (v) system frequency fluctuations.

xxx

**ARTICLE 9  
OUTAGES<sup>1</sup>**

**Section 9.1        Scheduled Outage and Major Maintenance Outage Allowances**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages not to exceed the Full Load Equivalent Scheduled Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which times reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Scheduled Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Scheduled Outage Allowance Days.

<sup>1</sup> Schedule 1, Appendix E of the PSA:

|                                                         |                                                    |
|---------------------------------------------------------|----------------------------------------------------|
| Base Full Load Equivalent Scheduled Outage Allowance    | 30 Days per Contract Year                          |
| Full Load Equivalent Major Maintenance Outage Allowance | 20 Days, not more frequent than once every 4 years |
| Base Full Load Equivalent Forced Outage Allowance       | 15 Days per Contract Year                          |

Power Supplier shall be entitled to the Full Load Equivalent Major Maintenance Outage Allowance Days to undertake major repair, overhaul and maintenance of the Plant in accordance with the technical requirements of the Plant; provided that, it shall, in no case, be availed of more frequently than once every four (4) years; and provided further, that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after the occurrence of the Commercial Operations Date.

## **Section 9.2      Forced Outage Allowance**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Forced Outages not to exceed the Full Load Equivalent Forced Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which time reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Forced Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Forced Outage Allowance Days.

## **Section 9.3      Replacement Power**

9.3.1 During outages within the Full Load Equivalent Forced Outage Allowance Days, Full Load Equivalent Scheduled Outage Allowance Days and the Full Load Equivalent Major Maintenance Outage Allowance Days, Power Supplier shall not be required to supply Meralco with Replacement Power. In such circumstances, Meralco, at its own cost, shall source the Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.

9.3.2 During any period in which an Event of Force Majeure affects Power Supplier or Meralco, Meralco shall procure its own Replacement Power from the WESM to the extent supply or offtake is so affected.

9.3.3 During any period of Scheduled Outage for which unutilized Full Load Equivalent Scheduled Outage Allowance Days is not available, or Major Maintenance Outage for which unutilized Full Load Equivalent Major Maintenance Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E. During any period of Forced Outage for which unutilized Full Load Equivalent Forced Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier and delivered to Meralco under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E.

xxx

## **ARTICLE 10**

### **ASSIGNMENT OR TRANSFER OF CONTRACT CAPACITY**

#### **Section 10.1 Implementation of Open Access and Retail Competition or Reduction in Demand of Captive Customers**

With the implementation of Open Access and Retail Competition in phases in accordance with the guidelines issued by the ERC or in relation to any reduction in demand of Meralco's captive customers, the amount of Contract Capacity may be adjusted in accordance with the terms hereof.

#### **Section 10.2 Notification of Reduction in Contract Capacity**

In respect of the start of each phase under Open Access and Retail Competition or in case of any reduction in demand of Meralco's captive customers, Meralco shall deliver to Power Supplier written notice specifying the reduced amount of Contract Capacity under this Agreement resulting from transfers made in accordance with Section 10.3.

#### **Section 10.3 Assignment or Transfer of Contract Capacity Due to Open Access and Retail Competition or Reduction in Demand of Captive Customers**

10.3.1 Meralco shall be entitled to assign, transfer, designate, delegate or allocate (collectively in this context, "**Transfer**") its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to any of its business segments or its Retail Electricity Supplier ("**RES**") Affiliate, without the prior consent of the Power Supplier. In the event that Meralco has two or more RES Affiliates, Power Supplier shall have the option to choose the RES Affiliate to which Meralco shall Transfer its rights and obligations, which option shall be communicated to Meralco within five (5) Days from receipt of the Transfer Notice (defined below).

10.3.2 Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to (i) any of its Affiliates or (ii) to any other Person, subject to the consent of Power Supplier, which consent shall not be unreasonably withheld delayed or conditioned, it being understood that withholding consent would not be considered unreasonable if the proposed Transfer would be contrary to the reasonable requirements of Finance Parties under the Finance Documents, as evidenced by a written confirmation by the relevant Finance Parties. Power Supplier shall exert reasonable efforts to (i) procure that only the consent of Finance Parties representing no more than seventy-five percent (75%) of the debt plus undrawn commitments shall be required for a Transfer under the Finance Documents; and (ii) upon written notice being given by Meralco, procure such consent for the Transfer. Meralco shall endeavor to cooperate with Power Supplier by providing documents and information in relation to the Transfer as may be reasonably required by the Finance Parties.

xxx

## **ARTICLE 11**

### **BILLING AND PAYMENT**

xxx

#### **Section 11.2 Payments**



11.2.1 Meralco shall pay the entire amount indicated in the Final Invoice (subject to Appendix I) when due and payable, provided that Meralco shall not be required to make payment on any Invoice that is manifestly in error, apparently invalid or not in the form or substance contemplated by this Agreement until the same has been corrected following prompt notice by Meralco to Power Supplier of such error, invalidity or absence of proper form or substance.

XXX

## ARTICLE 12 TAXES, FEES AND COSTS

XXX

### Section 12.2 Charges Due to Change in Circumstances

12.2.1 If, as a result of a Change in Circumstances, Meralco becomes liable to pay any new charges, fees, taxes, duties, assessments or other similar amounts ("**New Charges**"), or any increase in existing charges, fees, taxes, duties, assessments or other similar amounts ("**Increased Charges**") become payable with respect to this Agreement, the New Charges or Increased Charges shall form part of the price that Meralco will charge to its customers.

12.2.2 In the event that, as a result of a Change in Circumstances and pursuant to a corresponding order of the ERC or any relevant Government Instrumentality:

- (a) Meralco is prevented from making a timely pass through to its customers of any charges under this Agreement as approved by the ERC in the ERC Final Approval as accepted by Power Supplier (such amounts referred to hereinafter as "**Disallowed Pass-Through Amounts**"); or
- (b) any portion of the Price that has been paid to Power Supplier is required to be refunded to Meralco or Meralco's customers in connection with the ERC Application or any petition, claim, case, proceeding or other action involving any of the Parties brought before any judicial, administrative or quasi-judicial body (such portion of the Price referred to hereinafter as "**Refundable Amounts**"),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement to restore Meralco's commercial position prior to such Change in Circumstances, including an adjustment of the Price; provided that in the case of Section 12.2.2(b), Power Supplier shall refund all Refundable Amounts to Meralco or Meralco's customers in the manner and within the period as required by the ERC or any other relevant Government Instrumentality (as applicable). If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the provisions of Section 18.6.6(a) will apply.

12.2.3 If as a result of a Change in Circumstances affecting Power Supplier, Power Supplier becomes liable to pay any New Charges or any Increased Charges with respect to this Agreement, or Power Supplier is no longer able to require payment from Meralco for Disallowed Pass-Through Amounts, or Power Supplier is required to refund Refundable Amounts, or a Change in Circumstances materially increases the operating costs or capital expenditures associated with the Plant or materially and adversely affects its performance of its obligations under this Agreement, adversely affects the sale by Power Supplier of Contract Capacity and Associated Energy in accordance with this Agreement, makes the Power Supplier's administration or operational aspects of such performance materially more burdensome (whether made at the direction of any Governmental Instrumentality or otherwise) or causes serious damage to, or materially and adversely affects the financial condition of Power Supplier, Power Supplier shall send a notice to Meralco of the occurrence of such Change in Circumstances ("**Notice of Change in Circumstances**") together with an analysis of the cost impact of such Change in Circumstances and Meralco shall file the necessary application with the ERC for the adjustment of the Price ("**Application for Price Adjustment**") within thirty (30) Days from receipt of the Notice of Change in Circumstances; provided that, Meralco shall not be liable to pay any adjustment in the Price from the time the Change in Circumstances becomes effective until the ERC approves the Application for Price Adjustment ("**Interim Period**"); and provided, further, that New Charges or Increased Charges for which the Power Supplier sends a Notice of Change in Circumstances in accordance with this Section 12.2.3 shall not include charges, fees, taxes, duties or other similar amounts relating to (i) taxes on the income of Power Supplier, (ii) taxes on the real property owned, held by or in possession of Power Supplier, and (iii) business taxes on the operations of Power Supplier.

12.2.4 In the event that:

- (a) Meralco is unable to file an Application for Price Adjustment within thirty (30) Days from receipt of the Notice of Change in Circumstances, or
- (b) the ERC denies, in whole or in part, the Application for Price Adjustment, or
- (c) if no order is issued granting the Application for Price Adjustment within sixteen (16) months from receipt of the Notice of Change in Circumstances, or
- (d) the total amount of unreimbursed New Charges, Increased Charges, Disallowed Pass-Through Amounts that Power Supplier is unable to collect from Meralco, and the Refundable Amounts actually refunded by Power Supplier, accumulated during the Interim Periods for all Change in Circumstances events occurring for the entire Term ("**Unreimbursed New or Increased Charges and Refundable Amounts**") exceeds the equivalent of two percent (2%) of the Capacity Payments for one (1) Contract Year ("**Threshold Level 1**"),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement to restore Power Supplier's commercial position prior to such Change in Circumstance, including an adjustment of the Price. If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the Power Supplier shall be entitled to terminate this Agreement in accordance with the provisions of Section 18.6.6(b).

xxx

## **ARTICLE 14 COVENANTS**

xxx

### **Section 14.2 ERC Approval**

14.2.1 Subject to the non-occurrence of the Longstop Date, Power Supplier shall immediately inform Meralco of its receipt of the ERC Final Approval by providing proof thereof. Power Supplier shall have ten (10) Days from the date of such receipt of the ERC Final Approval to notify Meralco in writing that (i) it accepts such ERC Final Approval or (ii) it does not accept the ERC Final Approval, stating the grounds for non-acceptance.

14.2.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration and Meralco shall cooperate and use reasonable efforts to support any such motion. Any order on a motion for reconsideration filed shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.2, and Power Supplier shall accept or reject such ERC Final Approval in accordance with Section 14.2.1 above.

14.2.3 If the ERC's Final Approval requires an amendment of any provision herein, including provisions on amounts payable under this Agreement, or subjects such approval to any material term or condition that is not acceptable to either Party, acting reasonably ("**ERC Conditional Approval**"), the Parties shall cooperate in good faith to resolve the required ERC amendment or to address the material term or condition. The Parties may:

- (a) within fifteen (15) Days after the receipt of the ERC Conditional Approval, seek reconsideration of the ERC Conditional Approval; or
- (b) within sixty (60) Days after receipt of the ERC Conditional Approval, revise and file an amended Agreement incorporating changes (other than the Price) for approval by the ERC ("**Amended Agreement**");

provided that, if the motion for reconsideration is denied by the ERC, or the Amended Agreement is disapproved by the ERC, or approved by the ERC but still with any material term or condition that is not acceptable to either Party, acting reasonably, the Party adversely affected may terminate this Agreement upon sixty (60) Days prior written notice to the other Party in accordance with the provisions of Section 18.6.2.

xxx

## ARTICLE 17 FORCE MAJEURE

XXX

### **Section 17.5      Effect of Extended Force Majeure**

If any Event of Force Majeure prevents Power Supplier from making available the Contract Capacity or Delivering the Associated Energy or Meralco from accepting Contract Capacity or Associated Energy, in each case for a continuous period of more than one hundred eighty (180) Days, then either Party may upon written notice, require the other Party to meet as soon as practicable to reasonably discuss any modification, change or amendment of this Agreement under such reasonable terms, to the extent necessary to resolve the issues arising from the Event of Force Majeure and maintain, to the extent feasible, the rights and obligations of the Parties under this Agreement.

If the Parties do not reach such satisfactory solution prior to the end of such one hundred eighty (180) Day period, or such other time as may be agreed upon, either Party may terminate this Agreement in accordance with Section 18.6.5.

XXX

## **ARTICLE 18 EVENTS OF DEFAULT AND TERMINATION**

XXX

### **Section 18.3      Remedies in case of an Event of Default**

18.3.1      During the Curing Period with respect to a Power Supplier Event of Default, Meralco shall, for each time Power Supplier fails to make Available the Contract Capacity or to Deliver the Associated Energy, be entitled to source energy from the WESM. In such case, and provided that Power Supplier is able to cure the Power Supplier Event of Default prior to the exercise by Meralco of its rights under Section 18.3.3, Power Supplier shall be liable to pay Meralco the difference between the amount Meralco actually paid for such energy and the Price. It is understood and agreed that, despite the cure of a Power Supplier Event of Default, Meralco's rights under Section 18.3.3 continues to subsist until Power Supplier makes full payment of its liability under this Section 18.3.1.

18.3.2 During the Curing Period with respect to a Meralco Event of Default, Power Supplier shall, from the time of Meralco's failure to accept or pay for the Contract Capacity and Associated Energy, be entitled to sell the Contract Capacity and Associated Energy to the WESM. In such case, and provided that Meralco is able to cure the Meralco Event of Default prior to the exercise by Power Supplier of its rights under Section 18.3.4, Meralco shall be liable to pay Power Supplier the difference between the amount Power Supplier actually received from such sale to the WESM and the Price. It is understood and agreed that, despite the cure of a Meralco Event of Default, Power Supplier's rights under Section 18.3.4 continues to subsist until Meralco makes full payment of its liability under this Section 18.3.2.

xxx"

10. The Payment Structure, as provided in Appendix E of the PSA shall be as follows:

**"C. PAYMENT UPON OPERATIONS EFFECTIVE DATE**

The payment to be made in each Billing Period during the Term for Contract Capacity and Associated Energy shall consist of a Capacity Payment, Energy Payment, Interconnection Facilities Payment, and Reimbursable Cost Payment. The Capacity Payment consists of Component A (MCP), and Component B (MFOM), and the Energy Payments consists of Component C (MFP), and Component D (MVOM). Other payments consist of Component E (MIFP), Component F Reimbursable Cost Payment (RCP) and Component G (VAT). Thus, the Monthly Power Bill ("MPB") payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

$$\text{MPB} = \text{MCP} + \text{MFOM} + \text{MFP} + \text{MVOM} + \text{MIFP} + \text{RCP} + \text{VAT}"$$

11. Given the foregoing, a sample calculation of the base contract price under the PSA, given a certain set of assumptions, results in an annual effective rate of PhP3.8466 per kWh (at plant gate), as shown in the sample calculation below:

**RPE PSA - Rate Impact**  
(YEAR 2021)

| BILLING COMPONENT                                        | UNIT                       | BASE RATE <sup>(a)</sup> | CPI Adj Factor <sup>(b)</sup> | BILLING DETERMINANT <sup>(c)</sup> |       | AMOUNT (PHP)       |
|----------------------------------------------------------|----------------------------|--------------------------|-------------------------------|------------------------------------|-------|--------------------|
| <b>A. Capacity Payment (MCP)</b>                         |                            |                          |                               |                                    |       |                    |
| Peso Portion                                             | (Php/kW-yr) <sup>(d)</sup> | 14,913.2468              |                               | 225,000                            | (kW)  | 3,355,480,530.00   |
| <b>B. Fixed O&amp;M Payment (MFOM)</b>                   |                            |                          |                               |                                    |       |                    |
| US Dollar Portion Escalating                             | (USD/kW-yr) <sup>(e)</sup> | 19.2828                  | 1.000000                      | 225,000                            | (kW)  | 199,880,684.10     |
| Peso Portion Escalating                                  | (Php/kW-yr) <sup>(e)</sup> | 1,870.1836               | 1.000000                      | 225,000                            | (kW)  | 420,791,310.00     |
| <b>C. Fuel Payment (MFP)</b>                             |                            |                          |                               |                                    |       |                    |
| US Dollar Portion                                        | (USD/kWh) <sup>(f)</sup>   | 0.0220                   |                               | 1,576,800,000                      | (kWh) | 1,595,887,404.73   |
| <b>D. Variable O&amp;M Payment (MVOM)</b>                |                            |                          |                               |                                    |       |                    |
| Peso Portion                                             | (Php/kWh)                  | 0.1572                   | 1.000000                      | 1,576,800,000                      | (kWh) | 247,872,960.00     |
| <b>E. Interconnection Facilities Payment (MIFP)</b>      |                            |                          |                               |                                    |       |                    |
| Capital Recovery                                         | (Php/kW-yr)                | 403.4155                 |                               | 225,000                            | (kW)  | 90,768,487.50      |
| Fixed O&M                                                | (Php/kW-yr)                | 174.6456                 | 1.000000                      | 225,000                            | (kW)  | 39,295,260.00      |
| <b>F. Reimbursable Cost Payment (RCP) <sup>(g)</sup></b> |                            |                          |                               |                                    |       |                    |
| Real Property Tax                                        | (Php)                      |                          |                               |                                    |       | 1,854,823          |
| Lease Fees                                               | (Php)                      |                          |                               |                                    |       | 75,000,000         |
| Start-up and Shutdown Costs                              | (Php)                      |                          |                               |                                    |       | -                  |
| Supplemental Payments                                    | (Php)                      |                          |                               |                                    |       | 38,473,920         |
| Commissioning Energy Charges                             | (Php)                      |                          |                               |                                    |       | -                  |
| Replacement Power                                        | (Php)                      |                          |                               |                                    |       | -                  |
| <b>TOTAL PAYMENT</b>                                     | (Php)                      |                          |                               |                                    |       | 6,065,305,379.42   |
| <b>Effective Rate at Plant Gate</b>                      | (Php/kWh)                  |                          |                               |                                    |       | 3.8466             |
| <b>WESM Line Rental Rate <sup>(h)</sup></b>              | (Php/kWh)                  |                          |                               |                                    |       | 0.3000             |
| <b>Delivered Rate</b>                                    | (Php/kWh)                  |                          |                               |                                    |       | 4.1466             |
| <b>Effective Cost at WESM Price <sup>(i)</sup></b>       | (Php/kWh)                  |                          |                               |                                    |       | 7.0640             |
| <b>Increase / (Decrease) over WESM Price</b>             | (Php/kWh)                  |                          |                               |                                    |       | (2.9174)           |
| <b>Meralco Captive Energy Demand <sup>(j)</sup></b>      | (kWh)                      |                          |                               |                                    |       | 34,658,621,088     |
| <b>Increase / (Decrease) in Generation Cost</b>          | (Php)                      |                          |                               |                                    |       | (4,600,188,356.80) |
| <b>Increase / (Decrease) in Generation Cost</b>          | (Php/kWh)                  |                          |                               |                                    |       | (0.1327)           |

**NOTE:**

<sup>(a)</sup> Base Rates as set forth in Schedule 1 of Appendix E of the PSA

<sup>(b)</sup> Annual Capacity Rate and Annual Fixed O&M is converted into monthly rates by applying the formulas shown in Appendix E of the PSA

<sup>(c)</sup> Fuel Payment calculated based on Guaranteed Net Plant Heat Rate at 91.25% plant load factor, Newcastle index = USD 50.38/MT, Freight Price = USD 5.90/MT, and Forex rate at PhP 46.07/USD (current prices as of Mar 2016)

<sup>(d)</sup> Reimbursable Payments (pass through costs) based on estimated taxes

<sup>(e)</sup> Assumed estimated RPE line rental rate

<sup>(f)</sup> Cost if equivalent volume of RPE was sourced from the WESM based on forecast average Jan - Dec 2021 hourly prices

<sup>(g)</sup> Meralco Captive Energy Demand based on 2021 forecast

<sup>(h)</sup> Assumed no CPI escalation

<sup>(i)</sup> Energy Payments based on 80.00% plant capacity factor

12. As seen in the rate impact above, given the above assumptions, the simulated delivered price under the PSA would result in the reduction of MERALCO's generation charge by about PhP0.1327 per kWh.

13. Notably, the Plant offers greater reliability compared to existing plants that are past their expected plant life, at a price competitively at par with the rates of the existing plants despite its newness.

14. It bears emphasis that there is an urgent need for the final approval of the PSA considering the requirement of lenders for the Honorable Commission's final approval of the PSA prior to financial

closure. Only thereafter can RPE commence construction of the Plant to meet the target Commercial Operations Date and allow for delivery of MERALCO's needed capacity and associated energy by then.

15. Verily, this Honorable Commission's approval of the PSA will send strong signals to lenders of the viability of financing power generation projects in the Philippines, and thus, set the pace for infusion of similar investments by the private sector.

16. Additionally, the Plant is part of the Department of Energy's ("**DOE**") planned indicative power projects. It is worthy to note that the realization of this project and its contribution to achieving the government's target of available capacity as per the DOE's Philippine Development Plan would largely depend on the timely approval of this Application.

17. In support of this Application, the Judicial Affidavit of **MR. CIPRINILO C. MENESES**, Head of MERALCO's Energy Sourcing Office, is attached as **ANNEX "B"** and made an integral part hereof.

18. Likewise, in support of this Application, the Applicants provide this Honorable Commission with the following documents, which underwent the pre-filing conference of this Honorable Commission, to wit:

| DESCRIPTION OF DOCUMENT                                                                                                               | ANNEX     |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Articles of Incorporation of RPE                                                                                                      | <b>C</b>  |
| Securities and Exchange Commission (" <b>SEC</b> ") Certificate of Registration of the said Articles of Incorporation                 | <b>D</b>  |
| List of Shareholders (Latest GIS of RPE – SEC Form)                                                                                   | <b>E</b>  |
| Write-up on Board of Investment (" <b>BOI</b> ") Certificate of Registration                                                          | <b>F</b>  |
| Environmental Compliance Certificate (" <b>ECC</b> ") issued by the Department of Environment and Natural Resources (" <b>DENR</b> ") | <b>G</b>  |
| Executive Summary                                                                                                                     | <b>H</b>  |
| Debt/Equity Ratio                                                                                                                     | <b>I</b>  |
| Project Cost                                                                                                                          | <b>J</b>  |
| Computation of Return on Investment/Weighted Average Cost of Capital (" <b>WACC</b> ")                                                | <b>K</b>  |
| Write-up on Certification from the Bank/Lending Institution                                                                           | <b>L</b>  |
| Purchased Power Rate/Breakdown of the base prices of Operation and Maintenance; Capacity Fee; Fixed Operation Fee; and Energy Fee     | <b>M*</b> |



|                                                                                            |            |
|--------------------------------------------------------------------------------------------|------------|
| Sample Computation of Power Rates                                                          | <b>N</b>   |
| Rate Impact on the overall rates of MERALCO upon approval of the PSA                       | <b>O</b>   |
| Basis/Rationale of Indexation                                                              | <b>P</b>   |
| Cash Flow specifying the Initial Costs and Breakdown of Operating and Maintenance expenses | <b>Q*</b>  |
| Write-up on Minimum Energy Off-take ("MEOT")                                               | <b>R</b>   |
| Write-up on the Procurement Process of Fuel                                                | <b>S</b>   |
| Write-up on Related Agreements                                                             | <b>T</b>   |
| Connection Agreement between National Grid Corporation ("NGCP") and RPE                    | <b>U</b>   |
| Write-up on Certificate of Compliance ("COC") of RPE                                       | <b>V</b>   |
| Write-up on National Power Corporation ("NPC") Certification                               | <b>W</b>   |
| Technical and Economic Characteristics                                                     | <b>X</b>   |
| Cost Analysis                                                                              | <b>Y*</b>  |
| Procurement Process leading up to the execution of the PSA                                 | <b>Z</b>   |
| Details regarding transmission projects                                                    | <b>AA</b>  |
| Letter from Department of Energy's ("DOE") regarding Philippine Development Plan ("PDP")   | <b>BB</b>  |
| Distribution Development Plan ("DDP") of MERALCO                                           | <b>CC</b>  |
| Demand Side Management (DSM) of MERALCO                                                    | <b>DD</b>  |
| Latest and Complete Set of Audited Financial Statements of RPE                             | <b>EE</b>  |
| Operating Expenses                                                                         | <b>FF*</b> |
| Sworn Statement on Fuel Procurement                                                        | <b>GG</b>  |
| Write-up on Certification of Engine Manufacturer                                           | <b>HH</b>  |
| Write-up on Simulation of the Number of Operating Units necessary to meet the MEOT         | <b>II</b>  |
| Write-up on Potential Cost (absolute amounts and PhP/kWh) of Ancillary Services            | <b>JJ</b>  |
| Acknowledgement receipt by the City of Pasig                                               | <b>KK</b>  |
| Affidavit of Publication                                                                   | <b>LL</b>  |

*\* These documents are requested to be treated as confidential and are attached to this Application in a sealed envelope.*

## **ALLEGATIONS IN SUPPORT OF MOTION FOR CONFIDENTIAL TREATMENT OF INFORMATION**

19. RPE notes that Annexes "M", "Q", "Y" and "FF" of this Application contain certain non-public information, data and calculations involving business operations and financial trade secrets

reflecting RPE's investment and business calculations and, as such, are confidential in nature. Further, there are confidentiality clauses set out by the Parties under the PSA.

20. Under Rule 4 of the ERC Rules of Procedure, the Honorable Commission may, upon request of a party and determination of the existence of conditions which would warrant such remedy, treat certain information submitted to it as confidential. Pursuant to said rule, RPE respectfully move that **Annexes "M", "Q", "Y" and "FF"** not be disclosed and be treated as confidential documents in accordance with Rule 4 of the ERC Rules of Procedure.

21. RPE hereby submits Annexes "M", "Q", "Y" and "FF" in a sealed envelope.

### **PRAYER**

**WHEREFORE**, premises considered, it is respectfully prayed that the Honorable Commission:

- a) **ISSUE** an Order (i) treating Annexes "M", "Q", "Y" and "FF" and the information contained therein as confidential, (ii) directing their non-disclosure to persons other than officers and staff of the Honorable Commission, as necessary, pursuant to Rule 4 of the ERC Rules, and (iii) prescribing guidelines for the protection thereof; and
- b) after hearing on the merits, a Decision be rendered **APPROVING** the PSA between Applicants MERALCO and RPE.

Other relief just and equitable under the circumstances are likewise prayed for.

Pasig City, 28 April 2016.

### **MANILA ELECTRIC COMPANY**

*Applicant*

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By:



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*Applicant*

By:

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*Counsel for Applicant RPE*

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PTR No. 4761136/1-9-15/Makati City

MCLE Compliance No. V-0014157/2-15-2016

REPUBLIC OF THE PHILIPPINES )  
CITY OF PASIG )s.s.

**VERIFICATION**  
**AND CERTIFICATION OF NON-FORUM SHOPPING**

I, **JOSE RONALD V. VALLES**, Filipino, of legal age, married, with office address at 7<sup>th</sup> Floor, Lopez Building, MERALCO Compound, Ortigas Avenue, Barangay Ugong, Pasig City, after being sworn in accordance with law, hereby depose and say that –

1. I am the Vice President and Head, Regulatory Affairs Office, of Applicant Manila Electric Company ("MERALCO"). In such capacity, I have caused the preparation and filing of the foregoing Application;

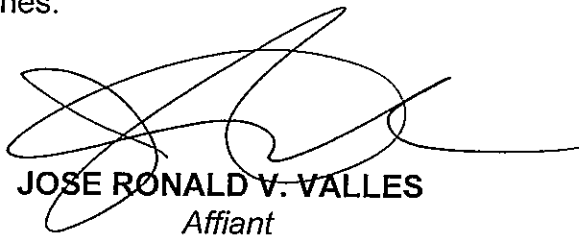
2. Moreover, I have been authorized by the Board of Directors of MERALCO to certify that Applicant has not heretofore filed any similar action, pleading or application involving the same issues before the Supreme Court, the Court of Appeals or any other lower courts or administrative bodies. A copy of the Secretary's Certificate authorizing me to cause the preparation of the instant Application and sign this Verification and Certification is attached hereto as **ANNEX "MM"**;

3. I have read and understood the allegations contained therein and the same are true and correct based on my personal knowledge and authentic records made available to me in the ordinary course of business of MERALCO;

4. To the best of my knowledge, no similar action or proceeding is pending before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies;

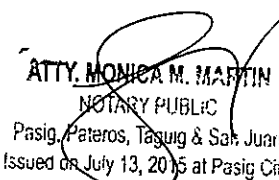
5. If I should hereafter learn that a similar action has been filed before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies, I undertake to report such fact to this Honorable Commission within five (5) days from notice of such fact.

**IN WITNESS WHEREOF**, I have hereunto affixed my signature this APR 28 2016 at Pasig City, Philippines.

  
**JOSE RONALD V. VALLES**  
*Affiant*

**SUBSCRIBED and SWORN** to before me this APR 28 2016, affiant having exhibited to me his Social Security System ID bearing the number 33-10900088.

Doc. No. 340 ;  
Page No. 69 ;  
Book No. III ;  
Series of 2016.

  
**ATTY. MONICA M. MARTIN**  
NOTARY PUBLIC  
Pasig, Pateros, Taguig & San Juan  
Issued on July 13, 2015 at Pasig City  
until December 31, 2016  
Roll No. 55693; IBP No. 1023726; 01/08/16, RSM Chapter  
PTP No. 1473411; 01/21/16; Pasig City  
7<sup>th</sup> Floor, Lopez Bldg., Ortigas Ave., Pasig City

## VERIFICATION AND CERTIFICATION

I, **ROCHEL DONATO GLORIA**, of legal age, Filipino, with business address at Aboitiz Power, NAC Tower, 32<sup>nd</sup> Street Bonifacio Global City, Taguig, after having been duly sworn in accordance with law, depose and say:

1. I am the duly authorized representative of **Redondo Peninsula Energy, Inc. (the "Corporation")**. Attached hereto as proof of such authority is a Secretary's Certificate issued by the Corporate Secretary of the Corporation.

2. As the duly authorized representative of the Corporation, I have caused the preparation and filing of the foregoing Application; I have read the allegations contained therein and certify that the same are true and correct based on my personal knowledge and on authentic records in the possession of the Corporation;

**3.** The Corporation has not commenced any other action or proceeding involving the same issues and parties before any court, tribunal or quasi-judicial agency; to the best of my knowledge, no such action or proceeding involving the same issues and parties is pending; and if I should learn that the same or similar action or proceeding has been filed or is pending, I hereby undertake to report such fact to this Honorable Commission within five (5) days to therefrom.

IN WITNESS WHEREOF, I have hereunto set my hand in  
PACIFIC CITY on APR 28 2016.

ROCHEL DONATO GLORIA

**SUBSCRIBED AND SWORN** to before me this 28th day of April 2016 at Taguig City, Philippines, Affiant exhibiting to me his Passport bearing number EC4495474 issued at DFA NCR East on June 25 2015.

Doc. No. III ;  
Page No. 24 ;  
Book No. II ;  
Series of 2016.

[illegible]

ANNEX "A"

**POWER SUPPLY AGREEMENT**

**Between**

**MANILA ELECTRIC COMPANY**

**and**

**REDONDO PENINSULA ENERGY, INC.**

**April 20, 2016**

*a*

*✓*

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## POWER SUPPLY AGREEMENT

This Power Supply Agreement (the “Agreement”) is entered into as of April 20, 2016 by and between:

1. **Manila Electric Company** (hereinafter “**Meralco**”), a corporation duly organized and existing under the laws of the Republic of the Philippines, with its address at Ortigas Avenue, Pasig City, Metro Manila; and
2. **Redondo Peninsula Energy, Inc.** (hereinafter “**Power Supplier**”), a corporation duly organized and existing under the laws of the Republic of the Philippines, with its principal place of business at Unit 310, The Venue, Rizal Highway, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport Zone, Philippines.

Each of the above-mentioned parties to this Agreement are referred to as a “**Party**,” and together, the “**Parties**”.

### RECITALS

A. Meralco is a distribution utility operating an electric power distribution system (as defined below) in Metro Manila and the surrounding provinces on the island of Luzon in the Philippines by virtue of its legislative franchise under Republic Act No. 9209 (the “**Franchise**”).

B. Power Supplier shall construct, own, operate, manage and maintain a 300 MW (net) sub-critical circulating fluidized-bed coal-fired power generating facility in Sitio Naglatore, Barangay Cawag, Municipality of Subic in the Province of Zambales, within the Subic Bay Freeport Zone, (the “**Plant**”), on the island of Luzon in the Philippines.

C. Power Supplier desires to sell capacity and electrical output from the Plant to Meralco, under the terms and conditions specified in this Agreement.

D. Meralco desires to purchase up to 225MW of the Plant’s capacity and electrical output from Power Supplier, under the terms and conditions specified in this Agreement.

E. Meralco and Power Supplier desire to define in this Agreement their respective rights and obligations with respect to the sale and purchase of capacity and electrical output from the Plant and other related matters.

NOW, THEREFORE, in view of the foregoing and in consideration of the mutual covenants and agreements set out in this Agreement, the Parties hereby agree as follows:

## ARTICLE 1 DEFINITIONS AND INTERPRETATION

### Section 1.1 Definitions

When used in this Agreement, the capitalized words, phrases and terms set out in this Article 1 shall have the following meanings:

**Acceptable Bank** has the meaning given to it in Section 4.1.

**Acceptance Date** means the date of written acceptance by Power Supplier of the ERC Final Approval in accordance with Section 14.2.

**Affiliate** shall mean, with respect to any Person, any other Person that directly or indirectly through one or more intermediaries, Controls, is Controlled by, or is under common Control with, such Person.

**Agreed Rating Agency** has the meaning given to it in Section 4.4.

**Agreement** means this Power Supply Agreement, including its Appendices, attachments, and Schedules, as amended from time to time in accordance with this Agreement.

**Amended Agreement** has the meaning given to it in Section 14.2.3(b).

**Annual Capacity Test Certificate** means a certificate attesting to the results of the annual NDC Test conducted by Power Supplier after the relevant Scheduled Outage for each Contract Year.

**Annual Maintenance Plan** has the meaning given to it in Section 9.4.1.

**Application for Price Adjustment** has the meaning given to it in Section 12.2.3.

**Arbitration Rules** has the meaning given to it in Section 20.2.1.

**Assessments** has the meaning given to it in Section 12.1.7.

**Associated Energy** refers to the quantity of electrical energy nominated by Meralco and declared by Power Supplier at the WESM as BCQ for Meralco for any Trading Interval, which shall not exceed the Contract Capacity.

**Available or Availability** means that the Plant is capable of generating electricity whether or not it is actually generating electricity.

**Bilateral Contract Quantities or BCQ** refers to the quantity of electrical energy declared by Power Supplier at the WESM for Meralco for any Trading Interval.

**Benefits to Host Communities Charges** means the financial benefits due to the host local government unit as mandated by the DOE's Energy Regulations 1-94.

**Billing Period** means: (i) for the first Billing Period, the period commencing on the Operations Effective Date and ending on the immediately succeeding twenty-fifth (25<sup>th</sup>) Day of a month, (ii) thereafter, each successive period commencing on the twenty-sixth (26<sup>th</sup>) Day of a month and ending on the twenty-fifth (25<sup>th</sup>) Day of the succeeding month, and (iii) for the final Billing Period, the period starting immediately after the end of the next to last Billing Period of the Term to the last Day of the Term, or, if this Agreement is terminated earlier in accordance with the terms hereof, until the Day of termination; *provided that*, prior to the first Billing Period, each period commencing on the twenty-sixth (26<sup>th</sup>) Day of a month and ending on the twenty-fifth (25<sup>th</sup>) Day of the succeeding month shall be used for calculating and billing for any Commissioning Energy Charges accrued prior to the Operations Effective Date, except that the first such period shall commence on the Commissioning date and the last such period shall end on the Day preceding the Operations Effective Date; *and provided, finally*, that if the Market Operator imposes a mandatory change to the billing cycle of WESM that cannot be reconciled with the foregoing schedule, the Parties agree to revise the Billing Period under this Agreement to conform with such changed WESM billing cycle, so long as such revised Billing Period is commercially reasonable.

**BOI** means the Board of Investments.

**Business Day** means any Day from Monday to Friday on which banking institutions are open for the transaction of business in Pasig City.

**Buy-Back** has the meaning given to it in Section 18.3.3(b).

**Buy-Back Notice** has the meaning given to it in Section 18.3.3(b).

**Capacity Payment** has the meaning given to it in Appendix E.

**Capacity Test Certificate** means a certificate attesting to the results of the initial NDC Test conducted in accordance with Appendix K and signed by the Independent Engineer.

**Change in Circumstances** means:

- (a) any Law coming into effect after the signing of this Agreement, including any change or repeal with respect to the imposition of taxes, duties, levies, fees, charges and similar impositions, and the right to remit or convert currencies, but in all cases excluding any Legal Requirement or the application or interpretation thereof in existence at such date but which by its explicit terms became effective only after the date of this Agreement; or
- (b) the amendment, modification, repeal or withdrawal of any Law (including any official interpretation thereof which the Parties have relied upon in entering into this Agreement) in force at the date hereof; or

- (c) the amendment or modification in the application, enforcement, interpretation or implementation of any Law by a Governmental Instrumentality at any time after the date of this Agreement,

in each case, which causes or may cause serious damage to, or materially and adversely affects the financial condition, of any of the Parties.

**Change of Control** means, with respect to Power Supplier, any direct or indirect sale and/or transfer of stock or membership interests, reorganization, merger, consolidation or other form of business transaction or series of business transactions, involving more than fifty percent (50%) of the voting interests of Power Supplier (or the reorganized, merged or consolidated entity's then outstanding voting interests) or any direct or indirect change in the power to direct or cause the direction of the management policies of Power Supplier.

**Claim** means, with respect to any Person, any and all suits, sanctions, legal proceedings, claims, assessments, judgments, damages, penalties, fines, liabilities, demands, reasonable out-of-pocket expenses of whatever kind and losses incurred or sustained by or against such Person.

**Commencement Date** has the meaning given to it in Section 3.2.1.

**Commercial Operations Date** means the date that the conditions set out in Section 3.4.1 have been satisfied and the Plant shall have consequently entered into commercial operation.

**Commercial Operations Date Certificate** means a certificate of the Independent Engineer attesting to the satisfaction of the conditions for the occurrence of the Commercial Operations Date as set out in Section 3.4.1.

**Commissioning** means the act of putting the Plant into operation after the completion of the construction and erection works prior to the Commercial Operations Date of the Plant.

**Commissioning Energy** has the meaning given to it in Article 5.

**Commissioning Energy Charge** has the meaning given to it in Article 5.

**Confidential Information** has the meaning given to it Section 22.3.1.

**Connection Agreement** means the Connection Agreement executed or to be executed and in effect from time to time between Power Supplier and NGCP in respect of the Plant.

**Connection Charges** means the fees, charges and other amounts assessed by the Transmission Service Provider to the Power Supplier as approved by the ERC.

**Consent Notice** has the meaning given to it in Section 10.3.3.

**Contract Capacity or CC** shall be 225,000 KW.



**Contract Year** means:

- (a) for the first (1st) Contract Year, the period consisting of the first Billing Period and the succeeding eleven (11) Billing Periods; and
- (b) thereafter, each successive year consisting of twelve (12) Billing Periods until the final Contract Year, which shall end on the last Day of the Term or on the Day of termination, as applicable.

**Control** shall mean, in respect of any company or corporation, the ownership (whether directly or indirectly) of more than fifty percent (50%) of the total issued voting share capital of that company or corporation, or the ability to otherwise direct the business and affairs of that company or corporation or the ability to appoint a majority of the members of the board of directors or similar corporate body or bodies of that company or corporation through the ownership of securities with voting power or otherwise, and the terms Controls and Controlled shall have correlative meanings.

**Coordinating Committee** means the committee established pursuant to Section 8.1.6.

**Curing Period** has the meaning given to it in Section 18.1 and Section 18.2.

**Curtailment** has the meaning given to it in Section 17.2.

**Day** means a 24-hour period beginning 0001H and ending at 2400H Philippine time. Unless expressly stated otherwise, a Day shall refer to a calendar day.

**Deliver** or **Delivery** means the declaration by Power Supplier with the WESM of the hourly energy nominations of Meralco to be supplied by Power Supplier to Meralco at the Delivery Point.

**Delivery Point** means the high side of the Plant's step-up transformer in the Plant switchyard.

**Direct Agreement** means an agreement among Meralco, Power Supplier, and Finance Parties (or their appointed trustee) regarding the terms and relative rights of such parties in connection with collateral assignment of this Agreement, substantially in the form and substance of Appendix J.

**Direct WESM Member** has the meaning given to it under the WESM Rules.

**Disallowed Pass-Through Amounts** has the meaning given to it in Section 12.2.2(a).

**Dispatch** and **Dispatch Instructions** means the instructions issued by the System Operator to Power Supplier to schedule and control the generation of electricity by the Plant in order to increase or decrease the electrical energy generated by the Plant.

**Dispute** has the meaning given to it in Section 20.1.

**Distribution Code** means the Philippine Distribution Code adopted by the ERC under ERC Resolution No. 115, for the operation, maintenance and development of the Distribution Systems,

including amendments, modifications, exclusions, replacements or re-enactments thereof, as the case may be, and all other sets of rules, requirements, procedures and standards governing distribution utilities in the Philippines.

**Distribution Systems** means the system of wires and associated facilities belonging to a franchised distribution utility extending between delivery points on the Philippine Grid or from the generator connection to the point of connection at the premises of the end-user.

**DOE** means the Department of Energy of the Philippines.

**Downgrade Event** has the meaning given to it in Section 4.4.

**Early COD Notice** has the meaning given to it in Section 3.5.1.

**Early Commercial Operations Date** has the meaning given to it in Section 3.5.1.

**Effective Date** has the meaning given to it in Section 3.1.

**Electrical Interconnection Facilities** means the switchyard adjacent to the Plant and the associated protective relaying, metering, control, data acquisition and communications facilities required to integrate the operation and control of the Plant with that of the Luzon Grid.

**Energy Imbalance Fees** means the settlement fees, charges or other similar amounts assessed by the Market Operator on Power Supplier in relation to ex-ante and ex-post trading imbalances, in accordance with the WESM Rules.

**Energy Payments** has the meaning given to it in Appendix E.

**Environmental Law** means any Legal Requirement governing or relating to (i) the environment, (ii) releases or threatened releases of Hazardous Materials, including without limitation investigations, monitoring and abatement of such releases, and (iii) the manufacture, handling, transport, use, treatment, storage or disposal of Hazardous Materials or materials containing Hazardous Materials.

**EOD Notice** has the meaning given to it in Section 18.4.

**EOD Notice Dispute** has the meaning given to it in Section 18.4.

**EPC Contract** means the contract or agreement for the design, engineering, procurement, material and equipment supply shipping, storage, installation, construction, start-up, testing and commissioning of the Plant.

**EPIRA** means Republic Act No. 9136, otherwise known as "The Electric Power Industry Reform Act of 2001".

**Equity Interests in Power Supplier** means, at any date, the legal and beneficial ownership rights of the shareholders of Power Supplier.

**Equity Transfer Procedures** means procedures to be agreed between holders of the Equity Interests in Power Supplier, Meralco, and the Finance Parties on or prior to the date of Financial Close in respect of the creation, maintenance and execution of Meralco's rights or obligations to acquire the Equity Interests in Power Supplier under Section 18.3 without creating recourse obligations of such holders and while protecting the Finance Parties' security interests in the Equity Interests of the Power Supplier and the Plant.

**ERC** means the Energy Regulatory Commission of the Philippines or any successor Governmental Instrumentality.

**ERC Application** has the meaning given to it in Section 14.1.1.

**ERC Conditional Approval** has the meaning given to it in Section 14.2.3.

**ERC Final Approval** means the decision issued by the ERC on the application filed by Meralco seeking approval of this Agreement.

**Event of Default** means a Power Supplier Event of Default or a Meralco Event of Default, as the context may require.

**Event of Force Majeure** has the meaning given to it in Section 17.1.

**Excused Delay Event** has the meaning given to in Section 3.4.3.

**Excused Delay Limit** has the meaning given to it in Section 3.4.3.

**Final Invoice** has the meaning given to it in Appendix I.

**Finance Documents** means the agreements for the making available of any loan, credit facility, notes (including floating rate notes and commercial paper), bonds, subordinated debt or other funds other than equity or equity-related funds and including working capital and any letters of credit (and related agreements), security agreements, swap agreements, any other hedging agreements, and any other documents, relating to the financing or refinancing of the development, construction, acquisition, ownership, operation and maintenance of the Plant.

**Finance Parties** means the creditors and their representatives, which are parties to the Finance Documents.

**Financial Close** means that all of the conditions precedent of the Finance Documents have been complied with or waived by the relevant parties thereto and the first financial drawdown has occurred.

**Forced Outage** means (a) any interruption of the Plant's generating capability resulting in an unplanned reduction or suspension of the electrical output from the Plant and/or unavailability of capacity in whole or in part from the Plant; (b) any automatic shutdown of any part of the Plant; and (c) any other unavailability of the Plant for operation, in whole or in part, for maintenance and/or repair, and in each of (a), (b) or (c), that is not a Scheduled Outage and not the result of an Event of Force Majeure or the circumstances described in Section 18.5, and that affects the Plant's ability to generate and export all or any portion of the Contract Capacity or Associated Energy. Any interruption, reduction or suspension of the Plant's output as instructed by the System Operator shall not be considered as a Forced Outage.

**Franchise** shall have the meaning given to it in the Recitals.

**Full Load Equivalent Forced Outage Allowance Days** has the meaning given to it in Appendix E.

**Full Load Equivalent Major Maintenance Outage Allowance Days** has the meaning given to it in Appendix E.

**Full Load Equivalent Scheduled Outage Allowance Days** has the meaning given to it in Appendix E.

**Government** means the government of the Philippines.

**Governmental Authorizations** means all authorizations, consents, decrees, permits, waivers, privileges and approvals from and filings with all Governmental Instrumentalities necessary for the execution and performance of this Agreement.

**Governmental Instrumentality** means the Government or any ministry, department, agency, bureau, commission, judicial, quasi-judicial or administrative body, or political subdivision thereof, the central bank, and any state-owned company, in each case within the Philippines.

**Grid Code** means the Philippine Grid Code adopted by the ERC under ERC Resolution No. 115 for the operation of the Philippine Grid, including amendments, modifications, exclusions, replacements or re-enactments thereof, as the case may be, and all other rules adopted by the ERC or other Governmental Instrumentality for the operation of the Philippine Grid.

**Grid Management Committee or GMC** means the committee established under the Grid Code.

**Guaranteed Net Plant Heat Rate or GNPHR** has the meaning given to it in Schedule 2 of Appendix E.

**Hazardous Materials** means any petroleum or petroleum products, radioactive materials, asbestos in any form that is or could become friable, urea formaldehyde foam insulation, and transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls and any other chemical, material, substance or any of their derivatives, which by its nature or concentration or quantity, either directly or indirectly, can pollute and/or harm the environment,

health, the perpetuation of livelihood of human and other living creatures, and are now or hereafter become defined as or included in the definition of "hazardous substances", "hazardous wastes", "hazardous materials", "extremely hazardous wastes", "toxic substances" or "toxic pollutants" under, or are regulated or become regulated as such, by Environmental Laws or in the regulations promulgated pursuant to said Laws, in any case which are not naturally occurring and present at levels in excess of those permitted by Environmental Laws.

**Increased Charges** has the meaning given to it in Section 12.2.1.

**Independent Engineer** means the engineer appointed by the Finance Parties under the Finance Documents from the list of acceptable firm of engineers set out in Appendix D.

**Interim Period** has the meaning given to it in Section 12.2.3.

**Interim Supply Period** means, in case the Plant achieves Commercial Operations Date earlier than the Operations Effective Date, the period from Commercial Operations Date until the Operations Effective Date.

**Invoice** has the meaning given to it in Appendix I.

**ITH** means Income Tax Holiday.

**kW** means kiloWatt.

**kWh** means kiloWatt-hour.

**Laws** means any decree, resolution, law, statute, act, ordinance, rule, rulings, direction, order, treaty, code or regulation (including any of the foregoing relating to health or safety matters or any Environmental Law) or any interpretation of the foregoing, as enacted, issued or promulgated by any Governmental Instrumentality, including amendments, modifications, exclusions, replacements or re-enactments thereof.

**Legal Requirements** means all Laws, Governmental Authorizations and other licenses, permits, approvals and agreements and any injunction or final judgment directly applicable to the relevant Party of any Governmental Instrumentality having jurisdiction over the matter in question.

**Longstop Date** means the date falling six (6) months after the date of submission to the ERC of the ERC Application, as may be extended by mutual agreement of the Parties.

**Luzon Grid** means the high voltage backbone system of interconnected transmission lines, substations, and related facilities located in Luzon, Philippines for the purpose of conveyance of bulk power forming part of the Philippine Grid.

**Major Maintenance Outage** means a removal of the Plant or any portion thereof from service for major repair, replacement, improvement and/or overhaul of the turbine, generator and/or boiler of

the Plant, including its auxiliary equipment, which has been scheduled and approved by the System Operator.

**Market Operator** means the person or entity in its role as such tasked with operating and administering the WESM in accordance with the WESM Rules.

**Meralco** has the meaning given to it in the first paragraph of this Agreement, and its permitted successors and assigns.

**Meralco Event of Default** has the meaning given to it in Section 18.2.

**Meralco Parties** has the meaning given to it in Section 16.1.1.

**Metering Service Agreement** means the Metering Service Agreement executed or to be executed and in effect from time to time between Power Supplier and the Metering Services Provider.

**Metering Services Provider** means the person or entity authorized by the ERC to provide metering services subject to compliance requirements under existing ERC regulations and WESM Rules.

**Minimum Load Requirement** has the meaning given to it in Appendix B.

**Monthly Power Bill or MPB** has the meaning given to it in Appendix E.

**MW** means MegaWatt.

**MWh** means MegaWatt-hour.

**NDC Test** refers to the test to be undertaken by Power Supplier to determine the Net Dependable Capacity of the Plant in accordance with the procedure defined in Appendix K.

**Net Dependable Capacity or NDC** means the capacity of the Plant net of the station service as determined during the most recent NDC Test for the Plant.

**Net Plant Heat Rate Test** refers to the test to be undertaken by Power Supplier to determine the Guaranteed Net Plant Heat Rate of the Plant in accordance with the procedure defined in Appendix K.

**Net Plant Heat Rate Test Certificate** means a certificate attesting to the results of the Net Plant Heat Rate Test of the Plant, as applicable, conducted in accordance with Appendix K and signed by the Independent Engineer.

**New Charges** has the meaning given to it in Section 12.2.1.

**NGCP** means National Grid Corporation of the Philippines (or its successor in interest as System Operator, Transmission Services Provider or Metering Services Provider).

**Non-Firm Price** means the terms upon which the amount to be paid by Meralco to Power Supplier for the purchase of Contract Capacity and Associated Energy during the Interim Supply Period pursuant to this Agreement are calculated, including any indexation thereof and all adjustments and modifications thereto, as provided in Appendix E.

**Notice of Change of Circumstances** has the meaning given to it in Section 12.2.3.

**NTP Issuance** means that the conditions for the issuance of the Notice to Proceed under the EPC Contract have been fulfilled and Power Supplier shall have issued the Notice to Proceed under the EPC Contract.

**OATS Rules** means the "Rules, Terms and Conditions for the Provision of Open Access Transmission Service", as adopted by the ERC pursuant to ERC Case No. 2006-015RC, including amendments, modifications, exclusions, replacements or re-enactments thereof, as the case may be.

**Obligations to Finance Parties** means, at any date, the total unpaid principal amount owed by the Power Supplier to the Finance Parties under the Finance Documents and accrued and unpaid interest (including default interest) thereon plus any winding-up costs, prepayment charges, or similar charges or costs for which the Power Supplier is responsible under the Finance Documents.

**Open Access and Retail Competition** means the system implemented by the ERC allowing qualified persons open and non-discriminatory use of Distribution Systems and the Luzon Grid, subject to the payment of transmission, distribution and wheeling charges and other fees approved by the ERC.

**Operating Procedures** means the procedures set out in Appendix H.

**Operations Effective Date** has the meaning given to it under Section 3.3.1.

**Outage** means, as the context may require, a Forced Outage, Scheduled Outage or Major Maintenance Outage.

**Payment Date** has the meaning given to it in Appendix I.

**PDST-R2** means the Philippine Dealing System Treasury Reference Rate for a term equivalent to three months, or if there is no equivalent term, the next longer term closest to three months, as posted or displayed at 1700H (Manila time) on the relevant page of the website of the Philippine Dealing and Exchange Corp.; provided, that if the rate, page or website is not available on the relevant date, the applicable rate shall be the last rate posted or displayed on such page before the rate, page or website became unavailable; provided further, that if the page or website ceases to be

available, the applicable rate shall be that rate posted or displayed on such page, website or other relevant service to be agreed upon by the Parties.

**Performance Security** has the meaning given to it in Section 4.1.

**Person** means any individual, corporation, partnership, association, joint stock company, unincorporated organization, joint venture or Governmental Instrumentality.

**Pesos or PHP** means the lawful currency of the Philippines.

**Philippines** means the Republic of the Philippines.

**Philippine Grid** means the high voltage backbone system of interconnected transmission lines, substations, and related facilities located in the Philippines for the purpose of conveyance of bulk power.

**Plant** has the meaning given to it in the recitals of this Agreement, as more particularly described in Appendix A.

**Power Supplier** has the meaning given to it in the first paragraph of this Agreement, and its permitted successors and assigns.

**Power Supplier Event of Default** has the meaning given to it in Section 18.1.

**Power Supplier Parties** has the meaning given to it in Section 16.1.1.

**Price** means the terms upon which the amounts to be paid by Meralco to Power Supplier for the purchase of Contract Capacity and Associated Energy (and Replacement Power) pursuant to this Agreement are calculated, including any indexation thereof and all adjustments and modifications thereto, as provided in Appendix E.

**Prudent Operating Practices** means, at a particular time, those practices, methods and acts that are in accordance with standards of prudence applicable to the international coal-fired electric utility industry which would have been expected to accomplish the desired result consistent with reliability, safety, environmental protection and expedition.

**Refundable Amounts** has the meaning given to it in Section 12.2.2(b).

**Relevant Operating Regulations** means (i) EPIRA; (ii) the WESM Rules; (iii) the OATS Rules; (iv) the Grid Code; (v) the Distribution Code; and (vi) all ERC rules and regulations applicable to this Agreement.

**Replacement Power** means the electric power procured by the Power Supplier or Meralco, as the case may be, from the WESM or third parties not exceeding the Contract Capacity during any Trading Interval for Delivery to Meralco under the terms and conditions of this Agreement.



**Required Financial Completion Date** has the meaning given to it in Section 3.2.2.

**RES** has the meaning given to it in Section 10.3.1.

**Scheduled Commercial Operations Date** has the meaning given to it in Section 3.4.2.

**Scheduled Outage** means a removal of the Plant or any portion thereof from service initiated by Power Supplier for regular scheduled inspection, testing, preventive maintenance, corrective maintenance, repairs, replacement or improvement that has been scheduled in accordance with Section 9.4.

**Security Amount** has the meaning given to it in Section 4.1.

**Site** means the land on which the Plant is located, as described in Appendix A.

**System Emergency** means any unforeseeable condition (e.g., "Emergency State" or "Extreme State" as defined in the Grid Code) affecting the Luzon Grid, as declared by the System Operator or certified by the GMC, which may cause (a) the disconnection of the Plant from the Luzon Grid or any disruption in the supply of electric energy from the Plant for reasons other than a Forced Outage, or (b) suspension of electric energy off-take from the Plant in order to prevent or avoid significant disruption of service to Meralco or danger to life or property.

**System Operator** means the entity responsible under the WESM Rules in its role as such for generation dispatch, the provision of ancillary services, and the operation and control of the Philippine Grid to ensure its safety, power quality, stability, reliability and security.

**Target Full Load Equivalent Days of Availability** has the meaning given to it in Appendix E.

**Technical Limits** means the limits and constraints relating to the operation, maintenance and dispatch of the Plant described in Appendix B.

**Term** has the meaning given to it in Section 2.2.2.

**Term Extension** has the meaning given to it in Section 17.3.3.

**Threshold Level 1** has the meaning given to it in Section 12.2.4.

**Threshold Level 2** has the meaning given to it in Section 12.2.5.

**Trading Interval** has the meaning given to it in the WESM Rules.

**Transfer** has the meaning given to it in Section 10.3.1.

**Transfer Notice** has the meaning given to it in Section 10.3.3.

**Transmission Failure** means the outage of the component of the transmission system which results in the inability of that component to transmit power.

**Transmission Service Agreement** means the Transmission Service Agreement executed or to be executed and in effect from time to time between Power Supplier and NGCP in respect of the Plant.

**Transmission Services Provider** means NGCP in its role as operator of the Philippine Grid.

**Tribunal** has the meaning given to it in Section 20.2.1.

**Unreimbursed New or Increased Charges and Refundable Amounts** has the meaning given to it in Section 12.2.4.

**USD** means the lawful currency of the United States of America.

**WESM** means the Wholesale Electricity Spot Market established by the DOE under DOE Circular No. 2006-06-008 pursuant to Section 30 of the EPIRA.

**WESM Differential** has the meaning given to it in Section 3.3.2.

**WESM Market Fees** means the charges imposed on Power Supplier by the Market Operator, as approved by the ERC.

**WESM Rules** means the rules promulgated by the DOE under Department Circular No. 2002-006-003 pursuant to Section 30 of the EPIRA, including amendments, modifications, exclusions, replacements or re-enactments thereof, as the case may be, that establish the basic rules, requirements, procedures and standards that govern the operation of the Philippine electricity market.

## **Section 1.2 Interpretation**

In this Agreement, unless otherwise specified:

1.2.1 references to “**Meralco**” are to Meralco’s Distribution Utility business segment and its successors and assigns;

1.2.2 any actions, occurrences, events and omissions (including without limitation any Events of Default and Events of Force Majeure) shall be considered as separate, distinct and independent of any actions, occurrences, events and omissions (including without limitation any Events of Default and Events of Force Majeure) under any other agreement for the supply of power between Meralco and Power Supplier;

1.2.3 the table of contents and the headings are inserted for convenience only and do not affect the interpretation of this Agreement;

1.2.4 references to Articles, Sections, sub-Sections, Appendices and Schedules are to Articles, Sections and sub-Sections of, and Appendices and Schedules to this Agreement, and references in an Appendix or a Schedule to a paragraph or an attachment are to a paragraph of or an attachment to that Appendix or Schedule;

1.2.5 references to this Agreement or any other document are to this Agreement or such other document as from time to time amended, varied, added to, substituted, renewed, extended, restated, novated or replaced;

1.2.6 references to any Law includes any subordinate legislation made under it;

1.2.7 a reference to any Law shall be construed as a reference to the Law as amended, modified, supplemented, consolidated or replaced from time to time;

1.2.8 references to time are to Philippine time;

1.2.9 references to **"the date of this Agreement"** is a reference to the date of this Agreement as shown in the preamble of this Agreement.

1.2.10 if any amount payable under this Agreement falls due on a date that is not a Business Day, payment shall be made on the next succeeding Business Day;

1.2.11 the words **"include"** and **"including"** shall not limit the generality of any preceding words or be construed as being limited to the same class as the preceding words where a wider construction is possible;

1.2.12 the singular includes the plural and vice versa, and without limiting the generality of the foregoing, any word or expression defined in the singular has the corresponding meaning used in the plural and vice versa;

1.2.13 a reference to writing includes printing, typing, lithography and other means of reproducing words in a visible form;

1.2.14 any reference to a person or entity includes such person or entity's permitted successors and assigns; and

1.2.15 words not otherwise defined in this Agreement that have well known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings.



## ARTICLE 2 PURPOSE; TERM

### Section 2.1 Purpose

The purpose of this Agreement is to set out the rights and obligations of each Party with regard to the sale and purchase of Contract Capacity and Associated Energy of the Plant.

### Section 2.2 Term of Agreement

2.2.1 This Agreement shall become effective upon the satisfaction (or the waiver by the relevant Party) of the conditions set out in Section 3.1 (the “**Effective Date**”).

2.2.2 The term of this Agreement (the “**Term**”) shall commence on the Effective Date and shall expire on the date falling twenty (20) years after the Operations Effective Date, unless (i) terminated earlier in accordance with the terms of this Agreement, or extended by the application of Section 2.2.3, Section 17.3.3 or Section 18.3.3.

2.2.3 The Term may be renewed for an additional period of up to five (5) years under the same terms and conditions. No later than one (1) year prior to the expiration of the original Term under Section 2.2.2 above, the Parties shall enter into good faith negotiations on whether or not to extend the Term in accordance with this Section 2.2.3.

## ARTICLE 3 EFFECTIVE DATE, COMMENCEMENT DATE AND COMMERCIAL OPERATIONS DATE

### Section 3.1 Effective Date

3.1.1 The Effective Date shall be the date that the following conditions shall have been satisfied or waived by the relevant Party, as certified by Power Supplier and Meralco pursuant to Section 3.1.2 below:

- (a) each of the Parties shall have received from the other Party evidence confirming the other Party’s corporate approvals for the execution, delivery and performance of this Agreement;
- (b) Power Supplier shall have received from Meralco the documents and evidence set forth in Part 2 of Appendix C; and
- (c) Meralco shall have received from Power Supplier the documents and evidence set forth in Part 1 of Appendix C.

The representations and warranties of Power Supplier and Meralco contained herein shall be true and correct in all material respects on and as of (i) the date of the execution of this Agreement, (ii)

the Effective Date, (ii) the Commencement Date, (iii) the Operations Effective Date, and (iv) the Commercial Operations Date.

For the avoidance of doubt, notwithstanding the preceding sentences of this Section 3.1.1, the provisions of Section 14.1, Section 14.2, Article 18, Article 19, Article 20, Article 21, and Article 22 shall be effective from the date of execution of this Agreement.

3.1.2 Within seven (7) Days after the satisfaction of the conditions referred to in Section 3.1.1, Meralco and Power Supplier shall issue a joint certification confirming the occurrence of the Effective Date.

### **Section 3.2 Commencement Date**

3.2.1 The “**Commencement Date**” shall occur upon the satisfaction of the conditions below;

- (a) the conditions set out in Section 3.1 have been fulfilled;
- (b) each Party has delivered to the other Party a certification dated no earlier than two (2) Days prior to the proposed Commencement Date to the effect that its representations and warranties contained herein shall be true and correct in all material respects on and as of the Commencement Date;
- (c) on or before the Longstop Date, (i) the ERC shall have approved in the ERC Final Approval this Agreement, including the pricing structure as set out herein (or as otherwise acceptable to Power Supplier), and (ii) the Acceptance Date has occurred; and
- (d) Financial Close or NTP Issuance shall have occurred within the period contemplated under Section 3.2.2.

Power Supplier shall deliver written notice to Meralco of the satisfaction of these conditions and Meralco shall confirm in writing the occurrence of the Commencement Date.

3.2.2 Power Supplier covenants to achieve Financial Close or NTP Issuance within ninety (90) Days from the Acceptance Date (the “**Required Financial Completion Date**”).

3.2.3 If both Financial Close and NTP Issuance have not occurred by the Required Financial Completion Date, the Parties shall meet to discuss and agree upon the conditions under which this Agreement may be continued (including any extension on the Required Financial Completion Date and/or the Scheduled Commercial Operations Date). In the event that Parties do not reach any agreement within a period of thirty (30) Days from the Required Financial Completion Date (or such other longer period as the Parties may agree upon), either Party shall have the right, by written notice given to the other Party, to terminate this Agreement. In case of termination of this Agreement, Meralco shall have the right to forfeit as liquidated damages an amount equivalent to fifty percent (50%) of the face value of the Performance Security and to draw on the Performance Security for the settlement of such amount. However, if the non-occurrence of Financial Close or

NTP Issuance by the Required Financial Completion Date is directly due to or a direct result any of the following:

- (a) an Event of Force Majeure; or
- (b) the unreasonable refusal of Meralco to enter into the Direct Agreement or the Equity Transfer Procedures (it being understood that Meralco's refusal shall not be considered unreasonable where the terms of the Direct Agreement or Equity Transfer Procedures are not customary for agreements of such nature or projects similar to the Plant on non-recourse terms with customary power supply agreement terms taking account of the risks involved); or
- (c) any delay not due to the fault of the Power Supplier in the issuance of any Governmental Authorization, it being understood that the Power Supplier shall not be considered at fault provided (i) Power Supplier has made due application therefor in accordance with Legal Requirements and has diligently pursued its application; and (ii) the delay in the issuance is not due to any justified refusal to grant such Governmental Authorization on the part of the relevant Governmental Instrumentality because of, among others, Power Supplier's breach of Legal Requirements or failure to comply with reasonable terms and conditions imposed by the Governmental Instrumentality;

Meralco shall return the Performance Security to Power Supplier within thirty (30) Days from the date of termination. Notwithstanding the foregoing, the Parties may agree in writing to extend the Required Financial Completion Date.

### **Section 3.3 Operations Effective Date**

3.3.1 Subject to the occurrence of the Commencement Date, Operations Effective Date shall occur on the date that is forty-four (44) months from the Commencement Date. From and after the Operations Effective Date, the obligations of Power Supplier and Meralco under this Agreement with respect to the sale and purchase of Contract Capacity and Associated Energy shall become effective.

3.3.2 If, at any time after the occurrence of the Operations Effective Date, Power Supplier fails to supply Meralco with Contract Capacity and Associated Energy, Meralco shall be entitled to procure Replacement Power from the WESM and Power Supplier shall be liable to pay Meralco the amount equivalent to the difference between (i) the WESM cost of the Replacement Power and (ii) the amount Meralco would have paid for the Replacement Power had it been paid at the Price (the "**WESM Differential**"). For the avoidance of doubt, if the WESM Differential is a negative number, Meralco shall have no liability whatsoever to Power Supplier.

3.3.3 After Meralco receives the invoice from the WESM that includes the WESM Differential, Meralco shall be entitled to invoice Power Supplier for payment of the WESM Differential. Power Supplier shall pay the WESM Differential within five (5) Days from receipt of such invoice.

3.3.4 In the event Power Supplier fails to pay Meralco the WESM Differential within the period stated in Section 3.3.3, Meralco shall be entitled to draw on the Performance Security, subject to the obligation of Power Supplier to replenish the Performance Security in accordance with Section 4.5.

3.3.5 In the event that Power Supplier fails to supply Contract Capacity and Associated Energy to Meralco for sixty (60) Days, Meralco shall have the right, by written notice to Power Supplier, to terminate this Agreement. In case of such termination, Meralco shall have the right to forfeit as liquidated damages the amount of the Performance Security and to draw on the Performance Security for the settlement of such liquidated damages.

#### **Section 3.4 Commercial Operations Date and Scheduled Commercial Operations Date**

3.4.1 The “**Commercial Operations Date**” shall occur upon delivery by Power Supplier of the documents enumerated below, in each case, in the form and substance satisfactory to Meralco:

- (a) Capacity Test Certificate dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate establishing the Net Dependable Capacity of the Plant;
- (b) a Net Plant Heat Rate Test Certificate dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate;
- (c) all permits, licenses, authorizations and other approvals from all Government Authorities and third parties needed for the operation of the Plant and the supply of electricity by the Power Supplier to Meralco, including but not limited to, the certificate of compliance of the Power Supplier as a generation company issued by the ERC, its registration as a member of the WESM and evidence of its execution of a Market Participation Agreement with the Philippine Electricity Market Corporation, have been obtained as certified by Power Supplier;
- (d) a Commercial Operations Date Certificate; and
- (e) certification by Power Supplier’s insurance advisor or broker that the insurances required for the Plant under this Agreement relevant for at least the first Contract Year have been obtained.

The initial Capacity Test Certificate, the Net Plant Heat Rate Test Certificate, and the Commercial Operations Date Certificate shall, upon issuance by the Independent Engineer, constitute conclusive evidence of the facts to be established by their respective contents, absent manifest error.

3.4.2 Power Supplier covenants that the Plant shall achieve Commercial Operations Date no later than twelve (12) months after the Operations Effective Date (the “**Scheduled Commercial Operations Date**”), subject to the provisions of Section 3.4.3 below.

3.4.3 In the event that Power Supplier (or any contractor of Power Supplier) has experienced a delay in design, construction, testing or commissioning of the Plant or any part thereof as a result or to the extent of any of the following (each, an “**Excused Delay Event**”):

- (a) any action or inaction or delay in action of the System Operator, the Market Operator or any Governmental Authority;
- (b) the occurrence of an Event of Force Majeure;
- (c) any breach or default by Meralco of its obligations under this Agreement or the Direct Agreement;
- (d) any delay in energizing the Electrical Interconnection Facilities that prevents the export of power from the Plant; or
- (e) unavailability of back-feed power to synchronize or to dispatch the Plant or absence of suitable Dispatch Instructions so as to allow for timely completion of testing and commissioning of the Plant,

then the Scheduled Commercial Operations Date shall be extended, Day for Day, by the same period that any Excused Delay Event subsists; *provided that*, Power Supplier has no contributory negligence with respect to any Excused Delay Event and, *provided further*, that any such extension or relief shall not exceed one hundred eighty (180) Days (the “**Excused Delay Limit**”). For the avoidance of doubt, the Excused Delay Events shall only extend the period during which Power Supplier is obligated to successfully Commission the Plant and shall not excuse Power Supplier from supplying Meralco with Contract Capacity and Associated Energy from and after the occurrence of the Operations Effective Date.

3.4.4 From and after the lapse of the Scheduled Commercial Operations Date or, if applicable, the Excused Delay Limit, Meralco shall have the right, by written notice to Power Supplier, to terminate this Agreement. In case of such termination, Meralco shall have the right to exercise its remedies at law or equity and to forfeit as liquidated damages the amount of the Performance Security and to draw on the Performance Security for the settlement of such liquidated damages. Notwithstanding the foregoing, the Parties may agree in writing to extend the Excused Delay Limit.

3.4.5 The Power Supplier shall deliver to Meralco written notice promptly upon becoming aware of any right it may have to an extension of its obligation to achieve the Commercial Operations Date on or before the original Scheduled Commercial Operations Date.

### **Section 3.5 Early Occurrence of the Commercial Operations Date**

3.5.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Operations Effective Date (“**Early Commercial Operations Date**”), Power Supplier shall promptly deliver to Meralco written notice (the “**Early COD Notice**”) of



such anticipated Early Commercial Operations Date, indicating the anticipated date thereof, at least three (3) months prior to the then anticipated date of the Early Commercial Operations Date.

3.5.2 Upon receipt of such Early COD Notice, Meralco shall, by written notice to Power Supplier, choose between the following options:

- (a) Consider that the Operations Effective Date shall occur on the Early Commercial Operations Date or on such other date as the Parties may agree; or
- (b) Elect to have Power Supplier deliver, on a non-firm basis during the Interim Supply Period and until the occurrence of the Operations Effective Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

3.5.3 In the event that Meralco elects the option to take, on a non-firm basis, the Contract Capacity and Associated Energy under Section 3.5.2(b), the Parties understand and agree that Power Supplier shall be free to sell the Contract Capacity and Associated Energy to the WESM or to any third party during the Interim Supply Period.

3.5.4 Notwithstanding Section 3.5.3, from and after the Early Commercial Operations Date, (i) Power Supplier shall provide information on its available and uncontracted Contract Capacity and Associated Energy; and (ii) Meralco may respond with its binding nominations, in each case to be made in accordance with the nomination protocol to be agreed by the Parties. Power Supplier shall declare Meralco's nomination as BCQ for Meralco and Meralco shall pay the Non-Firm Price therefor.

3.5.5 Notwithstanding Section 3.5.4, in the event that during the Interim Supply Period (i) any of Meralco's power suppliers suffers a forced outage and (ii) Power Supplier has available Contract Capacity and Associated Energy that has not been contracted under bilateral power sales agreements, Meralco shall have priority over such uncontracted Contract Capacity and Associated Energy. Meralco shall be entitled to nominate its energy requirements (by stating the capacity required for each Trading Interval of such Day) by giving notice at least two (2) hours prior to the first Trading Interval in which such energy requirements are needed, for which Meralco shall pay the Non-Firm Price. In the event that Power Supplier would be unable to declare as BCQ Meralco's energy requirements during the first Trading Interval, Power Supplier shall inform Meralco of the earliest Trading Interval during which Power Supplier is able to commence BCQ declarations, *provided that* such Trading Interval shall not be more than four (4) hours from the first Trading Interval requested by Meralco.

## ARTICLE 4 PERFORMANCE SECURITY

### Section 4.1 Performance Security

Power Supplier shall, within fifteen (15) Days from the Acceptance Date, deliver to Meralco one or more security (each, a "**Performance Security**") in an aggregate amount equivalent to Seven

Hundred Ten Million Pesos (PHP710,000,000.00) (the “**Security Amount**”). Each Performance Security shall (i) be an irrevocable stand-by letter of credit or bank guarantee in the form customarily issued by an Acceptable Bank, (ii) at the time of issuance thereof, be issued by an Acceptable Bank, and (iii) have a face value, when aggregated with the other Performance Securities, equivalent to not less than the Security Amount.

As used herein, “**Acceptable Bank**” means an international or domestic bank included in the list of banks agreed between the Parties, provided that, as of the date of the execution of this Agreement, the initial list of Acceptable Banks is set forth in Appendix F.

#### **Section 4.2 Review of Acceptable Banks**

Within sixty (60) Days from each anniversary of the Acceptance Date, the Parties shall meet to review the list of Acceptable Banks and mutually agree on the list of Acceptable Banks from which any amended or replacement Performance Security shall be procured. If the Parties fail to reach an agreement within such period, the latest agreed list of Acceptable Banks shall apply.

#### **Section 4.3 Renewal of Performance Security**

If a Performance Security is subject, pursuant to its terms, to a fixed expiry date, Power Supplier shall, not less than ten (10) Days prior to such expiry date, amend or replace the Performance Security with a duly-executed amended or replacement Performance Security, compliant with the requirements under Section 4.1 of this Agreement.

#### **Section 4.4 Downgrade Events**

If, at any time, a Downgrade Event occurs in respect of the issuing bank of the Performance Security, Power Supplier shall procure a replacement Performance Security from another Acceptable Bank within thirty (30) Days of the occurrence of the Downgrade Event.

For this purpose, “**Downgrade Event**” means (i) in respect of an Acceptable Bank that is an international bank, (x) two consecutive downgrades from its credit rating at the time of the last review of the list of Acceptable Banks or (y) a credit rating downgrade below investment grade, in each case as publicly announced by the Agreed Rating Agency; and (ii) in respect of an Acceptable Bank that is a domestic bank, if its total equity as reported in the latest quarterly published Balance Sheet/Statement of Condition submitted to the *Bangko Sentral ng Pilipinas* falls below PHP40 billion while “**Agreed Rating Agency**” means Standard & Poor’s or Moody’s Investor Services.

#### **Section 4.5 Duration of Performance Security**

Each Performance Security shall stand as security for the faithful and proper compliance by Power Supplier of its obligations under this Agreement and shall be procured and maintained by Power Supplier at the Security Amount until the satisfaction of the conditions for the Operations Effective Date or the Commercial Operations Date, whichever is later. If any amounts are drawn from the Performance Security by Meralco in accordance with this Agreement, the Power Supplier shall, on or before the date that is three (3) Days after the draw, deliver an additional irrevocable

stand-by letter of credit or bank guarantee in an amount equivalent to the amount drawn by Meralco, to restore the amount of the Performance Security to the Security Amount.

#### **Section 4.6 Release of Performance Security**

Within thirty (30) Days after the later of the Operations Effective Date or the Commercial Operations Date, Meralco shall return to Power Supplier the remaining Performance Security less any amount properly due and owing from Power Supplier to Meralco under this Agreement.

#### **Section 4.7 Cash Collateral**

Meralco may draw the entire amount of the Performance Security and hold the proceeds in trust as cash collateral if Power Supplier fails to procure a replacement or additional Performance Security within the time required under Section 4.3, Section 4.4, and Section 4.5 above.

### **ARTICLE 5 COMMISSIONING ENERGY**

During Commissioning of the Plant which occurs before the Operations Effective Date, Power Supplier shall sell, and Meralco shall purchase, the electrical energy quantities in MWh generated by the Plant (the "**Commissioning Energy**") at the times and at dispatch levels which are necessary for proper, efficient, and timely testing and commissioning of the Plant. Such purchases shall be made at a rate equivalent to the actual landed fuel cost plus the Monthly Variable O&M Payment plus any value-added tax ("VAT") and any other applicable taxes, fees and charges (the "**Commissioning Energy Charge**") calculated in accordance with Appendix E.

### **ARTICLE 6 SALE AND PURCHASE OF CONTRACT CAPACITY AND ASSOCIATED ENERGY**

#### **Section 6.1 Sale and Purchase of Power**

6.1.1 Subject to the terms and conditions of this Agreement, from the Operations Effective Date until the expiration of the Term, Power Supplier shall:

- (a) make available to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Contract Capacity of the Plant; and
- (b) sell and Deliver to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Associated Energy, to the extent of Meralco's relevant day-ahead nominations as provided in Appendix H;

*provided that*, Power Supplier may make available Contract Capacity and Deliver Associated Energy to Meralco from other sources, including the WESM, at the Price; and any such

Associated Energy Delivered from such other sources shall be deemed Delivered by Power Supplier by declaration made from the Plant.

The Dispatch of Contract Capacity and Associated Energy shall meet the requirements set out in Appendix B.

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent, sell, divert, grant, transfer, dedicate, reserve or assign all or any portion of the Contract Capacity and Associated Energy to any Person other than Meralco.

6.1.3 The supply of Contract Capacity and Associated Energy by Power Supplier to Meralco shall be in accordance with the WESM Rules. Each Party shall, during the Term, always keep and maintain its registration as a Direct WESM Member.

6.1.4 Power Supplier shall source its supply for Meralco from the Plant except during (i) the Interim Supply Period; (ii) Outages; (iii) any curtailment due to Dispatch Instructions; (iv) ramping limitations and (v) system frequency fluctuations.

6.1.5 The Associated Energy shall have been delivered to Meralco upon its declaration in the WESM by Power Supplier as its BCQ at the Power Supplier's WESM Node, with Meralco as its counterparty, in accordance with the WESM Rules.

## **Section 6.2 Title Transfer and Risk of Loss**

Title and risk of loss over the Contract Capacity and Associated Energy shall transfer from Power Supplier to Meralco at the Delivery Point.

## **Section 6.3 Nominations**

6.3.1 No later than fifteen (15) Days before the Operations Effective Date (including where Meralco elects to have the Operations Effective Date coincide with the Early Commercial Operations Date), Power Supplier shall furnish Meralco with its non-binding year-ahead capacity availability for the first Contract Year. Within five (5) Days from receipt of such non-binding year-ahead capacity availability for the first Contract Year, Meralco shall furnish Power Supplier with its non-binding year-ahead energy nomination for the first Contract Year.

6.3.2 For administrative and planning purposes only, Power Supplier shall furnish Meralco with year-ahead, month-ahead and week-ahead capacity availability and Meralco shall furnish Power Supplier with non-binding year-ahead, month-ahead and week-ahead nominations of Contract Capacity, in accordance with the WESM Rules, Technical Limits and the Operating Procedures. Such nominations shall reflect Meralco's good faith estimate of its projected capacity requirements for such period. Meralco shall furnish Power Supplier with the year-ahead nominations, the month-ahead nominations and the week-ahead nominations in accordance with Appendix H.

6.3.3 Power Supplier shall furnish Meralco with its day-ahead capacity availability and Meralco shall furnish Power Supplier with binding day-ahead nominations on an hour-by-hour basis,

subject to the Contract Capacity and dispatch ramp rates, as specified in Appendix B and in accordance with the WESM Rules and the Operating Procedures.

6.3.4 Within five (5) Days after the Commercial Operations Date, Power Supplier shall furnish Meralco with its non-binding year-ahead capacity availability for the current Contract Year. Within five (5) Days from receipt of such non-binding year-ahead capacity availability for the current Contract Year, Meralco shall furnish Power Supplier with its non-binding year-ahead energy nomination for the current Contract Year. Section 6.3.2 and Section 6.3.3 shall also apply.

6.3.5 Notwithstanding the foregoing, Meralco shall have the option to increase or decrease its day-ahead nominations in accordance with Appendix H.

6.3.6 Meralco shall, in all Trading Intervals not affected by a Scheduled Outage, Major Maintenance Outage, Forced Outage, Event of Force Majeure or suspension of delivery of Associated Energy as requested by Meralco, nominate no less than its share in the Minimum Load Requirement. If Meralco opts to suspend the delivery of Associated Energy from the Plant to Meralco, it may do so provided:

- (a) that notice of such suspension shall be provided by Meralco not less than four (4) weeks prior to the first Day of suspension;
- (b) that the suspension shall last for not less than four (4) weeks; *provided that*, the Parties may agree to end the suspension earlier;
- (c) that during such suspension, Power Supplier may sell the Plant's capacity and energy to third parties, including the WESM, and all profits, losses and costs incurred by Power Supplier from such sale to third parties shall be for the sole account of Power Supplier;
- (d) that during such suspension, Meralco shall continue to pay Power Supplier Capacity Payments as provided in Appendix E; and
- (e) that no shut down and start up costs and expenses shall be payable by Meralco.

For the avoidance of doubt, in the event that Meralco requests for the suspension contemplated under this Section 6.3.6, any outage resulting therefrom shall not be counted towards the Full Load Equivalent Forced Outage Allowance Days.

#### **Section 6.4 WESM Declarations**

6.4.1 Power Supplier shall ensure that its daily declaration of BCQs reported to the Market Operator (as required by the WESM Rules) exactly reflects the day-ahead nominations, including any revisions thereto, furnished by Meralco under Section 6.3, subject to the conditions of Section 9.3. Any amounts assessed by the Market Operator on the Parties, including amounts for energy imbalances, as a result of an erroneous declaration by Power Supplier of its BCQs shall be borne by Power Supplier, and Power Supplier shall indemnify and hold Meralco harmless from any loss, cost, expense or penalty incurred or paid by Meralco as a result of any such erroneous declaration.

Market Operator invoices Meralco for any such amounts, Power Supplier shall reimburse Meralco within seven (7) Days from receipt of written demand therefor. Further, Power Supplier shall pay Meralco an administrative fee of Fifty Thousand Pesos (PHP50,000.00) for each incident of erroneous BCQ declaration which is due to the Power Supplier's fault.

6.4.2 On a daily basis, Power Supplier shall furnish Meralco with copies of the prior Day's hourly declaration of BCQs reported by Power Supplier to the Market Operator. Meralco shall have the right, but not the obligation, to review such reports and upon its review, shall inform Power Supplier of any discrepancies or exceptions it may find. Power Supplier shall immediately notify Market Operator of any corrections to its declaration of BCQs in accordance with the WESM Rules.

## **ARTICLE 7 INTERCONNECTION AND TRANSMISSION**

### **Section 7.1 Metering Service Agreement, Connection Agreement and/or Transmission Service Agreement**

Power Supplier shall enter into a Metering Service Agreement, Connection Agreement and/or Transmission Service Agreement with NGCP to connect the Plant to the Luzon Grid. Power Supplier shall be solely responsible for, and shall bear all costs of obtaining such services, including any applications, studies and approvals, and construction and installation of interconnection facilities and network upgrades, other than as expressly provided in this Agreement.

### **Section 7.2 Copies of Documents; Amendments**

Within five (5) Days from execution thereof, Power Supplier shall furnish Meralco with full and complete copies of the Metering Service Agreement, Connection Agreement and/or the Transmission Service Agreement. Power Supplier shall notify Meralco of any intention and/or proposal to amend the Metering Service Agreement, Connection Agreement and/or Transmission Service Agreement and shall provide Meralco with a copy of any such amendment/s within five (5) Days after the effective date thereof. Power Supplier shall provide Meralco with thirty (30) Days' prior written notice of Power Supplier's intent to assign the Metering Service Agreement, Connection Agreement and/or Transmission Service Agreement.

### **Section 7.3 Interconnection and Transmission Undertaking**

At all times from and after Commissioning, the Power Supplier shall ensure that all interconnection, transmission and other agreements necessary for it to perform its obligations hereunder (including the Connection Agreement and Transmission Service Agreement) shall be in full force and effect.

## **ARTICLE 8**

### **CONSTRUCTION, OPERATION AND MAINTENANCE OF THE PLANT**

#### **Section 8.1 Construction, Operation, Maintenance and Repair**

8.1.1 Power Supplier shall design, procure, supply, deliver, install, erect, test and commission the Plant in accordance with Legal Requirements and Prudent Operating Practices and shall commence work as soon as reasonably practicable after Commencement Date.

8.1.2 Power Supplier shall at all times during the Term, operate, maintain and repair the Plant in a manner consistent with all Legal Requirements (including the Relevant Operating Regulations and Environmental Law) and Prudent Operating Practices. Power Supplier shall also operate the Plant in accordance with the Operating Procedures, including but not limited to Meralco's day-ahead nominations, the Dispatch Instructions and subject to the Technical Limits.

8.1.3 Power Supplier shall employ in the Plant all safety devices and safety practices required by the applicable Legal Requirements (including the Relevant Operating Regulations), the requirements of all insurance policies and Prudent Operating Practices. Power Supplier shall keep accurate records of any accident or other occurrence at the Site which results in injury to persons or damage to property. Upon Meralco's request, Power Supplier shall provide to Meralco reports and notices on such accidents and other occurrences at the Site, subject to Section 22.3.

8.1.4 Power Supplier shall ensure that its operating personnel are on duty at the Plant, twenty-four (24) hours a Day and seven (7) Days a week.

8.1.5 The appointment by Power Supplier of any plant operator or other sub-contractor shall not relieve Power Supplier of any of its liabilities or obligations hereunder.

8.1.6 The Parties shall maintain close coordination at all times in respect of all matters relating to the supply of electricity under this Agreement. Power Supplier shall keep Meralco sufficiently informed of all significant developments affecting the Plant. For this purpose, the Parties shall establish a Coordinating Committee comprised of four (4) members, two (2) appointed by each of Power Supplier and Meralco. The obligations and responsibilities of the Coordinating Committee and the rules governing meetings of the Coordinating Committee shall be as set out in Appendix H.

#### **Section 8.2 Coordination with Market Operator and System Operator**

Power Supplier shall maintain operating communications between the Plant and each of Meralco, the Market Operator and the System Operator in accordance with the procedures to be developed by the Coordinating Committee consistent with the WESM Rules and the Grid Code.

#### **Section 8.3 Operations Log**

Power Supplier shall keep a daily operations log for the Plant and the Electrical Interconnection Facilities, which shall include information on the Plant Availability, Scheduled Outages, Forced

Outages, circuit breaker trip operations requiring a manual reset and any significant events related to the operation of the Plant and the Electrical Interconnection Facilities. Meralco may request a report from Power Supplier, which request shall not be unreasonably denied, regarding any significant event or information relating to the operation of the Plant and the Electrical Interconnection Facilities.

#### **Section 8.4 Tests for the Plant**

8.4.1 Power Supplier shall, at its own cost, conduct an annual Net Dependable Capacity Test ("NDC Test"). Power Supplier shall provide Meralco with the Annual Capacity Test Certificate within five (5) Days from completion of the NDC Test for the relevant Contract Year.

8.4.2 Power Supplier shall, at its own cost, conduct a heat rate test ("Net Plant Heat Rate Test") in conjunction with the initial NDC Test, for each Unit of the Plant, in order to establish the GNPHR. The GNPHR shall be factored in the computation of the Monthly Power Bill in accordance with the relevant provisions of Appendix E.

8.4.3 The NDC Test and the Net Plant Heat Rate Test shall be conducted in accordance with the procedures set out in Appendix K.

#### **Section 8.5 Emergency Planning**

Power Supplier shall cooperate with Meralco in establishing agreed emergency plans for the Plant, including, without limitation, recovery from a local or widespread electrical blackout and voltage reduction in order to effect load curtailment, subject in each case to the Technical Limits and Prudent Operating Practices.

#### **Section 8.6 Allocation of Available Capacity**

If the Availability of the Plant is impaired for any reason such that Power Supplier is unable to make available all or a portion of the Contract Capacity, Power Supplier shall promptly notify Meralco in writing of such impairment. Power Supplier undertakes to give Meralco available capacity (and associated energy) equivalent to at least Meralco's pro-rata share in the Net Dependable Capacity.

### **ARTICLE 9 OUTAGES**

#### **Section 9.1 Scheduled Outage and Major Maintenance Outage Allowances**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages not to exceed the Full Load Equivalent Scheduled Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which times reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power



Supplier shall be entitled to the Full Load Equivalent Scheduled Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Scheduled Outage Allowance Days.

Power Supplier shall be entitled to the Full Load Equivalent Major Maintenance Outage Allowance Days to undertake major repair, overhaul and maintenance of the Plant in accordance with the technical requirements of the Plant; *provided that*, it shall, in no case, be availed of more frequently than once every four (4) years; and *provided further*, that the first Major Maintenance Outage shall occur no earlier than the fourth (4<sup>th</sup>) year after the occurrence of the Commercial Operations Date.

## **Section 9.2 Forced Outage Allowance**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Forced Outages not to exceed the Full Load Equivalent Forced Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which time reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Forced Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Forced Outage Allowance Days.

## **Section 9.3 Replacement Power**

9.3.1 During outages within the Full Load Equivalent Forced Outage Allowance Days, Full Load Equivalent Scheduled Outage Allowance Days and the Full Load Equivalent Major Maintenance Outage Allowance Days, Power Supplier shall not be required to supply Meralco with Replacement Power. In such circumstances, Meralco, at its own cost, shall source the Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.

9.3.2 During any period in which an Event of Force Majeure affects Power Supplier or Meralco, Meralco shall procure its own Replacement Power from the WESM to the extent supply or offtake is so affected.

9.3.3 During any period of Scheduled Outage for which unutilized Full Load Equivalent Scheduled Outage Allowance Days is not available, or Major Maintenance Outage for which unutilized Full Load Equivalent Major Maintenance Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E. During any period of Forced Outage for which unutilized Full Load Equivalent Forced Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for



delivery to Meralco. Replacement Power quantities procured by Power Supplier and delivered to Meralco under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E.

9.3.4 The supply by Power Supplier of quantities of Replacement Power under this Section 9.3.4 shall be deemed fulfillment of Power Supplier's obligation to make available the Contract Capacity and to deliver the Associated Energy during such period.

#### **Section 9.4 Scheduling Outages**

9.4.1 By no later than October 31 of every year, Power Supplier shall inform Meralco of the annual Scheduled Outages and Major Maintenance Outage for the succeeding calendar year as submitted to the System Operator (the "**Annual Maintenance Plan**"). In case of any revisions to the Annual Maintenance Plan approved or initiated by the System Operator, Power Supplier shall keep Meralco informed thereof immediately, but in no case less than thirty (30) Days prior to the start of such revised Scheduled Outage or Major Maintenance Outage.

9.4.2 In case of Scheduled Outages and Major Maintenance Outages other than those in the Annual Maintenance Plan, Power Supplier shall (i) secure approval of the System Operator and (ii) notify Meralco in writing at least seven (7) Days before the start of the Outage.

#### **Section 9.5 Early Completion of a Scheduled Outage or Major Maintenance Outage**

9.5.1 If a Scheduled Outage is completed earlier than the date originally anticipated, Power Supplier shall immediately advise Meralco of such event and the availability of Contract Capacity, and submit to Meralco a revised month-ahead, week-ahead and day-ahead capacity availability schedule, as may be applicable, indicating the revised capacity availability of the Plant. In the same manner, Meralco shall submit to Power Supplier the revised month-ahead, week-ahead and day-ahead energy nomination schedule, as may be applicable, to avail of the Contract Capacity made available as a result of the early completion of the Scheduled Outage. In such case, the number of maintenance, inspection and testing hours not used during the Scheduled Outage shall not be counted towards the Full Load Equivalent Scheduled Outage Allowance Days.

9.5.2 Section 9.5.1 shall similarly apply to the early completion of a Major Maintenance Outage.

#### **Section 9.6 Notification of Forced Outages**

Subject to Article 10 of Appendix H, when a Forced Outage occurs, Power Supplier shall notify Meralco of the occurrence thereof as soon as practicable after such occurrence and in any event within one (1) hour from such occurrence. Within four (4) hours after the occurrence of a Forced Outage, Power Supplier shall provide Meralco with a report on the nature of such Forced Outage and the expected duration thereof, taking into account the information available to the Power Supplier at that time. Power Supplier shall inform Meralco promptly of changes in the expected duration of a Forced Outage.

**ARTICLE 10**  
**ASSIGNMENT OR TRANSFER OF CONTRACT CAPACITY**

**Section 10.1 Implementation of Open Access and Retail Competition or Reduction in Demand of Captive Customers**

With the implementation of Open Access and Retail Competition in phases in accordance with the guidelines issued by the ERC or in relation to any reduction in demand of Meralco's captive customers, the amount of Contract Capacity may be adjusted in accordance with the terms hereof.

**Section 10.2 Notification of Reduction in Contract Capacity**

In respect of the start of each phase under Open Access and Retail Competition or in case of any reduction in demand of Meralco's captive customers, Meralco shall deliver to Power Supplier written notice specifying the reduced amount of Contract Capacity under this Agreement resulting from transfers made in accordance with Section 10.3.

**Section 10.3 Assignment or Transfer of Contract Capacity Due to Open Access and Retail Competition or Reduction in Demand of Captive Customers**

10.3.1 Meralco shall be entitled to assign, transfer, designate, delegate or allocate (collectively in this context, "**Transfer**") its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to any of its business segments or its Retail Electricity Supplier ("**RES**") Affiliate, without the prior consent of the Power Supplier. In the event that Meralco has two or more RES Affiliates, Power Supplier shall have the option to choose the RES Affiliate to which Meralco shall Transfer its rights and obligations, which option shall be communicated to Meralco within five (5) Days from receipt of the Transfer Notice (defined below).

10.3.2 Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to (i) any of its Affiliates or (ii) to any other Person, subject to the consent of Power Supplier, which consent shall not be unreasonably withheld delayed or conditioned, it being understood that withholding consent would not be considered unreasonable if the proposed Transfer would be contrary to the reasonable requirements of Finance Parties under the Finance Documents, as evidenced by a written confirmation by the relevant Finance Parties. Power Supplier shall exert reasonable efforts to (i) procure that only the consent of Finance Parties representing no more than seventy-five percent (75%) of the debt plus undrawn commitments shall be required for a Transfer under the Finance Documents; and (ii) upon written notice being given by Meralco, procure such consent for the Transfer. Meralco shall endeavor to cooperate with Power Supplier by providing documents and information in relation to the Transfer as may be reasonably required by the Finance Parties.

10.3.3 In respect of Transfers not requiring Power Supplier's consent, Meralco shall give a written notice to the Power Supplier of such Transfer at least five (5) Days prior to the first Day of the next Billing Period or by such date as would be sufficient for timely notice to WESM of such change ("**Transfer Notice**"). In respect of Transfers requiring Power Supplier's consent, Meralco shall give a written notice to the Power Supplier of such Transfer at least sixty (60) Days prior to

the first Day of the next Billing Period or by such date as would be sufficient for timely notice to WESM of such change ("Consent Notice")

10.3.4 Subject to the receipt of Meralco and the Power Supplier of the written acceptance of such Transfer by the transferee:

- (a) Meralco shall cease to have any rights and obligations under this Agreement, and
- (b) the transferee shall assume all rights and obligations of Meralco under this Agreement,

in respect of such portion of the Contract Capacity transferred under this Section 10.3, commencing from the first Day of the Billing Period immediately following the aforesaid notice, upon execution of acceptable documentation for such transferred Contract Capacity.

## **ARTICLE 11 BILLING AND PAYMENT**

### **Section 11.1 Billing**

Power Supplier shall render to Meralco an itemized Invoice for each Billing Period in accordance with the provisions of this Agreement and Appendix I. Meralco shall pay Invoices when due and payable in accordance with this Agreement and Appendix I.

### **Section 11.2 Payments**

11.2.1 Meralco shall pay the entire amount indicated in the Final Invoice (subject to Appendix I) when due and payable, provided that Meralco shall not be required to make payment on any Invoice that is manifestly in error, apparently invalid or not in the form or substance contemplated by this Agreement until the same has been corrected following prompt notice by Meralco to Power Supplier of such error, invalidity or absence of proper form or substance.

11.2.2 If Meralco disputes all or any portion of an Invoice for a reason other than a manifest error in, or the apparent invalidity or incorrect form or substance of, such Final Invoice, Meralco shall nonetheless pay the full amount of such Invoice (subject to Appendix H). Any payment by Meralco under this Section 11.2.2 is without prejudice to Meralco's right at a later date within one (1) year following such payment to dispute, protest or question any amount so paid.

11.2.3 If applicable, Meralco will endeavor to dispute, protest or question a Final Invoice within fifteen (15) Days from the date of its receipt. In such a case, the dispute, protest or question shall be resolved within thirty (30) Days from the date of filing thereof. If the dispute, protest or question is not resolved, Meralco may at any time refer such dispute, protest or question for resolution in accordance with Article 20.

11.2.4 If any withheld amount under Section 11.2.1 is subject to objection or Dispute, or any sum set forth in a Final Invoice, or any other sum payable under this Agreement has been paid under

protest or is subject to objection, or is the subject of a Dispute, then after agreement between the Parties or after settlement of the Dispute, any sum so agreed by the Parties or determined pursuant to Article 20 to be owing (including the refund of any amount so paid under protest or subject of a Dispute) shall be paid within the later of (a) the original due date of such payment and (b) seven (7) Days from such agreement or settlement, with interest accruing thereon from the original due date (or, if payment has been made under protest or Dispute, from the date the disputed amount was paid) until the award or settlement amount is paid. Interest shall be calculated on the actual number of days elapsed over a three hundred sixty-five (365) Day basis equivalent to PDST-R2 plus two hundred fifty (250) basis points; *provided, however*, that if the protest or Dispute is resolved by the Parties and payment is made, in each case within thirty (30) Days from the date of filing thereof, the Parties agree to waive payment of any interest due on the amount owing (or, if payment has been made under protest or Dispute, due on the amount to be refunded).

11.2.5 For the avoidance of doubt, if Meralco makes payment of a disputed Final Invoice and thereafter refers such Dispute for resolution in accordance with Article 20 and such Dispute is resolved in Meralco's favor, Power Supplier shall in addition to refunding the disputed amount, be liable, subject to the waiver under Section 11.2.4, for the payment of interest, which shall be calculated on the actual number of days elapsed over a three hundred sixty-five (365) Day basis equivalent to the PDST-R2 plus two hundred fifty (250) basis points in each month in which the sum was due and payable accruing from the date the disputed Invoice amount was paid by Meralco until the time the award is paid.

11.2.6 If any Party fails to make payment to another Party of any amount due under this Agreement, where such amount is not the subject of a Dispute, including but not limited to the award or settlement amount due under Section 11.2.4, interest thereon from the date when payment was originally due until payment thereof is received shall be calculated on the actual number of days elapsed over a three hundred sixty-five (365) Day basis equivalent to the PDST-R2 plus two hundred fifty (250) basis points, in each month in which the sum was due and payable.

11.2.7 Any reference to a "payment" required hereunder (including the consequences of any delay in such payment) shall also apply to any required reimbursement or "credit memo", and the due date shall be the date required for such reimbursement or "credit memo" to be made.

### **Section 11.3 Setoff**

Each Party reserves to itself all rights of setoff, counterclaim and other remedies and/or defenses that such Party is or may be entitled to assert arising exclusively from or out of this Agreement.

## **ARTICLE 12 TAXES, FEES AND COSTS**

### **Section 12.1 Responsibility for Taxes, Fees and Costs**

12.1.1 Power Supplier shall make timely payment of the following amounts:

- (a) WESM Market Fees;
- (b) Energy Imbalance Fees;
- (c) Benefits to Host Communities Charges; and
- (d) applicable VAT on any of the foregoing amounts in accordance with Philippine Bureau of Internal Revenue and ERC regulations.

12.1.2 If Connection Charges are imposed on Power Supplier after the Effective Date, Power Supplier shall make timely payment of the same, and these amounts (inclusive of applicable VAT) shall be charged to Meralco in the proportion that its Contract Capacity bears to the Net Dependable Capacity.

12.1.3 The following amounts that Meralco is responsible for paying to third parties shall form part of the price that Meralco will charge to its customers:

- (a) VAT on Contract Capacity and Associated Energy and Replacement Power (if any VAT is payable) in accordance with Philippine tax Laws and regulations; and
- (b) WESM line rental charges.

12.1.4 Each Party shall be liable for their respective income taxes.

12.1.5 Meralco shall deduct and withhold from the amounts payable under a Final Invoice, the applicable creditable withholding tax and Meralco shall remit any amounts withheld for such tax to the relevant taxing authorities. If Power Supplier believes such withholding tax is not applicable to it, Power Supplier shall provide Meralco with such documents and evidence to demonstrate that payments to Power Supplier are not subject to such withholding tax, such as but not limited to the following:

- (a) Board of Investments ("BOI") Certificate of Registration indicating Power Supplier's entitlement to Income Tax Holiday ("ITH");
- (b) BOI Certificate of ITH Entitlement indicating Power Supplier's entitlement to ITH renewed annually; and
- (c) such documents that the BIR may require to support Power Supplier's claim for exemption from creditable withholding tax.

Meralco shall no longer deduct and withhold creditable withholding tax from the amounts payable under a Final Invoice upon its reliance on the documents and evidence submitted by Power Supplier.

12.1.6 Power Supplier shall indemnify Meralco for any final assessment, liability, surcharge, interests, penalties and other costs or fees arising from Meralco's failure to withhold creditable withholding tax from payments due under this Agreement in accordance with applicable BIR rules and regulations, *provided that* such failure by Meralco to withhold is (a) upon Power Supplier's request, or (b) due to any change, reversal or ruling affecting Power Supplier's status or claim of exemption from withholding tax. The Parties agree that any outstanding obligations of Power Supplier in respect of its obligation to indemnify under this Section 12.16 shall not be considered a ground for termination.

12.1.7 Meralco shall remit to Power Supplier the applicable VAT on Contract Capacity and Associated Energy, except in respect of any portion thereof that applies to VAT zero-rated/VAT-exempt customers of Meralco, in accordance with regulations, orders, circulars or other issuances applicable to a distribution utility issued by relevant governmental instrumentalities, including, but not limited to, BIR Revenue Memorandum Circular No. 61-2005 and ERC Resolution No. 20-2005. Meralco shall issue, for each Billing Period, a certification containing:

- (a) the amount of VAT related to the actual energy volume covered by this Agreement and allocated as sold to Meralco's VAT zero-rated/VAT-exempt customers; and
- (b) the amount of VAT billed for energy covered by this Agreement that is uncollected from Meralco's customers which are neither VAT zero-rated nor VAT-exempt.

With respect to any VAT billed to Meralco by Power Supplier pertaining to actual energy volume for Meralco's VAT zero-rated and VAT-exempt customers, Power Supplier shall issue a credit memo reversing the corresponding amount of VAT billed to Meralco. Meralco shall indemnify Power Supplier for any final assessment, liability, surcharge, interests, penalties and other costs or fees ("**Assessments**") arising from Meralco's failure to remit the VAT collected from its customers. For purposes of this Article 12, Power Supplier shall notify Meralco of such Assessments, and the Parties shall meet and discuss within thirty (30) days from such notification, in order to reconcile the amount of unremitted VAT. The Parties agree that any outstanding obligations of Meralco in respect of its obligation to indemnify under this Article 12 shall not be considered a ground for termination.

In its monthly VAT remittance to Power Supplier, Meralco shall show the amount of VAT being remitted for the current and prior months' billings. Meralco shall provide Power Supplier an annual statement of its VAT balances with Power Supplier, including a certification indicating the VAT amount related to any receivables written off attributable to Power Supplier.

## **Section 12.2 Charges Due to Change in Circumstances**

12.2.1 If, as a result of a Change in Circumstances, Meralco becomes liable to pay any new charges, fees, taxes, duties, assessments or other similar amounts ("**New Charges**"), or any increase in existing charges, fees, taxes, duties, assessments or other similar amounts ("**Increased Charges**") become payable with respect to this Agreement, the New Charges or Increased Charges shall form part of the price that Meralco will charge to its customers.

12.2.2 In the event that, as a result of a Change in Circumstances and pursuant to a corresponding order of the ERC or any relevant Government Instrumentality:

- (a) Meralco is prevented from making a timely pass through to its customers of any charges under this Agreement as approved by the ERC in the ERC Final Approval as accepted by Power Supplier (such amounts referred to hereinafter as “**Disallowed Pass-Through Amounts**”); or
- (b) any portion of the Price that has been paid to Power Supplier is required to be refunded to Meralco or Meralco’s customers in connection with the ERC Application or any petition, claim, case, proceeding or other action involving any of the Parties brought before any judicial, administrative or quasi-judicial body (such portion of the Price referred to hereinafter as “**Refundable Amounts**”),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement to restore Meralco’s commercial position prior to such Change in Circumstances, including an adjustment of the Price; provided that in the case of Section 12.2.2(b), Power Supplier shall refund all Refundable Amounts to Meralco or Meralco’s customers in the manner and within the period as required by the ERC or any other relevant Government Instrumentality (as applicable). If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the provisions of Section 18.6.6(a) will apply.

12.2.3 If as a result of a Change in Circumstances affecting Power Supplier, Power Supplier becomes liable to pay any New Charges or any Increased Charges with respect to this Agreement, or Power Supplier is no longer able to require payment from Meralco for Disallowed Pass-Through Amounts, or Power Supplier is required to refund Refundable Amounts, or a Change in Circumstances materially increases the operating costs or capital expenditures associated with the Plant or materially and adversely affects its performance of its obligations under this Agreement, adversely affects the sale by Power Supplier of Contract Capacity and Associated Energy in accordance with this Agreement, makes the Power Supplier’s administration or operational aspects of such performance materially more burdensome (whether made at the direction of any Governmental Instrumentality or otherwise) or causes serious damage to, or materially and adversely affects the financial condition of Power Supplier, Power Supplier shall send a notice to Meralco of the occurrence of such Change in Circumstances (“**Notice of Change in Circumstances**”) together with an analysis of the cost impact of such Change in Circumstances and Meralco shall file the necessary application with the ERC for the adjustment of the Price (“**Application for Price Adjustment**”) within thirty (30) Days from receipt of the Notice of Change in Circumstances; *provided that*, Meralco shall not be liable to pay any adjustment in the Price from the time the Change in Circumstances becomes effective until the ERC approves the Application for Price Adjustment (“**Interim Period**”); and *provided, further*, that New Charges or Increased Charges for which the Power Supplier sends a Notice of Change in Circumstances in accordance with this Section 12.2.3 shall not include charges, fees, taxes, duties or other similar amounts relating to (i) taxes on the income of Power Supplier, (ii) taxes on the real property owned,



held by or in possession of Power Supplier, and (iii) business taxes on the operations of Power Supplier.

12.2.4 In the event that:

- (a) Meralco is unable to file an Application for Price Adjustment within thirty (30) Days from receipt of the Notice of Change in Circumstances, or
- (b) the ERC denies, in whole or in part, the Application for Price Adjustment, or
- (c) if no order is issued granting the Application for Price Adjustment within sixteen (16) months from receipt of the Notice of Change in Circumstances, or
- (d) the total amount of unreimbursed New Charges, Increased Charges, Disallowed Pass-Through Amounts that Power Supplier is unable to collect from Meralco, and the Refundable Amounts actually refunded by Power Supplier, accumulated during the Interim Periods for all Change in Circumstances events occurring for the entire Term ("**Unreimbursed New or Increased Charges and Refundable Amounts**") exceeds the equivalent of two percent (2%) of the Capacity Payments for one (1) Contract Year ("**Threshold Level 1**"),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement to restore Power Supplier's commercial position prior to such Change in Circumstance, including an adjustment of the Price. If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the Power Supplier shall be entitled to terminate this Agreement in accordance with the provisions of Section 18.6.6(b).

12.2.5 In the event that the total Unreimbursed New or Increased Charges and Refundable Amounts exceeds the equivalent of three percent (3%) of the Capacity Payments for one (1) Contract Year ("**Threshold Level 2**"), Power Supplier shall be entitled to terminate this Agreement by sending a written notice of termination to Meralco, which shall be effective no earlier than six (6) months after Meralco's receipt thereof. Pending effectivity of such termination, Power Supplier shall continue to make available the Contract Capacity and Deliver the Associated Energy at the Price.

12.2.6 If as a result of a Change in Circumstance, any component of the Price is affected as will result in a reduction in the Price, Meralco shall send a Notice of Change in Circumstance to Power Supplier and Meralco shall file the necessary Application for Price Adjustment within thirty (30) Days from knowledge of such Change in Circumstance; *provided, however*, that the Price shall not be reduced until the ERC approves the Application for Price Adjustment; *provided, further*, that all Refundable Amounts resulting from such Change in Circumstance shall be refunded by Power Supplier in the manner and within the time required by the ERC; *and provided, finally*, this shall be without prejudice to the Power Supplier's termination rights under Section 12.2.4 and Section 12.2.5 in case Threshold Level 1 or Threshold Level 2 is reached.

## ARTICLE 13 METERING

Any metering required to implement this Agreement shall be in accordance with the requirements of the WESM Rules and the Grid Code.

## ARTICLE 14 COVENANTS

### Section 14.1 ERC Application

14.1.1 Within five (5) Business Days after receipt from Power Supplier of the documents set forth in Part 3 of Appendix C (or such other period agreed upon by the Parties), the Parties shall jointly file with the ERC the necessary application for the approval of this Agreement ("**ERC Application**") and shall exert best efforts to obtain such approval as promptly as practicable following the submission of the ERC Application and to allow for the issuance of the ERC Final Approval and occurrence of the Acceptance Date on or before the Longstop Date.

14.1.2 Power Supplier shall furnish (i) all documents set forth in Part 3 of Appendix C promptly after, and in any case, within ten (10) Business Days from, Effective Date; and (ii) those documents that the ERC may require in connection with the ERC Application and any other review or examination conducted by the ERC with respect to this Agreement promptly upon request by Meralco, provided that Power Supplier shall submit directly to the ERC any information which it deems to be confidential and shall give written notice to Meralco of such direct filing.

### Section 14.2 ERC Approval

14.2.1 Subject to the non-occurrence of the Longstop Date, Power Supplier shall immediately inform Meralco of its receipt of the ERC Final Approval by providing proof thereof. Power Supplier shall have ten (10) Days from the date of such receipt of the ERC Final Approval to notify Meralco in writing that (i) it accepts such ERC Final Approval or (ii) it does not accept the ERC Final Approval, stating the grounds for non-acceptance.

14.2.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration and Meralco shall cooperate and use reasonable efforts to support any such motion. Any order on a motion for reconsideration filed shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.2, and Power Supplier shall accept or reject such ERC Final Approval in accordance with Section 14.2.1 above.

14.2.3 If the ERC's Final Approval requires an amendment of any provision herein, including provisions on amounts payable under this Agreement, or subjects such approval to any material term or condition that is not acceptable to either Party, acting reasonably ("**ERC Conditional Approval**"), the Parties shall cooperate in good faith to resolve the required ERC amendment or to address the material term or condition. The Parties may:

- (a) within fifteen (15) Days after the receipt of the ERC Conditional Approval, seek reconsideration of the ERC Conditional Approval; or
- (b) within sixty (60) Days after receipt of the ERC Conditional Approval, revise and file an amended Agreement incorporating changes (other than the Price) for approval by the ERC ("**Amended Agreement**");

*provided that*, if the motion for reconsideration is denied by the ERC, or the Amended Agreement is disapproved by the ERC, or approved by the ERC but still with any material term or condition that is not acceptable to either Party, acting reasonably, the Party adversely affected may terminate this Agreement upon sixty (60) Days prior written notice to the other Party in accordance with the provisions of Section 18.6.2.

14.2.4 Following (i) a written notice of acceptance from Power Supplier with respect to the ERC Final Approval (including upon reconsideration under Section 14.2.2 above), or (ii) the lapse of the 10-Day period referred to in Section 14.2.1 without Power Supplier communicating its acceptance or non-acceptance in writing, the Acceptance Date shall be considered as having occurred on the date of the written notice of acceptance or on the last Day of such period, as applicable, provided, in each case, that Meralco has not filed any motion for reconsideration or appeal subsequent to the Power Supplier's acceptance of such ERC Final Approval and the Longstop Date has not occurred.

### **Section 14.3 Coal Supply**

14.3.1 Power Supplier shall be responsible for the preparation and implementation of a plan for the safe, adequate and reliable supply and transportation of coal to the Plant throughout the Term.

14.3.2 Power Supplier shall ensure that at all times there is coal inventory at the Site sufficient to operate the Plant in accordance with this Agreement and in accordance with Prudent Operating Practices, taking into account all relevant factors such as seasonal and/or climatic factors, which inventory shall be good for at least a continuous thirty (30) Day period based on continuous operation of the Plant at average Associated Energy for the current Billing Period and the next two (2) Billing Periods based on the latest year-ahead or month-ahead nominations of Meralco.

### **Section 14.4 Compliance with Laws**

14.4.1 Power Supplier and Meralco agree that all applicable Legal Requirements shall govern their performance of this Agreement and each shall comply in all material respects with, and shall keep in full force and effect, all Governmental Authorizations required to be in its name for the performance of its obligations under this Agreement.

14.4.2 Without limiting the application of Section 14.4.1, Power Supplier and Meralco agree to comply and perform their respective obligations under this Agreement in accordance with Legal Requirements and the Relevant Operating Regulations.

## Section 14.5 Other Covenants of the Power Supplier

14.5.1 The Power Supplier shall have obtained, by the Operations Effective Date, the necessary permits and licenses under Legal Requirements to enter into and to perform its obligations under this Agreement.

14.5.2 The Power Supplier shall, by the Operations Effective Date, become a bona fide direct trading member of the Luzon WESM.

14.5.3 The Plant shall be constructed, operated and maintained in accordance with Legal Requirements and Prudent Operating Practices

## ARTICLE 15 INSURANCE

### Section 15.1 Insurance Policies

Power Supplier will endeavor to purchase the following insurance coverage described below to the extent such insurance coverages are commercially available, provided that, the coverages, deductibles, and amounts of insurance indicated below can be adjusted from time to time as market conditions dictate, or based on mutual agreement between Power Supplier, Meralco, and the Finance Parties:

- (a) marine insurance in respect of the Plant, equipment, parts and accessories to be imported into the Republic of the Philippines, for full replacement cost of imported equipment;
- (b) builders' or all risk insurance on an all risk basis in an amount not less than the full replacement or estimated maximum loss cost of the Plant to protect against loss or damage to or destruction of the Plant. The policy(ies) will include coverages for inland transit, expediting expense, demolition and increased cost of the construction, earthquake, and flood. To the extent that sublimits apply to these coverages, such sublimits will be customary for similar facilities in the Philippines. The policy will also provide delay in start up insurance for an indemnity period sufficient to cover lost revenue that results from any peril covered under the policy, and extra expense coverage with customary limits. The policies will contain the following deductibles:

|                    |   |                                   |
|--------------------|---|-----------------------------------|
| Property damage    | – | As acceptable to Finance Parties  |
| Delay in start-up  | – | As acceptable to Finance Parties  |
| Earthquake & flood | – | As acceptable to Finance Parties; |
- (c) general liability insurance (or equivalent Philippine insurance) to cover third party bodily injury and property damage, covering all premises and operations including products and completed operations, contractual liability, personal injury, and employers liability. Coverage shall be on an "occurrence form." Limits of liability of USD 5 million (or PHP equivalent) per occurrence and in the aggregate;

(d) workers compensation insurance as required by Legal Requirements.

Notwithstanding any provision herein to the contrary, it is agreed that insurance procured by Power Supplier which meets the requirements of Finance Parties shall satisfy the requirements of this Section 15.1.

### **Section 15.2 Evidence of Insurance**

On or before the Commencement Date and thereafter at least thirty (30) Days prior to the date set for each annual renewal thereof, Power Supplier shall provide Meralco with a certificate of insurance which reasonably describes the terms and conditions of the insurance and includes statements from its insurers evidencing payment of the annual premium in respect of the insurance policies from its insurance brokers or insurance advisor as to the insurance obtained by the Power Supplier in connection with this Agreement following inception or renewal of the relevant policies.

### **Section 15.3 Changes to Policies**

Any changes in the insurances which are not consistent with the requirements of this Agreement shall require the prior written consent of Meralco.

### **Section 15.4 Notification of Claims and Application of Proceeds**

Power Supplier shall in relation to each property damage insurance policy for the Plant required by Section 15.1 promptly notify Meralco of any circumstances which give rise or might reasonably be foreseen to give rise to a claim under such policy or policies which exceeds USD 5 million (or PHP equivalent).

Power Supplier shall apply, to the extent required, any and all of the property damage insurance proceeds that it receives regarding any damage to the Plant toward the reinstatement of the Plant, subject to the requirements under the Finance Documents.

## **ARTICLE 16 INDEMNIFICATION AND LIABILITY**

### **Section 16.1 Indemnity by Power Supplier**

16.1.1 Power Supplier shall indemnify, defend and hold harmless Meralco, from and against all Claims of third parties made against or suffered by Meralco for any physical loss of or damage to property or death or injury to persons, resulting from any negligent act or omission of Power Supplier or any of its contractors or their respective employees, directors, agents or shareholders ("**Power Supplier Parties**") that arises out of or is in any manner connected with the performance of this Agreement, except to the extent such loss, damage, injury or death is attributable to the negligence or misconduct of, or breach of this Agreement by, Meralco or any of its employees,

directors, agents or shareholders ("Meralco Parties") or the failure of Meralco or any Meralco Parties to take reasonable steps in mitigation thereof.

16.1.2 This Section 16.1 shall not apply to any loss, damage, cost or expense to the extent that Meralco is otherwise compensated pursuant to the terms of this Agreement in respect of such loss, damage, cost or expense.

#### **Section 16.2 Indemnity by Meralco**

16.2.1 Meralco shall indemnify, defend and hold harmless Power Supplier, from and against all Claims of third parties made against or suffered by Power Supplier for any physical loss of or damage to property or death or injury to persons, resulting from any negligent act or omission of Meralco or any Meralco Parties that arises out of or is in any manner connected with the performance of this Agreement except to the extent such loss, damage, injury or death is attributable to the negligence or misconduct of, or breach of this Agreement by, Power Supplier or any Power Supplier Parties or the failure of Power Supplier or any Power Supplier Parties to take reasonable steps in mitigation thereof.

16.2.2 This Section 16.2 shall not apply to any loss, damage, cost or expense to the extent that Power Supplier is otherwise compensated pursuant to the terms of this Agreement in respect of such loss, damage, cost or expense.

#### **Section 16.3 Notice of Proceedings**

Each Party shall promptly notify the other Party of any Claim in respect of which it is entitled to be indemnified under this Article 16. Such notice shall be given as soon as reasonably practicable after the relevant Party becomes aware of such Claim.

#### **Section 16.4 Conduct of Proceedings**

16.4.1 The indemnified Party shall have the right, but not the obligation, to contest, defend and litigate (and to retain legal advisers of its choice in connection therewith) any claim, action, suit or proceeding by any third party alleged or asserted against it arising out of any matter in respect of which it is entitled to be indemnified hereunder, and the reasonable costs and expenses thereof shall be subject to the said indemnity; provided that, the indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding at its expense and through legal advisers of its choice if it (i) gives notice of its intention to do so to the indemnified Party, (ii) acknowledges in writing its obligation to indemnify that Party to the full extent provided by this Article 16 and (iii) reimburses that Party for the reasonable costs and expenses previously incurred by it prior to the assumption of such defence by the indemnifying Party.

16.4.2 Neither Party shall settle or compromise any claim, action, suit or proceeding in respect of which it is entitled to be indemnified by the other Party without the prior written consent of that Party.

## **Section 16.5 Consequential Losses**

Without limiting any payments (or the calculations thereof) contemplated under this Agreement including, but not limited to Section 3.2, Section 3.3, Section 3.4, Section 18.3 or Appendix E, no Party shall in any circumstances be liable to the other Party in its performance of or failure to perform this Agreement or any provision hereof, whether in contract, tort or breach of statutory duty or otherwise for:

- (a) loss of or anticipated loss of profit, loss of use, business interruption, loss of use of any equipment, loss of any contract or other business opportunity or good will; and
- (b) indirect or consequential losses or damages

whether or not such losses or damages are subject to the indemnities in Section 16.1 and Section 16.2.

## **ARTICLE 17 FORCE MAJEURE**

### **Section 17.1 Events of Force Majeure**

An Event of Force Majeure shall mean any circumstance not within the reasonable control, directly or indirectly, of the Party affected, but only if and to the extent that:

- (a) such circumstance, despite the exercise of reasonable diligence, cannot be prevented, avoided or removed by such Party; and
- (b) such event prevents such Party from performing its obligations under this Agreement;

and in each case:

- (a) such Party has taken all reasonable precautions, due care and reasonable alternative measures in order to avoid the effect of such event on such Party's ability to perform its obligations under this Agreement and to mitigate the consequences thereof;
- (b) such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Agreement;
- (c) the suspension of a Party's performance of its obligations hereunder is of no greater scope and no longer duration than is required by the Event of Force Majeure;
- (d) no obligation of either Party, which arose before the occurrence of the event that caused the suspension of performance of obligations hereunder, shall be excused as a result of an Event of Force Majeure (for the avoidance of doubt, day-ahead nominations by Meralco

pursuant to Section 6.3.3 shall not be considered a pre-existing obligation for this purpose); and

- (e) such Party has given the other Party prompt notice in accordance with Section describing such event, the effect thereof and the actions being taken in order to comply with this Section 17.1.

## **Section 17.2 Instances of Force Majeure**

Subject to the provisions of Section 17.1 and Section 17.7, Events of Force Majeure shall include, but not be limited to:

- (a) acts of war or the public enemy whether war is declared or not;
- (b) public disorders, civil disturbance, insurrection, rebellion, acts or campaigns of terrorism, piracy, embargo, sabotage, blockade, revolution, riots or violent demonstrations;
- (c) explosions, fires, earthquakes, lightning, typhoon, tsunami, flood, cyclone, volcanic eruptions, landslide or other natural disasters, acts of God, epidemic, quarantine or plague;
- (d) any action or aggregation of actions or failure to act by any Governmental Instrumentality, including expropriation, requisition, confiscation, nationalization or other compulsory acquisition; export or import restriction or other restrictions, rationing or allocations imposed by any Governmental Authority (in each instance, occurring in the Philippines); the denial of or delay in the granting of any approval, consent, authorization or other requirement mandated by any Legal Requirement, the failure of any such approval, consent, authorization or other requirement (including the ERC Final Approval) once granted to remain in force and effect or to be renewed on substantially similar terms;
- (e) strikes, lockouts or other collective or industrial action by workers or employees other than non-manual personnel (in each instance, occurring in the Philippines); provided that any Party that seeks to invoke such a strike, lockout or other collective or industrial action as an Event of Force of Majeure must first utilize all reasonable efforts to continue performance of its obligations hereunder;
- (f) radioactive contamination or ionizing radiation;
- (g) unavailability of power from the System;
- (h) any System Emergency or Transmission Failure that may affect the delivery by Power Supplier, or acceptance by Meralco, of power (except if due to the act or omission of the Party seeking to claim an Event of Force Majeure, unless otherwise due to an Event of Force Majeure). In case of disagreement as to the existence of a Transmission Failure, the Parties shall secure the necessary certification from the GMC, which certification shall bind both Parties;



- (i) appropriate actions taken in response to any orders, warnings or advice given by a Governmental Instrumentality or the System Operator, whether or not for safety reasons to implement emergency shutdown (except if due to the act or omission of the Party seeking to claim an Event of Force Majeure, unless otherwise due to an Event of Force Majeure) or otherwise; and
- (j) a Transmission Failure or a Curtailment of the Plant output by the Market Operator or System Operator.

For the avoidance of doubt, (i) the breakdown or failure of equipment or machinery of the Plant or the delay or inability to procure fuel for the Plant shall not in itself be considered as an Event of Force Majeure, unless otherwise due to an Event of Force Majeure and (ii) any (x) interruption of the Plant's generating capability resulting in an unplanned reduction or suspension of the electrical output from the Plant and/or unavailability of capacity in whole or in part from the Plant; (y) automatic shutdown of any part of the Plant; and (z) other unavailability of the Plant for operation, that is due to an Event of Force Majeure, it shall be treated for all purposes of this Agreement as an Event of Force Majeure and not as a Scheduled Outage or a Forced Outage.

For reference, "Curtailment", is as defined in the OATS Rules under ERC Case No. 2006-015RC.

For the avoidance of doubt, neither Party shall be entitled to claim any of its act or omission as an Event of Force Majeure.

### **Section 17.3 Effect of Force Majeure**

17.3.1 Except as provided in Section 17.7, the affected Party shall be excused from performance to the extent affected by, and shall not be considered to be in default in respect of any obligation under this Agreement (including any obligation of Meralco to pay the Price) for so long as failure to perform such obligation shall be due to, an Event of Force Majeure. For the avoidance of doubt and notwithstanding any other provision of this Agreement, Meralco shall not be required to make any Capacity Payment in respect of (i) any Contract Capacity that is unavailable due to an Event of Force Majeure or (ii) any Contract Capacity that Meralco cannot accept due to an Event of Force Majeure. Similarly, in respect of (ii) in the foregoing sentence, Power Supplier shall not be required to supply to Meralco and may freely sell the Contract Capacity or a portion thereof to interested parties, including the WESM.

17.3.2 If an Event of Force Majeure prevents Power Supplier from delivering capacity and/or energy to Meralco, Meralco shall procure its own Replacement Power from the WESM to the extent supply is so affected. If any Event of Force Majeure prevents Meralco from taking capacity and/or energy from Power Supplier, Power Supplier may sell such capacity and energy to third parties, on terms which permit Power Supplier to recommence sales to Meralco following the discontinuance of such Event of Force Majeure affecting Meralco upon twenty-four (24) hours' prior written notice to Power Supplier.

17.3.3 Any Event of Force Majeure, whether single or in aggregate, within the original Term of the Agreement shall result in the automatic extension of the Term for the same period that any Event of Force Majeure, whether single or in aggregate, subsists, provided that such automatic extension shall not exceed one hundred eighty (180) Days (the "Term Extension"). Any extension of the Term in addition to the Term Extension by reason of Force Majeure Events occurring during the Term or the Term Extension shall be subject to the mutual agreement of the Parties.

#### **Section 17.4 Effect of Uninsured Events of Force Majeure**

If an Event of Force Majeure occurs that causes material damage to the Plant, and such Event of Force Majeure (i) is of a type not normally insured against by owners or operators of power plants similar to the Plant, is not required to be insured against in accordance with Prudent Operating Practices, and in fact has not been insured against by Power Supplier or (ii) could not be insured against by Power Supplier prior to the time of the occurrence of the Event of Force Majeure, then:

- (a) both Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the operation of the Plant or regarding an adjustment of the Contract Capacity or Price, and Power Supplier shall use its best efforts to obtain funding to complete or repair the Plant; and
- (b) during the existence and continuance of any Event of Force Majeure (including the effects and consequences thereof), Power Supplier shall not be required to repair or operate the Plant, as the case may be, and such failure shall not constitute a Power Supplier Event of Default.

If the Parties do not reach such satisfactory solution within one hundred eighty (180) Days after the end of such Event of Force Majeure, or such other time as may be agreed upon, either Party may terminate this Agreement in accordance with Section 18.6.5.

#### **Section 17.5 Effect of Extended Force Majeure**

If any Event of Force Majeure prevents Power Supplier from making available the Contract Capacity or Delivering the Associated Energy or Meralco from accepting Contract Capacity or Associated Energy, in each case for a continuous period of more than one hundred eighty (180) Days, then either Party may upon written notice, require the other Party to meet as soon as practicable to reasonably discuss any modification, change or amendment of this Agreement under such reasonable terms, to the extent necessary to resolve the issues arising from the Event of Force Majeure and maintain, to the extent feasible, the rights and obligations of the Parties under this Agreement.

If the Parties do not reach such satisfactory solution prior to the end of such one hundred eighty (180) Day period, or such other time as may be agreed upon, either Party may terminate this Agreement in accordance with Section 18.6.5.

## Section 17.6 [NOT USED]

## Section 17.7 Certain Events Not Excused

The provisions of this Section 17 shall not excuse the late payment of money, except when such late payment is caused by an Event of Force Majeure, and in such case, such late payment shall be excused and not subject to late payment interest.

## Section 17.8 Notice of Force Majeure; Procedure

17.8.1 As soon as possible following the occurrence of any Event of Force Majeure (or, if known in advance of the Event of Force Majeure, promptly upon such knowledge), if either Party desires to invoke such Event of Force Majeure as a cause to excuse or delay performance of any obligation (other than the payment of money) hereunder, it shall advise the other Party in writing of the date, nature and expected duration of such Event of Force Majeure; provided that such notice must be sent (a) by Power Supplier to Meralco immediately and in any event within twenty-four (24) hours after Power Supplier becomes aware of such Event of Force Majeure and (b) by Meralco to Supplier as soon as reasonably possible and in any event within twenty-four (24) hours after Meralco becomes aware of such Event of Force Majeure.

17.8.2 As soon as practicable from time to time during the Event of Force Majeure, and also within five (5) Days following the termination of the then-known effects of such Event of Force Majeure, the Party having invoked such Event of Force Majeure shall submit to the other Party reasonable proof of such Event of Force Majeure and its effect upon such Party's performance of its obligations under this Agreement.

17.8.3 During the existence and continuance of any Event of Force Majeure (including the effects and consequences thereof), the Parties shall:

- (a) make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay or non-performance occasioned by any Event of Force Majeure including recourse to alternate acceptable sources of services, equipment and materials;
- (b) use their best efforts to ensure resumption of normal performance of this Agreement after the termination of any Event of Force Majeure and shall perform their obligations to the maximum extent practicable and agreed between the Parties; and

- (c) continue to provide the other Party with weekly updated reports as to the nature of the delay and its effect upon the time of performance.

## ARTICLE 18 EVENTS OF DEFAULT AND TERMINATION

### Section 18.1 Power Supplier Events of Default

Each of the events described below shall constitute a **"Power Supplier Event of Default"**; *provided that* such event (with the exception of Section 18.1(e)) results to or is accompanied by an actual failure by Power Supplier to make Available the Contract Capacity and/or Deliver the Associated Energy of Meralco in accordance with this Agreement:

- (a) Power Supplier fails to perform any material obligation under this Agreement, including the making of any payment which is due, unless such failure is remedied within sixty (60) Days after receipt from Meralco of a written notice of Power Supplier Event Default.
- (b) The appointment of a receiver or liquidator or trustee of Power Supplier or of any material property of Power Supplier, unless such appointment is discharged within sixty (60) Days; the bankruptcy, insolvency or corporate rehabilitation of Power Supplier or sequestration of any substantial part of the property of Power Supplier, unless such decree is discharged and stayed within sixty (60) Days after entry thereof; the filing of a petition to declare Power Supplier bankrupt or to reorganize Power Supplier pursuant to any of the provisions of any applicable bankruptcy or rehabilitation Law or any similar statute, unless such petition is dismissed within sixty (60) Days after such filing;
- (c) The voluntary passing of a resolution or filing of a petition for the bankruptcy, insolvency, corporate rehabilitation or winding up, liquidation of, or other similar proceeding relating to Power Supplier, unless such resolution or petition is rescinded, withdrawn or revoked within sixty (60) Days; or Power Supplier consents to the filing of any bankruptcy, corporate rehabilitation or reorganization petition against it, unless such consent is rescinded, withdrawn or revoked within sixty (60) Days.
- (d) Power Supplier files a petition or answer in a proceeding under any of the provisions of any applicable bankruptcy, insolvency or corporate rehabilitation Law or any other similar statute admitting the material allegations of a petition filed against it in such a proceeding, unless such petition or admission is not rescinded, withdrawn or revoked within sixty (60) Days; Power Supplier makes a general assignment of its assets and rights for the benefit of its creditors, unless such assignment is rescinded or revoked within sixty (60) Days; or Power Supplier admits in writing its inability to pay its debts generally as they become due, unless such admission is withdrawn or revoked within sixty (60) Days;
- (e) It shall become illegal for Power Supplier to generate and supply all or a material portion of Contract Capacity and Associated Energy due to Power Supplier's fault, upon final

judgment by a court of competent jurisdiction, unless such illegality is removed, withdrawn or corrected within sixty (60) Days; or

- (f) Power Supplier breaches any of its material representations and warranties under this Agreement, unless such breach is remedied within one hundred twenty (120) Days after written notice from Meralco to Power Supplier stating that such a breach has occurred.

Each of the periods indicated above during which the corresponding Power Supplier Event of Default may be cured or remedied shall be referred to as the “Curing Period.”

## Section 18.2 Meralco Events of Default

Each of the events described below shall constitute a “Meralco Event of Default”; provided that such event (with the exception of Section 18.2(e)) results to or is accompanied by an actual failure by Meralco to receive, or pay for, the Contract Capacity and Associated Energy in accordance with this Agreement:

- (a) Meralco fails to perform any material obligation under this Agreement, excluding the payment of any Final Invoice which is due, unless such failure is remedied within sixty (60) Days after receipt from Power Supplier of a written notice of Meralco Event Default;
- (b) The appointment of a receiver or liquidator or trustee of Meralco or of any material property of Meralco, unless such appointment is discharged within sixty (60) Days; the bankruptcy, insolvency or corporate rehabilitation of Meralco or sequestration of any substantial part of the property of Meralco, unless such decree is discharged and stayed within sixty (60) Days after entry thereof; the filing of a petition to declare Meralco bankrupt or to reorganize Meralco pursuant to any of the provisions of any applicable bankruptcy or rehabilitation Law or any similar statute, unless such petition is dismissed within sixty (60) Days after such filing;
- (c) The voluntary passing of a resolution or filing of a petition for the bankruptcy, insolvency, corporate rehabilitation or winding up, liquidation of, or other similar proceeding relating to Meralco, unless such resolution or petition is rescinded, withdrawn or revoked within sixty (60) Days; or Meralco consents to the filing of any bankruptcy, corporate rehabilitation or reorganization petition against it, unless such consent is rescinded, withdrawn or revoked within sixty (60) Days;
- (d) Meralco files a petition or answer in a proceeding under any of the provisions of any applicable bankruptcy, insolvency or corporate rehabilitation Law or any other similar statute admitting the material allegations of a petition filed against it in such a proceeding, unless such petition or admission is not rescinded, withdrawn or revoked within sixty (60) Days; subject to the terms of Direct Agreements, Meralco makes a general assignment of its assets and rights for the benefit of its creditors, unless such assignment is rescinded or revoked within sixty (60) Days; or Meralco admits in writing its inability to pay its debts generally as they become due, unless such admission is withdrawn or revoked within sixty (60) Days;

- (e) It shall become illegal for Meralco to accept all or a material portion of Contract Capacity and Associated Energy due to Meralco's fault, after final judgment by a court of competent jurisdiction, unless such illegality is removed, withdrawn or corrected within sixty (60) Days;
- (f) Meralco fails to make any payment of a Final Invoice when such invoice becomes due and payable under the Agreement, unless such payment is made within sixty (60) Days after the due date of the relevant Final Invoice; or
- (g) Meralco breaches any of its material representations and warranties under this Agreement, unless such breach is remedied within one hundred twenty (120) Days after written notice from Power Supplier to Meralco stating that such a breach has occurred.

For the avoidance of doubt, it is understood and agreed that, subject to Meralco exerting best efforts to procure the extension or renewal of its Franchise, the expiration and/or non-renewal of the Franchise shall not be considered a Meralco Event of Default.

Each of the periods indicated above during which the corresponding Meralco Supplier Event of Default may be cured or remedied shall also be referred to as the "Curing Period."

### **Section 18.3 Remedies in case of an Event of Default**

18.3.1 During the Curing Period with respect to a Power Supplier Event of Default, Meralco shall, for each time Power Supplier fails to make Available the Contract Capacity or to Deliver the Associated Energy, be entitled to source energy from the WESM. In such case, and provided that Power Supplier is able to cure the Power Supplier Event of Default prior to the exercise by Meralco of its rights under Section 18.3.3, Power Supplier shall be liable to pay Meralco the difference between the amount Meralco actually paid for such energy and the Price. It is understood and agreed that, despite the cure of a Power Supplier Event of Default, Meralco's rights under Section 18.3.3 continues to subsist until Power Supplier makes full payment of its liability under this Section 18.3.1.

18.3.2 During the Curing Period with respect to a Meralco Event of Default, Power Supplier shall, from the time of Meralco's failure to accept or pay for the Contract Capacity and Associated Energy, be entitled to sell the Contract Capacity and Associated Energy to the WESM. In such case, and provided that Meralco is able to cure the Meralco Event of Default prior to the exercise by Power Supplier of its rights under Section 18.3.4, Meralco shall be liable to pay Power Supplier the difference between the amount Power Supplier actually received from such sale to the WESM and the Price. It is understood and agreed that, despite the cure of a Meralco Event of Default, Power Supplier's rights under Section 18.3.4 continues to subsist until Meralco makes full payment of its liability under this Section 18.3.2.

18.3.3 In the event that (i) a Power Supplier Event of Default continues unremedied upon the expiration of the relevant Curing Period and (ii) where applicable, Power Supplier fails to make available the Contract Capacity or to Deliver the Associated Energy, Meralco shall have the right

(but not the obligation), by written notice to Power Supplier in accordance with Section 18.4 and in accordance with the Equity Transfer Procedures, to acquire the Equity Interests in Power Supplier at the price of Five Hundred Pesos (PHP 500.00). In addition, following the exercise by Meralco of its right under this Section 18.3.3, Meralco shall be entitled, by written notice to Power Supplier, to suspend the performance by the Parties of their respective obligations in respect of the sale and purchase of Contract Capacity and Associated Energy. In case of such suspension, the Parties understand and agree that the period of suspension shall be counted against (and shall reduce) the Term of this Agreement.

Any tax and levies due on the transfer of the Equity Interest shall be paid by the Power Supplier.

Following the acquisition by Meralco of the Equity Interest in Power Supplier:

- (a) Meralco shall have the option (but not the obligation) to operate, maintain, repair, or rehabilitate the Plant; and
- (b) Provided that (i) this right is exercised within three (3) years from Meralco's exercise of its option under Section 18.3.3; and (ii) Meralco exercises its option to operate, maintain, repair or rehabilitate the Plant, the sellers of the Equity Interest in Power Supplier in respect of the sale contemplated under Section 18.3.3 above (collectively) shall have the right (but not the obligation), by written notice to Meralco (the "**Buy-Back Notice**"), to re-acquire from Meralco their respective share in the Equity Interest in Power Supplier ("**Buy-Back**") at the price equivalent to (i) the sum of (x) the amount of Five Hundred Pesos (PHP500.00), (y) the amounts infused by Meralco (through equity infusion, shareholder loans or shareholder advances) to fund the costs of operation or maintenance, repair or rehabilitation and (z) the interest on (x) and (y) at the rate of 12% *per annum* from the time of infusion, calculated on a compounding basis, *less* (ii) the amounts received by Meralco by way of return of capital or equity, dividends and principal (and, if applicable, interest) payments on any shareholder loans or advances.

Any tax and levies due on the Buy-Back shall be paid by the Power Supplier.

Following receipt by Meralco of the Buy-Back Notice, Meralco shall inform Power Supplier whether or not Meralco shall extend the Term by the period of suspension referred to in Section 18.3.3.

18.3.4 In the event that (i) the Meralco Event of Default continues unremedied upon the expiration of the relevant Curing Period; and (ii) where applicable, Meralco fails to receive, or pay for, the Contract Capacity and Associated Energy, Power Supplier shall be entitled to terminate this Agreement in accordance with Section 18.4, and, as a consequence of such termination, Power Supplier shall have the right (but not the obligation), by written notice to Meralco, to compel Meralco to acquire the Equity Interests in Power Supplier at the price of:

- (i) if the underlying Meralco Event of Default occurs on or before the second anniversary of the Operations Effective Date: the sum of (A) the Obligations to Finance Parties (to be remitted directly to the Finance Parties) and (B) each equity contribution at a yield determined based on the ERC Final Approval computed from the date of such actual equity

contribution less (C) distributions to equity if any (such calculation of (B) and (C) are illustrated in Appendix G); and

- (ii) if the underlying Meralco Event of Default occurs after the second anniversary of the Operations Effective Date: the sum of (A) the Obligations to Finance Parties (to be remitted directly to the Finance Parties) and (B) the book value of equity (including accumulated retained earnings/losses and excluding revaluation adjustments).

Any tax and levies due on the transfer of the Equity Interest shall be paid by Meralco.

18.3.5 To be valid, a notice of the exercise by a Party of its rights under this Section 18.3 must be delivered no later than sixty (60) Days after the effective date of termination of this Agreement. Thereafter, completion of payment and transfer shall be in accordance with the Equity Transfer Procedures.

18.3.6 The remedies in this Section 18.3 are exclusive remedies in cases of termination of this Agreement resulting from an Event of Default.

#### **Section 18.4 Termination upon Event of Default**

The following procedure shall apply in case of the exercise by a Party of any of the remedies under Section 18.3.3 and Section 18.3.4:

- (a) The Party which is not the subject of such Event of Default may give a notice (an “**EOD Notice**”) to the other Party, specifying (1) in reasonable detail the Power Supplier Event of Default or Meralco Event of Default (as applicable) giving rise to such EOD Notice, and (2) the date on which the Party giving such EOD Notice proposes to exercise the remedies provided under Section 18.3.3 and Section 18.3.4 of this Agreement (including the contemplated suspension or termination date, if applicable), which date shall not be earlier than the date on which the Curing Period shall lapse. If, upon the date specified in the EOD Notice, the event giving rise to the EOD Notice is subsisting and the defaulting Party has failed to perform its obligations in respect of the sale and purchase of Contract Capacity and Associated Energy, then the suspension or termination contemplated under Section 18.3.3 or Section 18.3.4, as applicable, shall take effect on such date (or on such later date as the Parties may agree) and Sections 18.3 and Section 18.7 shall apply.
- (b) During the period following the giving of such EOD Notice, the Parties shall consult as to what steps shall be taken with a view to mitigating or remedying the consequences of the relevant event having regard to all the circumstances.
- (c) If the Party receiving the EOD Notice intends to raise a Dispute regarding the right to give effect to the EOD Notice (the “**EOD Notice Dispute**”) and to refer such EOD Notice Dispute to resolution pursuant to Article 20, such Party shall within fifteen (15) Days of receipt of the EOD Notice so inform the Party giving the EOD Notice and shall



immediately thereafter refer the EOD Notice Dispute to resolution in accordance with Article 20; and

- (d) In circumstances where the Party in receipt of the EOD Notice has referred an EOD Notice Dispute for resolution in accordance with Section 18.4(c) above, if:
  - (i) at any time after the expiry of the period referred to in Section 18.4(a), the event giving rise to the EOD Notice has not been remedied and the defaulting Party has failed to perform its obligations in respect of the sale and purchase of Contract Capacity and Associated Energy; and
  - (ii) the EOD Notice Dispute has been determined in favor of the Party who has issued the EOD Notice,

then the Party having given the EOD Notice may suspend the obligations under or terminate this Agreement (in each case as contemplated under Section 18.3.3 or Section 18.3.4, as applicable) by giving further written notice thereof to the other Party, whereupon the suspension or termination contemplated under Section 18.3.3 or Section 18.3.4, as applicable, shall take effect on the date specified for termination in such notice (which date shall be not less than fifteen (15) Days after the date of such notice) (or on such later date as the Parties shall have agreed) and Section 18.3 and Section 18.7 shall apply.

## **Section 18.5 Exculpatory Provisions**

18.5.1 Notwithstanding anything contained in this Agreement to the contrary, Meralco's failure to accept any amounts of nominated quantities of Contract Capacity and Associated Energy shall not be considered a Meralco Event of Default and Power Supplier's failure to make available Contract Capacity or supply Associated Energy shall not be considered a Power Supplier Event of Default if each such failure was direct result of:

- (a) Outages that occur within the Full Load Equivalent Outage Allowance;
- (b) any act or omission of the System Operator (other than acts or omission of the System Operator resulting from acts or omissions of a Party that is not otherwise excused under this Agreement); and
- (c) maintenance or repair of the Luzon Grid that materially affects the generation and transmission of electricity, where such maintenance or repair is conducted to ensure system stability and for safety reasons, in accordance with applicable Legal Requirements.

18.5.2 For the avoidance of doubt, Meralco shall not be obligated to make Capacity Payments and Energy Payments for interruptions in the supply of Contract Capacity and Associated Energy as a result of the occurrence of any of the events described in Section 18.5.1.

## **Section 18.6 Termination other than upon Event of Default**

### **18.6.1 Non-Fulfilment of Conditions to Effective Date**

If any condition precedent set out in Section 3.1.1 in respect of the Effective Date has not been fulfilled on or before the date falling thirty (30) Days after the date of execution of this Agreement, then either Party has the right to terminate this Agreement by giving written notice of such termination to the other Party, *provided that* the fulfilment of such condition is not within the control of the Party seeking to give such notice. Upon the giving of notice of termination, this Agreement shall terminate on the date specified for termination in such notice, which date shall not be earlier than fifteen (15) Days from the date of such notice.

Notwithstanding the foregoing, if any such conditions have not been fulfilled on or before the Effective Date, the Parties may agree in writing to (i) extend the Effective Date or (ii) waive the non-fulfilment of such condition to the Effective Date (provided that the intended receiving Party in respect of the documents referenced in Section 3.1 shall have the unilateral right to waive such condition).

### **18.6.2 Termination upon Non-Occurrence of Acceptance Date**

If the Acceptance Date has not occurred on or before the Longstop Date, then Power Supplier has the right to terminate this Agreement by giving written notice of such termination to the other Party. Upon the giving of notice of termination, this Agreement shall terminate on the date specified for termination in such notice, which date shall not be earlier than fifteen (15) Days from the date of such notice and neither Party shall be liable to the other by reason of such termination. Notwithstanding the foregoing, the Parties may agree in writing to extend such Longstop Date.

### **18.6.3 Termination on Expiry**

This Agreement shall terminate on the last Day of the Term unless otherwise extended by the application of Section 2.2.3, Section 17.3.3 or upon the mutual agreement of the Parties.

### **18.6.4 Termination upon Mutual Agreement**

This Agreement may be terminated at any time upon the mutual agreement of both Parties.

### **18.6.5 Termination in the Event of Certain Events of Force Majeure**

If an Event of Force Majeure occurs under the circumstances and having the consequences described in Section 17.4 or Section 17.5 and the Parties have failed to agree on a solution satisfactory to each of the Parties prior to the lapse of the period of one hundred eighty (180) Days, then upon the lapse of such period, either Party may terminate this Agreement upon sixty (60) Days' prior written notice thereof to the other Party.

#### 18.6.6 Termination in the Event of Change in Circumstances

- (a) If a Change in Circumstances occurs under the circumstances and having the consequences described in Section 12.2.2 and Section 12.2.5 and the Parties have failed to agree on a solution satisfactory to each of the Parties, then the Power Supplier may terminate this Agreement upon sixty (60) Days' prior written notice to the other Party. Until termination occurs, the Parties shall continue to perform their respective obligations under this Agreement, subject to Threshold Level 2.
- (b) If a Change in Circumstances occurs under the circumstances and having the consequences described in Section 12.2.4 and the Parties have failed to agree on a solution satisfactory to each of the Parties, then Power Supplier may terminate this Agreement upon sixty (60) Days' prior written notice to the other Party. Until termination occurs, the Parties shall continue to perform their respective obligations under this Agreement.

#### 18.6.7 Consequences of Suspension or Termination

Upon any suspension or termination of this Agreement (as contemplated under Sections 18.3.3 and Section 18.3.4) and without prejudice to the other provisions in Section 18.3, each Party shall cease to have any further obligations, responsibilities or liabilities hereunder, other than for such obligations or liabilities that have accrued prior to the date of suspension or termination hereof and remain undischarged as of the date of termination. In any case of suspension or termination, the invoice for the last Billing Period shall be due and payable notwithstanding.

#### **Section 18.7 Other Rights and Remedies**

Upon the breach by either Party of any representations, warranties, covenants or obligations hereunder, the Party damaged by any such breach may, in its sole discretion, in addition to exercising any other remedies provided for hereunder, proceed in accordance with Article 20 to protect and enforce its rights, to recover any damages to which it may be entitled (including all costs and expenses reasonably incurred in the exercise of its remedy, but subject to the limitations in Section 16.5 and Section 18.3 or to seek specific performance by the other Party of such other Party's obligations under this Agreement.

### **ARTICLE 19 REPRESENTATIONS AND WARRANTIES**

#### **Section 19.1 Representations and Warranties of Power Supplier**

19.1.1 Power Supplier represents and warrants as of the date of this Agreement that: Power Supplier is a corporation duly organized and validly existing under the Laws of the Philippines and has all requisite legal power and authority to execute this Agreement and to carry out the terms, conditions and provisions of this Agreement;

19.1.2 All legislative, administrative or other governmental action required to authorize the execution and delivery by Power Supplier of this Agreement have been taken and are in full force and effect;

19.1.3 This Agreement constitutes the valid, legal and binding obligation of Power Supplier, enforceable in accordance with the terms thereof except as the enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar Laws affecting creditors' rights generally;

19.1.4 There are no actions, suits or proceedings pending or, to Power Supplier's knowledge, threatened, against or affecting Power Supplier before any court or administrative body or arbitral tribunal that might materially adversely affect (i) the validity, binding effect or enforceability of this Agreement, (ii) its ability to perform its obligations under this Agreement or (iii) the condition, financial or otherwise, business or operations of Power Supplier;

19.1.5 The execution, delivery and performance by Power Supplier of this Agreement have been duly authorized by all requisite corporate action, and will not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a party or by which it or its property may be bound;

19.1.6 Power Supplier is in compliance with all applicable Legal Requirements, except for any non-compliance that, individually or in the aggregate, could not reasonably be expected to have a material adverse effect on the business and/or financial condition of Power Supplier and/or its ability to fulfil its commitments and obligations under this Agreement; and

19.1.7 Power Supplier has the qualifications, capacity and abilities to perform its obligations hereunder, pursuant to and in accordance with this Agreement.

## **Section 19.2 Representations and Warranties of Meralco**

Meralco represents and warrants as of the date of this Agreement that:

19.2.1 Meralco has all requisite legal power and authority to execute this Agreement and to carry out the terms, conditions and provisions of this Agreement;

19.2.2 All legislative, administrative or other governmental action required to authorize the execution and delivery by Meralco of this Agreement have been taken and are in full force and effect;

19.2.3 This Agreement constitutes the valid, legal and binding obligation of Meralco, enforceable in accordance with the terms thereof except as the enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally;

19.2.4 There are no actions, suits or proceedings pending or, to Meralco's knowledge, threatened, against or affecting Meralco before any court or administrative body or arbitral tribunal that might materially adversely affect the validity, binding effect or enforceability of this Agreement;

19.2.5 The execution, delivery and performance by Meralco of this Agreement have been duly authorized by all requisite corporate action, and will not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a party or by which it or its property may be bound;

19.2.6 Meralco has the qualifications, capacity and abilities to perform its obligations hereunder, pursuant to and in accordance with this Agreement.

19.2.7 Meralco is or remains, by the Scheduled Commercial Operations Date (Plant), a bona fide direct trading member of the Luzon WESM.

## ARTICLE 20 SETTLEMENT OF DISPUTES

### Section 20.1 Amicable Settlement

The Parties shall endeavour in the first instance to resolve any dispute, controversy, claim or difference of any kind whatsoever in connection with, or arising out of, this Agreement (including, without limitation, the breach, termination or validity of this Agreement) (a “**Dispute**”) for a period of thirty (30) Days after the receipt by one Party of a written notice from the other Party of the existence of the Dispute, by mutual discussions between the Parties. To this end, on or before seven (7) Days after receipt of written notification that a Dispute exists, each of Power Supplier and Meralco shall designate in writing to the other a representative who shall be tasked to seek to resolve by an agreement between them any Dispute.

### Section 20.2 ERC Proceedings/Arbitration

20.2.1 Provided that the ERC has jurisdiction over a Dispute between the Parties within its administrative authority, any such Dispute that is not resolved under Section 20.1 shall be referred to and shall be heard and resolved by the ERC in accordance with its rules on practice and procedure. Otherwise, the Dispute shall be finally resolved by binding arbitration under the UNCITRAL Arbitration Rules (the “**Arbitration Rules**”) in force on the date of commencement of the arbitration, which Rules are deemed to be incorporated by reference into this provision (save as otherwise provided for in this Article 20) by three (3) arbitrators (the “**Tribunal**”) appointed in accordance with Section 20.2.3 below. The place and seat of the arbitration shall be Singapore.

20.2.2 The Parties agree that the Tribunal shall not have the power to award damages inconsistent with Section 16.5 and Section 18.3.

20.2.3 Each Party shall appoint an arbitrator within thirty (30) Days of the commencement of an arbitration, and the two Party-appointed arbitrators shall, within thirty (30) Days after the date of this appointment of the second Party-appointed arbitrator, jointly appoint a third arbitrator who shall act as Chairman of the Tribunal. Any arbitrator not appointed within the time limits set forth in this provision shall be promptly appointed by the Philippine Dispute Resolution Center, Inc.

20.2.4 The arbitration shall be conducted in the English language and all documents submitted in connection with such proceeding shall be in the English language.

20.2.5 During the pendency of the ERC proceedings or arbitration under Section 20.2, and for as long as payments by Meralco are current, Power Supplier, shall continue to make available and Deliver Contract Capacity and Associated Energy and Meralco shall continue to pay all amounts due hereunder in accordance with the provisions of this Agreement.

## ARTICLE 21 ASSIGNMENT AND CHANGE OF CONTROL

### Section 21.1 Assignment

Neither Party may assign this Agreement, in whole or part, without the prior written consent of the other Party (which consent shall not be unreasonably withheld); *provided*, however, that:

### Section 21.2 Assignment by Power Supplier

21.2.1 Power Supplier may, with prior written notice to Meralco, transfer, sell, pledge, encumber or assign this Agreement, and its rights and interests hereunder, including, but not limited to, the accounts, revenues or proceeds under this Agreement to or for the benefit of the Finance Parties in connection with any financing for the construction of the Project or permanent or term financing or refinancing of the Project, in which case Meralco agrees to execute and deliver the Direct Agreement. In the event that the Finance Parties require additional or different terms and conditions as indicated in the attached form of Direct Agreement, including such terms and conditions as are customary for international financing transactions involving projects similar in nature to the development, engineering, installation, construction, testing, commissioning, operation and maintenance of the Plant, the Parties agree to discuss such terms and conditions in good faith. Meralco shall have no obligation to execute and deliver a Direct Agreement unless such additional or different terms and conditions are agreed upon by the Parties.

21.2.2 Power Supplier may, with prior written consent of Meralco (which consent shall not be unreasonably withheld or delayed), transfer or assign this Agreement, and its rights and interests hereunder to (a) an Affiliate with creditworthiness equal to or higher than that of Power Supplier and (b) any Person succeeding to all or substantially all of Power Supplier's assets with credit worthiness equal to or higher than that of Power Supplier. Power Supplier shall issue a written notice of such assignment within fifteen (15) days therefrom; *provided*, further however, that for (a) and (b) above, any such assignee shall agree in writing to be bound by the terms and conditions of this Agreement, and upon any such assumption, Power Supplier shall be relieved of any further liability hereunder.

### **Section 21.3 Assignment by Meralco**

Meralco may assign, transfer, designate, delegate or allocate (as determined by Meralco) such portion of Contract Capacity and Associated Energy in accordance with Section 10.3 of this Agreement.

### **Section 21.4 Breach**

Any actual, attempted or purported sale, assignment, novation or other transfer by a Party of any of its rights or obligations or interests in, under or pursuant to this Agreement that does not comply with the terms of this Article 21 shall be null, void and of no force or effect.

### **Section 21.5 Change of Control**

A Party shall promptly notify the other Party in writing in the event of any Change of Control of such Party (whether voluntary or by operation of Law).

## **ARTICLE 22 MISCELLANEOUS**

### **Section 22.1 Language**

All documents, notices, waivers and all other communications, written or otherwise, between the Parties in connection with this Agreement shall be in the English language.

### **Section 22.2 Notices**

Any notice or other communication to be given hereunder, shall be in writing and shall be sufficiently given if delivered by registered mail, courier or hand-delivered against written receipt or if transmitted and clearly received by facsimile transmission addressed as follows:

22.2.1 In the case of Meralco, to:

MERALCO  
Lopez Building  
Ortigas Avenue  
Pasig City, Metro Manila  
Philippines 0300  
Attention: Chief Executive Officer  
Facsimile: (63-2) 631-5590  
Telephone: (63-2) 16220

With copy to:  
MERALCO  
4/F Technical Services Building

Ortigas Avenue  
Pasig City, Metro Manila  
Philippines 0300  
Attention: Head - Energy Management  
Facsimile: (63-2) 632-8683  
Telephone: (63-2) 16226483

MERALCO  
4/F Technical Services Building  
Ortigas Avenue  
Pasig City, Metro Manila  
Philippines 0300  
Attention: Head - Energy Sourcing  
Facsimile: (63-2) 632-8643  
Telephone: (63-2) 6226656

22.2.2 In the case of Power Supplier, to:

REDONDO PENINSULA ENERGY, INC.  
Unit 310, The Venue, Rizal Highway  
Subic Bay Industrial Park, Phase 1  
Subic Bay Freeport Zone, Philippines

Attention: The President  
Facsimile: 047 250 2664  
Telephone: 047 250 2664

With copy to:  
REDONDO PENINSULA ENERGY, INC.  
8<sup>th</sup> Floor, Tower 1, Rockwell Business Center  
Ortigas Avenue, Pasig City  
Philippines 1604

Attention: The Chief Financial Officer  
Facsimile: (63-2) 661-4978  
Telephone: (63-2) 422-1900

or sent to such other person by registered mail, courier or hand-delivery to such other address as any Party may designate for itself by notice given in accordance with this Section 22.2.2. Any such notice shall be deemed to have been received on the date of delivery.

### Section 22.3 Confidentiality

22.3.1 Each Party agrees that it will, and will ensure that its employees, officers and directors will, and will use best efforts to ensure that its agents will, hold in confidence this Agreement and all information, documentation, data or know-how disclosed to it by the other Party and designated in



writing as confidential (the “**Confidential Information**”), and will not disclose to any third party or use Confidential Information or any part thereof without the other Party’s prior written approval, provided that Confidential Information may be disclosed to (i) a Governmental Instrumentality pursuant to Legal Requirements or a stock exchange when required by it, and (ii) financial institutions, bona fide potential purchasers, insurers and consultants and contractors whose duties reasonably require such disclosure; provided that, except for a bona fide disclosure to independent legal advisors and to the ERC in view of an ERC Application, such Party intending to make a disclosure of Confidential Information shall first have obtained an agreement in writing pursuant to which the person or entity to which Confidential Information is proposed to be disclosed agrees not to disclose the relevant Confidential Information to any other person for any purposes other than as contemplated in Section 22.3.

22.3.2 The restrictions in this Section 22.3 shall not apply, or shall cease to apply, to any part of the Confidential Information that:

- (a) is in the public domain other than by reason of a breach of Section 22.3.1;
- (b) was in the rightful possession of the recipient Party at or prior to the time of the disclosure;  
or
- (c) was obtained by the recipient Party in good faith from a third party entitled to disclose it.

#### **Section 22.4 Survival**

The provisions of Article 16 shall survive termination of this Agreement. The restrictions contained in Section 22.3 shall survive for a period of two (2) years after the termination or expiry of this Agreement.

#### **Section 22.5 Severability of Provisions**

Each provision of this Agreement is severable and distinct from the others. The Parties intend that every provision of it shall be and remain valid and enforceable to the fullest extent permitted by Law. If any provision of this Agreement is or at any time becomes to any extent invalid, illegal or unenforceable for any reason, such provision shall to that extent be deemed not to form part of this Agreement, but the validity, legality and enforceability of the remaining parts of this Agreement shall not be thereby affected or impaired.

#### **Section 22.6 Waiver**

Neither Party shall be deemed to have waived any right under this Agreement, unless such Party shall have delivered to the other Party a written waiver signed by an authorized officer of such waiving Party. No delay or omission in the exercise of any power or remedy shall be construed to be a waiver of any default or acquiescence therein.

## **Section 22.7 Amendment**

This Agreement may be amended or modified only by a written instrument signed by each of the Parties.

## **Section 22.8 Entire Agreement**

22.8.1 This Agreement constitutes the entire agreement between Meralco and Power Supplier concerning the subject matter of this Agreement and supersedes any prior agreement, understanding, undertaking or arrangement between the Parties relating to the subject matter of this Agreement. All previous documents, undertakings and agreements, whether verbal, written or otherwise, between the Parties concerning the subject matter of this Agreement are hereby cancelled and shall not affect or modify any of the terms or obligations set out in this Agreement, except as the same may be made part of this Agreement in accordance with its terms, including the terms of any of the Appendices and/or the Schedules.

22.8.2 The Appendices and Schedules are hereby made an integral part of this Agreement and shall be fully binding upon the Parties.

22.8.3 In the event of any inconsistency between the text of the Articles of this Agreement, the Appendices and the Schedules hereto, the text of the Articles of this Agreement shall be controlling. If any such inconsistency shall become apparent, Meralco and Power Supplier shall consult to resolve the inconsistency in a manner consistent with the foregoing.

22.8.4 The Parties acknowledge and agree that by entering into this Agreement, they do not rely on any statement, representation, assurance or warranty of any Person (whether a party to this Agreement or not and whether made in writing or not) other than as expressly set out in this Agreement.

## **Section 22.9 Further Acts and Assurances**

Each of the Parties agrees to execute and deliver all such further instruments, and to do and perform all such further acts and things, as shall be reasonably necessary or convenient to carry out the provisions of this Agreement.

## **Section 22.10 Third Party Rights**

This Agreement shall not confer any right, benefit or cause of action whatsoever in favor of any Person who is not a Party to this Agreement.

## **Section 22.11 Expenses**

Except as otherwise provided in this Agreement, each Party shall pay its own costs and expenses (including, without limitation, the fees and expenses of its agents, representatives, advisors, counsel and accountants) necessary for the negotiation, preparation, execution, delivery, performance of and compliance with this Agreement.

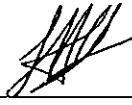
IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed as of the Day and year first above written.

**MANILA ELECTRIC COMPANY**

By:   
Name: **Alfredo S. Panlilio**  
Title: Senior Vice-President and  
Head, Customer Retail Services and  
Corporate Communications

By:   
Name: **Ronnie L. Apercho**  
Title: First Vice-President and  
Head, Networks

**REDONDO PENINSULA ENERGY, INC.**

By:   
Name: **Luis Miguel O. Aboitiz**  
Title: Authorized Representative

WITNESSED BY:

By:   
Name: **Ciprinilo C. Meneses**

WITNESSED BY:

By:   
Name: **Rochel Donato R. Gloria**

### **Section 22.12 Warranty Against Corruption**

Each Party represents and warrants to the other that it and authorized agents have complied with all Laws dealing with corrupt or illegal payments, gifts, or gratuities, including Republic Act No. 3019 (the Anti-Graft and Corrupt Practices Act). Each Party agrees not to (and to cause its authorized agents not to) in connection with the activities contemplated by this Agreement pay, promise to pay, seek, accept, or authorize the payment of any money or anything of value, directly or indirectly, to any person or entity (whether a governmental official or private individual) for the purpose of illegally or corruptly influencing any governmental employee or official, any political party or official thereof or any candidate for political office. Furthermore, each Party agrees that in connection with this Agreement and the activities contemplated hereby, it and its authorized agents will not take any action, or fail to take any action, which act or failure to act would subject the other Party to liability under the laws of the Philippines dealing with corrupt payments. Each Party agrees to indemnify the other Party from and against any loss, liability or damage (including reasonable attorney's fees) arising from or relating to such Party's breach of its representations, warranties, and obligations under this Section 22.12. Each Party represents and warrants to the other that prior to the date of this Agreement, it and its authorized agents have not taken any action in contravention of the foregoing in connection with the subject matter hereof.

### **Section 22.13 Counterparts**

This Agreement may be entered into in any number of counterparts and by the Parties to it on separate counterparts, and each of the executed counterparts, when duly exchanged or delivered, shall be deemed to be an original, but taken together, they shall constitute one and the same instrument, provided that this Agreement shall be effective only on the date of the signature of the last signing Party.

### **Section 22.14 No Partnership**

Nothing contained in this Agreement shall be construed to create an association, partnership or joint venture, or impose a trust or partnership duty, obligation or liability on or with regard to either Party, or to create any duty, standard of care or liability to any person or entity not a Party to this Agreement.

### **Section 22.15 Governing Law**

This Agreement shall be governed by, and construed in accordance with, the Laws of the Philippines.

*[Remainder of the page intentionally left blank.]*

**Appendix A**  
**PLANT DESCRIPTION and SITE LOCATION**

**1. PLANT DESCRIPTION**

The Redondo Peninsula Energy, Inc. ("RP Energy" or the "Company") project will comprise a single 300 MW (net) coal fired power plant within the Redondo Peninsula district of the Subic Bay Freeport Zone (the "Plant"). The Company will oversee the financing, design, procurement, construction, testing, commissioning, operation, and maintenance of the Plant (the "Project").

The Power Plant will run will as a base-load power generation unit. The Project is expected to partly address a foreseeable power supply shortage in Luzon Island.

It shall adopt a sub-critical pressure, reheating Circulating Fluidized-Bed ("CFB") boiler, steam turbine generator ("STG") complete with electric generator and associated accessories with a total Net electrical output of [300] MW. The Plant is designed based on a state-of-the-art-technology Steam Generator and Steam Turbine Generator (STG) complete with associated equipment, balance of plant facilities, coal supply infrastructure, waste water treatment, ash disposal, and grid connection facilities. CFB has the advantage of fuel flexibility, high combustion and boiler efficiency, high recycle ratio of unburned carbon and ash, low furnace operating temperature and eliminates the need for post-combustion flue gas treatment facilities. RP Energy is committed to build a more efficient, optimal power output and environmental friendly plant which will produce power at affordable tariff rates.

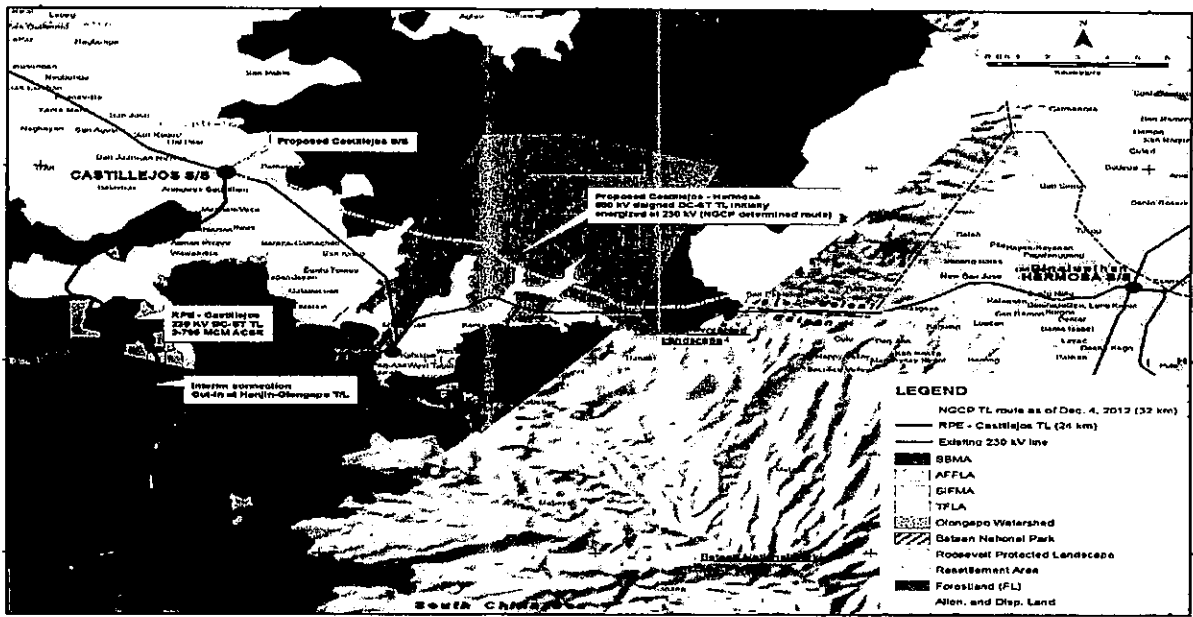
The Project will be constructed on a greenfield site located in Sitio Naglatore, Barangay Cawag in the municipality of Subic in the Province of Zambales, which is in an industrial area within the SBFZ. The Project will be connected to a new substation along the Luzon power grid.

The final power transmission interconnection for the project will be through the National Grid Corporation of the Philippines (NGCP)'s proposed Castillejos-Hermosa 33 km 500 kV designed (but initially 230 kV operated) transmission line. The Company will have to construct an approximately 23 km long 230 kV connecting line (connection asset) from the power plant to Castillejos to connect to the 500 kV line of NGCP.

However, the Company has an agreed interim connection with NGCP while the Castillejos-Hermosa transmission line is under development and construction by NGCP. Such an interim connection scheme entails the construction of the first 8.5 km portion of the 23 km connection asset starting from the power plant. At the other end of the 8.5 kms, the line will temporarily connect to the existing Hanjin-Olongapo transmission line using a cut-in connection until such time that the Castillejos-Hermosa transmission line of NGCP is completed.

A Connection agreement with NGCP has already been signed. ERC approval for NGCP's application to build the transmission line from Castillejos to Hermosa has been granted on 11 May 2015. ERC approval for RP Energy's application to build the transmission line from the power plant to Castillejos has been granted on 21 May 2015.

2. SITE LOCATION



✓

**Appendix B**  
**TECHNICAL LIMITS**

**1 DEFINITIONS**

All capitalized terms used herein shall have the meaning given to them in Article 1 of this Agreement, except as otherwise defined herein.

**2 TECHNICAL LIMITS**

| Technical Parameter                                    | Technical Limit                                       | Remarks                                                                                                        |
|--------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Design capacity (in MW)                                | 1 x 300MW                                             | 1 x 300MWnet unit generation at TMCR measured at plant gate                                                    |
| Contract capacity (in MW)                              | 225MW                                                 |                                                                                                                |
| Frequency Limits (Hertz)                               | 60 ± 4.1Hz                                            | Generator will be disconnected from the grid at either 57.6 Hz or 62.4 Hz (with a 5 s delay), as per Grid Code |
| Voltage Limits (kV)                                    | 230 ± 5%                                              | As per Grid Code                                                                                               |
| Reactive Power                                         | 0.85 lag - 0.90 lead                                  | As per Grid Code                                                                                               |
| Grid System Fault Level                                | 50kA                                                  |                                                                                                                |
| Critical Fault detection and Clearing Time Limits      | 83ms                                                  |                                                                                                                |
| Start-up times (in minutes)*<br>(Times from light off) |                                                       |                                                                                                                |
| a. Cold Start                                          | a. to Pmin (435min) to TMCR (660min)                  | a. ≥48h                                                                                                        |
| b. Warm Start                                          | b. to Pmin (305min); to TMCR (510min)                 | b. >8h to <48h                                                                                                 |
| c. Hot Start                                           | c. to Pmin (180min); to TMCR (300min)                 | c. ≤8h                                                                                                         |
| Dispatch Ramp Rates (MW/min)*                          |                                                       |                                                                                                                |
| a. Hot condition                                       | a. Pmin to 90% (2.45MW/min); 90% to 100% (0.75MW/min) |                                                                                                                |
| b. Warm condition                                      | b. Pmin to 90% (1.58MW/min); 90% to 100%              |                                                                                                                |

|                                                  |                                                                                 |                                                                                                              |
|--------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| c. Cold condition                                | (0.67MW/min)<br>c. Pmin to 90%<br>(0.83MW/min);<br>90% to 100% (0.67<br>MW/min) |                                                                                                              |
| Pmin (in MWnet) (as<br>registered with the WESM) | 120                                                                             | Minimum Net Unit<br>generation for continuous<br>stable operation – no oil<br>firing, measured at plant gate |
| Contract Pmin                                    | 40% of Contract<br>Capacity                                                     |                                                                                                              |

\*startup times and ramp rate values are design targets to be confirmed at COD



**Appendix C**  
**DOCUMENTS TO BE DELIVERED BY THE PARTIES**

**PART ONE: Documents to be Delivered by Power Supplier to Meralco**

1. Latest Certificate of Incorporation, Articles of Incorporation, By-Laws and Certificate of Incorporation of Power Supplier
2. Resolution of the board of directors of the Power Supplier, approving the terms of, and authorizing the performance of the transactions contemplated by, this Agreement and, resolving that the Power Supplier may execute, sign and deliver this Agreement and all other documents in connection therewith, and designating the individuals authorized to execute, sign and deliver this Agreement and all other documents in connection herewith on behalf of Power Supplier
3. Certificate from an authorized representative of the Power Supplier certifying that each copy document specified in this Part 1 of Appendix C relating to the Power Supplier is correct, complete, and in full force and effect as of Effective Date
4. A certificate dated no earlier than two (2) Days prior to the Effective Date from the Power Supplier in favour of Meralco that the representations and warranties of Power Supplier contained in this Agreement are true and correct and shall remain true and correct in all material respects on and as of the Effective Date.

**PART TWO: Documents to be delivered by Meralco to Power Supplier**

1. Latest Articles of Incorporation, By-Laws and Certificate of Incorporation (or other constitutional document) of Meralco
2. Resolution of the board of directors of Meralco approving the terms of, and authorizing the performance of the transactions contemplated by, this Agreement and, resolving that it execute, sign and deliver this Agreement and all other documents in connection therewith and designating the individuals authorized to execute, sign and deliver this Agreement and all other documents in connection herewith on behalf of Meralco
3. Certificate from an authorized representative of Meralco certifying that each copy document specified in this Part 2 of Appendix C relating to Meralco is correct, complete and in full force and effect as of the Effective Date
4. A certificate dated no earlier than two (2) Days prior to the proposed Effective Date from Meralco in favor of Power Supplier that the representations and warranties of Meralco contained in this Agreement are true and correct and shall remain true and correct in all material respects on and as of the Effective Date
5. Copy of Certificate of Public Convenience and Necessity.

**PART THREE: Documents to be provided by Power Supplier to Support ERC Application**

1. Certificate of Incorporation. Latest Articles of Incorporation and By-Laws of Power Supplier

2. SEC Certificate of Registration of the said Articles of Incorporation
3. Latest General Information Sheet of Power Supplier
4. Certificate of Registration of Power Supplier with the BOI, if available
5. Environmental Compliance Certificate issued by the DENR to Power Supplier (or an application to DENR)
6. Information required by ERC from Power Supplier:
  - a. Expectations of Sources of Funds/Financial Plans
    - (i) Debt/Equity Ratio
    - (ii) Project Cost
    - (iii) Computation of ROI/WACC
    - (iv) Certification from the Bank/Lending Institution specifying the principal amortization, term and interest during the cooperation period of the loan agreement
  - b. Purchased Power Rate
    - (i) Breakdown of the base prices of Operation and Maintenance, Capacity Fee, Fixed Operation Fee, and Energy Fee, if applicable
    - (ii) Sample computation of power rates with the supporting documents on the assumptions taken
    - (iii) If applicable, basis/rationale of indexation and level of indexation
  - c. Cash Flow specifying estimates of the following:
    - (i) Initial costs and
    - (ii) Breakdown of Operating and Maintenance Expenses
    - (iii) Minimum Energy Off-take (MEOT), if applicable
  - d. Details on the procurement process of fuel including requests for proposals, proposals received, and ranking of proposal terms, etc.
7. Copy of agreements related to the construction, development, operation, and maintenance of the Plant (i.e. Transmission Service Agreement, Interconnection Agreement, Fuel Supply Agreement, etc., if available and, in any case, with commercially sensitive information redacted or omitted).

**Appendix D**  
**INDEPENDENT ENGINEER**

1. The Independent Engineer shall act in an independent fashion to witness and evaluate testing and make other certifications based on its evaluations for purposes of establishing compliance with requirements under this Agreement. The Parties agree that the following independent firms of engineers (or their successors or Affiliates) qualify as capable engineers:

- Mott MacDonald
- SAIC Energy, Environment & Infrastructure LLC
- PB Power
- Sargent & Lundy
- Stone & Webster
- Black & Veatch
- Burns and Roe
- Connell Wagner
- GHD Pty Ltd.
- Fichtner GmbH
- Sinclair Knight Merz

2. Power Supplier shall appoint one or more of the above listed engineering firms to act in the capacity of Independent Engineer prior to the date of Financial Close. Prior to the appointment of the Independent Engineer, Power Supplier shall send a written notice to Meralco indicating a short-list of the Independent Engineers it intends to appoint. Within ten (10) Days from receipt of such notice, Meralco shall send a written reply (i) confirming that any of the short-listed Independent Engineers are acceptable to Meralco, or (ii) objecting to the appointment of any or all the short-listed Independent Engineers with a statement of the reason for such objection on grounds of conflict of interest stating the nature of the conflict. In the event of a valid objection under item (ii) above, the Power Supplier shall provide for Meralco's consideration, a substitute short-list of Independent Engineers.

3. Except as otherwise provided in this Agreement, Power Supplier shall bear all costs and expenses associated with the Independent Engineer, provided that Power Supplier shall be entitled to review and approve any requests by Meralco for work by the Independent Engineer, such that it can control the budgeted cost of the Independent Engineer. If in the Power Supplier's or the requisite majority of Finance Parties' opinion, the firm acting as Independent Engineer should be replaced, the Power Supplier shall be free to appoint as the replacement Independent Engineer any firm from the above list. Meralco shall not object to the Finance Parties' use of the same Independent Engineer.

**Appendix E**  
**CALCULATION OF PAYMENT**

**A. PAYMENT DURING COMMISSIONING**

The Commissioning Energy Charge shall be the sum of the actual landed fuel cost incurred during Commissioning and the Monthly Variable O&M Payment (MVOM) including Supplemental Payment (SP) as stated in Section C.

**B. PAYMENT DURING INTERIM SUPPLY PERIOD**

NEP = In the event that Power Supplier has provided energy on a non-firm basis during the Interim Supply Period in accordance with Section 3.5, the Non-firm Energy Payment (NEP) (to be understood as the Non-Firm Price) (in PHP) shall be calculated as follows:

$$NEP = [\sum (NEP_{HCF} + NEP_{FOM} + NEP_{Fuel} + NEP_{VOM}) * NEQ_h] + SP$$

Where:

$$NEP_{HCF} = ACF / \text{Calendar Year}$$

Where:

$$ACF = \text{as defined in C.1 below}$$

$$\text{Calendar Year} = 8784 \text{ (for the Contract Years containing February 29)}$$

$$= 8760 \text{ (for the Contract Years not containing February 29)}$$

$$NEP_{FOM} = ((AFOM_{USD} * USCPI_i / USCPI_o * FX) + (AFOM_{PHP,esc} * PCPI_i / PCPI_o)) / \text{Calendar Year}$$

Where:

$$AFOM_{USD} = \text{as defined in C.2 below}$$

$$USCPI_i = \text{as defined in C.2 below}$$

$$USCPI_o = \text{as defined in C.2 below}$$

$$FX = \text{as defined in C.2 below}$$

$$AFOM_{PHP,esc} = \text{as defined in C.2 below}$$

$$PCPI_i = \text{as defined in C.2 below}$$

$PCPI_o =$  as defined in C.2 below

$$NEP_{Fuel} = (MFCC + MFFC) * (GNPHR_h / 1,000,000) * FX$$

Where:

$MFCC =$  as defined in C.3 below

$MFFC =$  as defined in C.3 below

$GNPHR_h =$  as defined in C.3 below

$FX =$  as defined in C.2 below

$$NEP_{VOM} = VOM * PCPI_i / PCPI_o$$

Where:

$VOM =$  as defined in C.4 below

$PCPI_i =$  as defined in C.2 below

$PCPI_o =$  as defined in C.2 below

$NEQ_h =$  Non-Firm Energy Quantity provided by the Power Supplier during the Interim Supply Period in accordance with Section 3.5.

### C. PAYMENT UPON OPERATIONS EFFECTIVE DATE

The payment to be made in each Billing Period during the Term for Contract Capacity and Associated Energy shall consist of a Capacity Payment, Energy Payment, Interconnection Facilities Payment, and Reimbursable Cost Payment. The Capacity Payment consists of Component A (MCP), and Component B (MFOM), and the Energy Payments consists of Component C (MFP), and Component D (MVOM). Other payments consist of Component E (MIFP), Component F Reimbursable Cost Payment (RCP) and Component G (VAT). Thus, the Monthly Power Bill ("MPB") payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

$$MPB = MCP + MFOM + MFP + MVOM + MIFP + RCP + VAT$$

## Capacity Payments

### *1. Component A – Monthly Capacity Recovery Fee*

Component A is the Monthly Capacity Recovery Fee for the Billing Period calculated as follows:

$$\text{MCP} = \text{DCP} * \text{CC} * \text{EDA}_M$$

Where:

MCP = the monthly payment for Contract Capacity for the Billing Period (in PHP)  
DCP = the Daily Capacity Payment, (in PHP/kW-day), calculated as:

$$\text{DCP} = \text{CYF} * \text{ACF} / \text{TEDA}$$

Where:

ACF = Annual Capacity Fee, (in PHP/kW-year), set forth in Schedule 1 of this Appendix E

CYF = Contract Year Factor calculated as:

CYF =  $\text{CYD} / 366$  (for the Contract Years containing February 29)

CYF =  $\text{CYD} / 365$  (for the Contract Years not containing February 29)

Where:

CYD = number of days in the relevant Contract Year.

TEDA = the Target Full Load Equivalent Days of Availability, (in days), for the Contract Year as determined as the number of days in the Contract Year less the sum of the (i) Full Load Equivalent Scheduled Outage Allowance Days plus (ii) Full Load Equivalent Forced Outage Allowance Days (iii) Full Load Equivalent Major Maintenance Outage Allowance Days. By formula,

Where:

TEDA =  $\text{CYF} * 366 - (\text{SOA} + \text{FOA} + \text{MOA})$  (for the Contract Years containing February 29)

TEDA =  $\text{CYF} * 365 - (\text{SOA} + \text{FOA} + \text{MOA})$  (for the Contract Years not containing February 29)

Where:

CYF = as previously defined



SOA = Full Load Equivalent Scheduled Outage Allowance Days, (in days) calculated as:

$$SOA = CYF * BSOA$$

Where:

CYF = as previously defined

BSOA = Base Full Load Equivalent Scheduled Outage Allowance Days (in days) excluding Full Load Equivalent Major Maintenance Outage Allowance Days, for the period as set forth in Schedule 1 of this Appendix E

FOA = Full Load Equivalent Forced Outage Allowance Days, (in days), calculated as:

$$FOA = CYF * BFOA$$

Where:

CYF = as previously defined

BFOA = Base Full Load Equivalent Forced Outage Allowance Days (in days) for the relevant period as set forth in Schedule 1 of this Appendix E

MOA = Full Load Equivalent Major Maintenance Outage Allowance Days, (in days), forecasted and allocated for the relevant Contract Year, in accordance with Schedule 1 of Appendix E

CC = as defined in Article 1.

EDA<sub>M</sub> = the Full Load Equivalent Days of Availability, (in days), achieved in the relevant Billing Period during Days in the Billing Period, calculated as:

- (1) Gross Full Load Equivalent Days of Availability (GEDA<sub>M</sub>),
- (2) Plus Adjustment in Availability Days for Forced Outage Days, Scheduled Outage Days, or Major Maintenance Outage Days in excess of FOA, SOA and MOA, respectively (AADE),
- (3) Less Adjustment in Availability Days of Unutilized FOA, SOA, and MOA (AADU).

By formula:

$$EDA_M = GEDA_M + AADE - AADU$$

Where:

$GEDA_M$  = the Gross Full Load Equivalent Days of Availability, (in days) achieved in the relevant Billing Period during Days in the Billing Period, calculated as the number of Days in the Billing Period, less the Full Load Equivalent Scheduled Outage Days Taken, less the Full Load Equivalent Forced Outage Days Taken, less the Full Load Equivalent Major Maintenance Outage Days Taken, less the Full Load Equivalent Force Majeure Days Taken, during the Billing Period. By formula:

$$GEDA_M = BPD - SOT_M - FOT_M - MOT_M - FMT_M$$

Where:

$BPD$  = the number of Days in the Billing Period.

$SOT_M$  = the Full Load Equivalent Scheduled Outage Days Taken (in days) during the Billing Period

$FOT_M$  = the Full Load Equivalent Forced Outage Days Taken (in days) during the Billing Period

$MOT_M$  = the Full Load Equivalent Major Maintenance Outage Days Taken (in days) during the Billing Period

$FMT_M$  = the Full Load Equivalent Force Majeure Days Taken (in days) during the Billing Period

$AADE$  = Adjustment in Availability Days for Forced Outage Days in excess of FOA, Scheduled Outage Days in excess of SOA, or Major Maintenance Outage Days in excess of MOA, calculated as:

$$AADE = FOE_M + SOE_M + MOE_M$$

Where:

$FOE_M$  =  $FOT_M$  in excess of FOA, wherein,

- i. If  $(FOT_A \geq FOA)$  and  $[(FOT_A - FOA) \geq FOT_M]$ ,

then:

$$FOE_M = FOT_M \text{ (in days)}$$

- ii. If  $(FOT_A \geq FOA)$  and  $[(FOT_A - FOA) < FOT_M]$ ,

*an*

*[Signature]*



then:

$$FOE_M = FOT_A - FOA \text{ (in days)}$$

iii. If  $(FOT_A < FOA)$ ,

then:

$$FOE_M = 0$$

Where:

$FOA$  = as previously defined

$FOT_A$  = Cumulative Full Load Equivalent Forced Outage Days Taken for the Contract Year as of the relevant Billing Period.

$FOT_M$  = as previously defined

$SOE_M$  =  $SOT_M$  in excess of  $SOA$ , wherein,

i. If  $(SOT_A \geq SOA)$  and  $[(SOT_A - SOA) \geq SOT_M]$ ,

then:

$$SOE_M = SOT_M \text{ (in days)}$$

ii. If  $(SOT_A \geq SOA)$  and  $[(SOT_A - SOA) < SOT_M]$ ,

then:

$$SOE_M = SOT_A - SOA \text{ (in days)}$$

iii. If  $(SOT_A < SOA)$ ,

then:

$$SOE_M = 0$$

Where:

$SOA$  = as previously defined

$SOT_A$  = Cumulative Full Load Equivalent Scheduled Outage Days Taken for the Contract Year as of the relevant Billing Period.

$SOT_M$  = as previously defined

$MOE_M$  =  $MOT_M$  in excess of MOA, wherein,

- i. If  $(MOT_A \geq MOA)$  and  $[(MOT_A - MOA) \geq MOT_M]$ ,

then:

$$MOE_M = MOT_M \text{ (in days)}$$

- ii. If  $(MOT_A \geq MOA)$  and  $[(MOT_A - MOA) < MOT_M]$ ,

then:

$$MOE_M = MOT_A - MOA \text{ (in days)}$$

- iii. If  $(MOT_A < MOA)$ ,

then:

$$MOE_M = 0$$

Where:

MOA = as previously defined

$MOT_A$  = Cumulative Full Load Equivalent Major Maintenance Outage Days Taken for the Contract Year as of the relevant Billing Period.

$MOT_M$  = as previously defined

$FOT_M$  = as previously defined

AADU = Adjustment in Availability Days due to unutilized FOA, SOA, and MOA wherein:

- i. If  $(EDA_{A(M-1)} + GEDA_M) \geq (TEDA - FMT_A)$ ,

then:

$$AADU = [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A)] \text{ (in days)}$$

- ii. If  $(EDA_{A(M-1)} + GEDA_M) < (TEDA - FMT_A)$ ,

then:

$$AADU = 0$$

Where:

$EDA_{A(M-1)}$  = the Cumulative Full Load Equivalent Days of Availability for the Contract Year at the end of the previous Billing Period.

$GEDA_M$  = as previously defined

$FMT_A$  = the Cumulative Full Load Equivalent Force Majeure Days Taken for the Contract Year as of the relevant Billing Period, calculated as the sum of all  $FMT_M$  for the current Contract Year.

$TEDA$  = as previously defined

With respect to  $FOT_M$ ,  $SOT_M$ ,  $MOT_M$  and  $FMT_M$ , Full Load Equivalent Days shall be computed in accordance with Schedule 5 of this Appendix E.

## 2. *Component B – Monthly Fixed O&M Payment*

Component B is the Monthly Fixed O&M Payment for the Billing Period calculated as follows:

$$MFOM = MFOM_{USD} + MFOM_{PHP,esc}$$

Where:

$MFOM$  = the Monthly Fixed O&M Payment for the Billing Period (in PHP)

$MFOM_{USD}$  = the USD denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PHP), calculated as:

$$MFOM_{USD} = DFOM_{USD} * USCPI_i / USCPI_o * CC * EDA_M * FX$$

Where:

$DFOM_{USD}$  = the Daily Fixed O&M Fee – USD denominated portion, (in USD/kW-day), calculated as:

$$DFOM_{USD} = CYF * AFOM_{USD} / TEDA$$

Where:

$CYF$  = as previously defined

$AFOM_{USD}$  = Annual Fixed O&M Fee – USD denominated portion, (in USD/kW-year), set forth in Schedule 1 of this Appendix E

TEDA = as previously defined

$USCPI_i$  = the average US Consumer Price Index City Average for All Urban Consumers – All Items for the last three calendar months prior to the start of the Billing Period for which the invoice is being prepared.

$USCPI_0$  = the US Consumer Price Index City Average for All Urban Consumers – All Items (1982-84=100) as published by the US Bureau of Labor Statistics and indicated in Schedule 1 of Appendix E.

CC = as previously defined

$EDA_M$  = as previously defined

FX = the selling rate for USD in PHP as announced by the Bangko Sentral ng Pilipinas ([www.bsp.gov.ph/statistics/sdds/ExchRate.htm](http://www.bsp.gov.ph/statistics/sdds/ExchRate.htm)), on the date three Business Days immediately preceding the Payment Date, as defined in Appendix I, (Invoicing and Payment Procedures) by Meralco of the relevant invoice issued by the Power Supplier.

$MFOM_{PHP,esc}$  = the escalating PHP denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PHP), calculated as:

$MFOM_{PHP,esc} = DFOM_{PHP,esc} * PCPI_i / PCPI_0 * CC * EDA_M$

Where:

$DFOM_{PHP,esc}$  = the Daily Fixed O&M Fee – escalating PHP denominated portion, (in PHP/kW-day), calculated as:

$DFOM_{PHP,esc} = \frac{CYF * AFOM_{PHP,esc}}{TEDA}$

Where:

CYF = as previously defined

$AFOM_{PHP,esc}$  = Annual Fixed O&M Fee – escalating PHP denominated portion, (in PHP/kW-year), set forth in Schedule 1 of this Appendix E

|                   |      |                                                                                                                                                                                                                          |                       |
|-------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|                   | TEDA | =                                                                                                                                                                                                                        | as previously defined |
| PCPI <sub>i</sub> | =    | the average Philippine Consumer Price Index for All Income Households in the Philippines – All Items for the last three calendar months prior to the start of the Billing Period for which the invoice is being prepared |                       |
| PCPI <sub>0</sub> | =    | the Philippine Consumer Price Index for All Income Households in the Philippines – All Items (2006=100) as published by the National Statistics Office and indicated in Schedule 1 of Appendix E.                        |                       |
| CC                | =    | as previously defined                                                                                                                                                                                                    |                       |
| EDA <sub>M</sub>  | =    | as previously defined                                                                                                                                                                                                    |                       |

### **Energy Payments**

#### **3. Component C – Monthly Fuel Payment**

Component C is the Monthly Fuel Payment for the Billing Period calculated as follows:

$$MFP = \sum FP_h$$

Where:

MFP = the Monthly Fuel Payment for the Billing Period (in PHP) calculated as the sum of Fuel Payments for all Trading Intervals within the relevant Billing Period.

FP<sub>h</sub> = the Fuel Payment for the relevant Trading Interval (in PHP), calculated as:

$$FP_h = (MFCC + MFFC) * (BCQ_h * GNPHR_h / 1,000,000) * FX$$

Where:

h = the relevant Trading Interval for which the Fuel Payment is being calculated

MFCC = Monthly Fuel Commodity Cost (in USD/MMBtu), calculated as:

$$MFCC = \text{Coal Price}$$

Where:

Coal Price = globalCOAL Monthly Index for Newcastle (“NEWC Index”) in US\$/MT for the month in which the start of the Billing Period transpires multiplied by 0.040

MT/MMBTU, in (USD/MMBtu)

MFFC = the actual freight charges and costs of delivery, excluding demurrage and dispatch, ("**Freight Price**") stated in USD/MMBtu, for freight, actual customs duties, government charges, and taxes, wharfage, harbour fees, witnessing and inspection fees and costs, pilotage, customs clearance, survey fees and costs, stevedoring charges, and other reasonable costs associated with transportation of coal, based on the moving weighted average of the actual freight and other invoices of coal deliveries for the month in which the start of the Billing Period transpires.

In the event that Power Supplier has provided Replacement Power during SOTM > SOA, FOTM > FOA, or MOTM > MOA and a Freight Price for the relevant Billing Period cannot be calculated due to the absence of one or all of its components, Freight Price for the relevant Billing Period shall be the Freight Price used in the most recent Final Invoice served by Power Supplier to Meralco.

In the event that Power Supplier has provided Replacement Power prior to the Commercial Operations Date as a result of unexcused delay, and a Freight Price for the relevant Billing Period cannot be calculated due to the absence of one or all of its components, Freight Price shall be set initially at USD 12.00/MT and a reconciliation shall be made in respect of such value in determining the Price of such Replacement Power quantities that have been invoiced on such basis once a Freight Price becomes available. For avoidance of doubt, this adjustment on such component of the Price for Replacement Power, if any, provided prior to the Commercial Operations Date may either be in the form of a credit or debit to Meralco.

$BCQ_h$  = BCQ Delivered to the relevant trading node during the relevant Trading Interval, in kWh in accordance with Section 6.4.1.

$GNPHR_h$  = Guaranteed Net Plant Heat Rate, in Btu/kWh on a net plant, HHV basis, for the relevant Trading Interval, which shall be in accordance with Schedule 2 of this Appendix E.

FX = as previously defined.

#### 4. *Component D – Monthly Variable O&M Payment*

Component D is the Monthly Variable O&M Payment for the Billing Period calculated as follows:

$$MVOM = VOM * PCPI_i / PCPI_o * \sum BCQ_h$$

Where:

MVOM = the total Variable O&M Payment (in PHP) for the relevant Billing Period

VOM = the base Variable O&M Fee, (in PHP/kWH) as set forth in Schedule 1 to this Appendix E

PCPI<sub>i</sub> = as previously defined.

PCPI<sub>o</sub> = as previously defined.

BCQ<sub>h</sub> = summation of hour BCQs, as previously defined, (in kWh)

If any indices referred to in this Appendix E of this Agreement ceases to exist or to be published, the relevant increase or decrease shall be the increase or decrease in the index replacing or revising such index or such other index agreed by the Parties.

### 5. *Component E – Monthly Interconnection Facilities Payment*

Component E is the Monthly Interconnection Facilities Payment for the Billing Period calculated as follows:

MIFP = MIFCP + MIFFOMP

Where:

MIFP = the total payment for the Interconnection Facilities (in PHP) for the relevant Billing Period

MIFCP = the payment for the recovery of capital for the Interconnection Facilities in the Billing Period (in PHP), calculated as:

MIFCP = (CYF \* IFCP / TEDA) \* CC \* EDA<sub>M</sub>

Where:

CYF = as previously defined

IFCP = the annual Interconnection Facilities Capacity Fee (in Php/kW-year) as set forth in Schedule 1 to this Appendix E.

TEDA = as previously defined

CC = as previously defined

EDA<sub>M</sub> = as previously defined

MIFFOMP = the payment for the recovery of Fixed O&M cost of the Interconnection Facilities for the Billing Period, (in PHP), calculated as:

MIFFOMP = (CYF \* IFFOM / TEDA) \* PCPI<sub>i</sub>/PCPI<sub>o</sub> \* CC \* EDA<sub>M</sub>

Where:

CYF = as previously defined

IFFOM = the Interconnection Facilities Fixed O&M Fee (in Php/kW-year) set forth in Schedule 1 to this Appendix E.

TEDA = as previously defined

PCPI<sub>i</sub> = as previously defined

PCPI<sub>o</sub> = as previously defined

CC = as previously defined

EDA<sub>M</sub> = as previously defined

#### 6. *Component F – Reimbursable Cost Payment*

Component F is the Reimbursable Cost Payment for the Billing Period calculated as follows:

RCP = RPTP + LF + SP + RP

Where:

RCP = Reimbursement of costs incurred by the Power Supplier, (in PHP)

RPTP = Meralco shall reimburse and pass through the Real Property Tax (in the proportion the Contract Capacity bears to the Net Dependable Capacity), (in PHP) as assessed and paid during the relevant Billing Period for real property owned, leased, or used by or the primary benefit of which is enjoyed by Power Supplier

LF = Meralco shall reimburse and pass through the Lease Fee (in the proportion the Contract Capacity bears to the Net Dependable Capacity), (in PHP) as assessed and paid during the relevant Billing Period.

SP = Supplemental payments shall include the following:  
(a) Energy and Environmental Tax, if applicable;  
(b) any applicable NGCP PDS and SO Charges or ancillary service charges by NGCP for the supply of Contract Capacity and Associated Energy to Meralco;  
(c) any applicable "Compensation for Must Run Unit" pursuant to any order of the ERC should any be charged in connection with the supply of Contract



- Capacity and Associated Energy to Meralco;
- (d) Benefits to host community charges under ER 1-94;
- (e) fees charged by the Market Operator; and
- (f) local business taxes.

RP = In the event that Power Supplier has provided Replacement Power during a period of unexcused delay of the Commercial Operations Date, the Replacement Power Payment (RP) (in PHP) shall be calculated as follows:

$$RP = \sum (RP_{ACF} + RP_{FOM} + RP_{Fuel} + RP_{VOM}) * RPQ_h$$

Where:

$$RP_{ACF} = ACF / 8760$$

Where:

$$ACF = \text{as previously defined}$$

$$RP_{FOM} = ((AFOM_{USD} * USCPI_i / USCPI_o * FX) + (AFOM_{PHP,esc} * PCPI_i / PCPI_o)) / 8760$$

Where:

$$AFOM_{USD} = \text{as previously defined}$$

$$USCPI_i = \text{as previously defined}$$

$$USCPI_o = \text{as previously defined}$$

$$FX = \text{as previously defined}$$

$$AFOM_{PHP,esc} = \text{as previously defined}$$

$$PCPI_i = \text{as previously defined}$$

$$PCPI_o = \text{as previously defined}$$

$$RP_{Fuel} = (MFCC + MFFC) * (GNPHR_h / 1,000,000) * FX$$

Where:

$$MFCC = \text{as previously defined}$$

$$MFFC = \text{as previously defined}$$



$GNPHR_h =$  as previously defined

$FX =$  as previously defined

$$RP_{VOM} = VOM * PCPI_i / PCPI_o$$

Where:

$VOM =$  as previously defined

$PCPI_i =$  as previously defined

$PCPI_o =$  as previously defined

$RPQ_h =$  Replacement Power Quantity provided by the Power Supplier after the Scheduled Commercial Operations Date but before the Commercial Operations Date for the relevant Trading Interval (in kWh)

*Provided that*, any payment of Meralco pursuant to items referred to above shall be proportional to the share of the Contract Capacity or Associated Energy to the total Net Dependable Capacity of the Plant or energy deliveries from the plant vis-à-vis the billing determinants used in the calculation of the charges relative to these items.

#### **7. Component G – Value Added Tax**

Component G is any value-added tax imposed on Seller for Contract Capacity and Associated Energy and Replacement Power in accordance with Philippine tax Laws.

**SCHEDULE 1  
BASE RATES**

|                                                                                |              |             |
|--------------------------------------------------------------------------------|--------------|-------------|
| Annual Capacity Fee(ACF <sub>0</sub> )†                                        | Php/kW-year  | 14,913.2468 |
| Annual Fixed O&M Fee (USD)‡                                                    | US\$/kW-year | 19.2828     |
| Annual Fixed O&M Fee (PHP, escalating) ‡                                       | PHP/kW-year  | 1,870.1836  |
| Variable O&M Fee (PHP)                                                         | PHP/kW-hour  | 0.1572      |
| Annual Interconnection Facility Capacity Fee (IFCP)                            | PHP/kW-year  | 403.4155    |
| Annual Interconnection Facility FOM Fee (IFFOM)                                | PHP/kW-year  | 174.6456    |
| Base USCPI <sub>0</sub> (1982-84=100) (December 2015)                          |              | 236.525     |
| Base PCPI <sub>0</sub> (2006=100) (December 2015)                              |              | 142.600     |
| Base Full Load Equivalent Scheduled Outage Allowance                           | Days         | 30          |
| Full Load Equivalent Major Maintenance Outage Allowance                        | Days         | 20          |
| Base Full Load Equivalent Forced Outage Allowance                              | Days         | 15          |
| Net Plant Guaranteed Heat Rate (NPGHR) @ year 1 and 100% plant capacity factor | Btu/kWh      | 9,388       |

†To make allowance for changes in prices and related economic conditions after the date of this Agreement, the following one-time adjustments to the Annual Capacity Fee shall occur:

(1) If the Commencement Date occurs later than nine (9) months after the filing of the ERC Application, 96% of each of the Annual Capacity Fee in the foregoing table shall be adjusted based on the percentage changes in the most recently announced MUV Index as of the date nine (9) months after the filing of the ERC Application and as of the Commencement Date. "MUV Index" refers to the "Manufactures Unit Value Index" (2005 = 100, gross value) published by the Development Prospects Group of the World Bank appearing at the following page: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:20587651~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>.

(2) The Annual Capacity Fee (in PHP/kW-year) shall be subject to a one-time adjustment effective from and after the date seven (7) years after the date of Financial Close based on the following formula: The financing is based on a fifteen-year financing tenure with an interest re-pricing at the end of the seventh year.

From and after the Commercial Operation Date until the 7<sup>th</sup> anniversary of the Financial Close:  $ACF = ACF_0$

After the 7<sup>th</sup> anniversary of the Financial Close:  $ACF = ACF_0 + AA$

where:

ACF = the Annual Capacity Fee in PHP/kW-year

ACF<sub>0</sub> = the Annual Capacity Fee, in PHP/kW-year, as shown in Table 1 above subject to MUV adjustment, if applicable.

AA = the adjustment amount in PHP/kW-year for the equivalent change in 8-year PDST-R2 to the Annual Capacity Fee in accordance with this adjustment (which may be a negative number) determined as using table below:

| Base 8Y PDST-R2  | Movement in 8Y PDST-R2 | Adjustment in PhP/MW-Yr | Adjustment in PhP/kW-Yr |
|------------------|------------------------|-------------------------|-------------------------|
| 8Y PDST-R2 4.45% | 500 bps                | 1,193,908.43            | 1,193.91                |
|                  | 475 bps                | 1,133,981.04            | 1,133.98                |
|                  | 450 bps                | 1,074,314.51            | 1,074.31                |
|                  | 425 bps                | 1,014,239.87            | 1,014.24                |
|                  | 400 bps                | 954,414.71              | 954.41                  |
|                  | 375 bps                | 894,591.34              | 894.59                  |
|                  | 350 bps                | 834,765.35              | 834.77                  |
|                  | 325 bps                | 774,966.36              | 774.97                  |
|                  | 300 bps                | 715,149.93              | 715.15                  |
|                  | 275 bps                | 655,324.71              | 655.32                  |
|                  | 250 bps                | 595,531.78              | 595.53                  |
|                  | 225 bps                | 535,638.60              | 535.64                  |
|                  | 200 bps                | 475,850.91              | 475.85                  |
|                  | 175 bps                | 415,988.22              | 415.99                  |
|                  | 150 bps                | 356,314.04              | 356.31                  |
|                  | 125 bps                | 296,906.11              | 296.91                  |
|                  | 100 bps                | 237,706.46              | 237.71                  |
|                  | 75 bps                 | 178,139.55              | 178.14                  |
|                  | 50 bps                 | 118,731.89              | 118.73                  |
|                  | 40 bps                 | 95,116.07               | 95.12                   |
|                  | 30 bps                 | 71,354.47               | 71.35                   |
|                  | 20 bps                 | 47,592.60               | 47.59                   |
|                  | 10 bps                 | 23,830.41               | 23.83                   |
|                  | 0 bps                  | -                       | -                       |
|                  | -10 bps                | (23,830.41)             | (23.83)                 |
|                  | -20 bps                | (47,592.60)             | (47.59)                 |
|                  | -30 bps                | (71,354.47)             | (71.35)                 |
|                  | -40 bps                | (95,116.07)             | (95.12)                 |
|                  | -50 bps or lower       | (118,731.89)            | (118.73)                |

The movement in the 8 Year PDST-R2 will be determined by:

$$\Delta = 8 \text{ Year PDST-R2 at the 7}^{\text{th}} \text{ anniversary of the Financial Close} - 445\text{bps}$$

If the 8 Year PDST-R2 is not available on 7<sup>th</sup> anniversary of the Financial Close, the corresponding rate will be interpolated using the nearest available PDST- R2 rate (i.e. 10 Year PDST-R2 and 7 Year PDST-R2).

Interpolated 8 year PDST-R2 rate will be calculated using the formula below:

$$8 \text{ Year PDST-R2} = \left[ \left( \frac{(10 \text{ Year PDST-R2}) - (7 \text{ Year PDST-R2})}{10 - 7} \right) * (8 - 7) \right] + (7 \text{ Year PDST-R2})$$

When the  $\Delta$  falls between the values in the foregoing table, adjustment amount will be interpolated using the formula:

$$AA = \left[ \left( \frac{(y \text{ upper}) - (y \text{ lower})}{x \text{ upper} - x \text{ lower}} \right) * (\Delta x - x \text{ lower}) \right] + y \text{ lower}$$

Sample Calculation, when  $\Delta$  is 115 bps:

|          | x   | y      |
|----------|-----|--------|
| $\Delta$ | 115 |        |
| lower    | 100 | 237.71 |
| upper    | 125 | 296.91 |

$$AA = \left[ \left( \frac{(296.91) - (237.71)}{125 - 110} \right) * (115 - 100) \right] + 237.71$$

$$AA = 273.23$$

‡If there is a Change in Circumstances under paragraph (d) of the definition thereof related to increased general and administrative or operations and maintenance costs incurred by Power Supplier due to discontinuance of baseload electricity generation of the landlord of the Power Supplier, the Annual Fixed O&M Fee will be adjusted based on the values agreed to by the Parties and subject to the approval of the ERC at the appropriate time.

SCHEDULE 2  
GUARANTEED NET PLANT HEAT RATE  
[LIFETIME AND LOAD FACTOR VALUES]

| Load        | 0         | 1         | 2         | 3         | 4         | 5         | 6         | 7         | 8         | 9         | 10        |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Degradation | 1         | 1.00650   | 1.00900   | 1.01080   | 1.01220   | 1.01340   | 1.01450   | 1.00960   | 1.01200   | 1.01360   | 1.01500   |
| 100%        | 9,388.01  | 9,449.04  | 9,472.51  | 9,489.40  | 9,502.55  | 9,513.81  | 9,524.14  | 9,478.14  | 9,500.67  | 9,515.69  | 9,528.83  |
| 99%         | 9,397.18  | 9,458.26  | 9,481.76  | 9,498.67  | 9,511.83  | 9,523.10  | 9,533.44  | 9,487.39  | 9,509.95  | 9,524.98  | 9,538.14  |
| 98%         | 9,405.56  | 9,466.69  | 9,490.21  | 9,507.14  | 9,520.30  | 9,531.59  | 9,541.94  | 9,495.85  | 9,518.42  | 9,533.47  | 9,546.64  |
| 97%         | 9,424.02  | 9,485.28  | 9,508.84  | 9,525.80  | 9,539.00  | 9,550.31  | 9,560.67  | 9,514.50  | 9,537.11  | 9,552.19  | 9,565.38  |
| 96%         | 9,441.44  | 9,502.81  | 9,526.41  | 9,543.41  | 9,556.63  | 9,567.96  | 9,578.34  | 9,532.08  | 9,554.74  | 9,569.85  | 9,583.06  |
| 95%         | 9,457.90  | 9,519.38  | 9,543.02  | 9,560.05  | 9,573.29  | 9,584.64  | 9,595.04  | 9,548.70  | 9,571.40  | 9,586.53  | 9,599.77  |
| 94%         | 9,473.49  | 9,535.07  | 9,558.75  | 9,575.81  | 9,589.07  | 9,600.44  | 9,610.86  | 9,564.44  | 9,587.18  | 9,602.33  | 9,615.60  |
| 93%         | 9,488.31  | 9,549.99  | 9,573.71  | 9,590.79  | 9,604.07  | 9,615.46  | 9,625.89  | 9,579.40  | 9,602.17  | 9,617.35  | 9,630.64  |
| 92%         | 9,502.45  | 9,564.22  | 9,587.97  | 9,605.08  | 9,618.38  | 9,629.78  | 9,640.24  | 9,593.67  | 9,616.48  | 9,631.68  | 9,644.99  |
| 91%         | 9,516.00  | 9,577.85  | 9,601.64  | 9,618.77  | 9,632.09  | 9,643.51  | 9,653.98  | 9,607.35  | 9,630.19  | 9,645.42  | 9,658.74  |
| 90%         | 9,529.05  | 9,590.99  | 9,614.81  | 9,631.97  | 9,645.31  | 9,656.74  | 9,667.22  | 9,620.53  | 9,643.40  | 9,658.65  | 9,671.99  |
| 89%         | 9,541.70  | 9,603.72  | 9,627.58  | 9,644.75  | 9,658.11  | 9,669.56  | 9,680.06  | 9,633.30  | 9,656.20  | 9,671.47  | 9,684.83  |
| 88%         | 9,554.04  | 9,616.14  | 9,640.03  | 9,657.22  | 9,670.60  | 9,682.06  | 9,692.57  | 9,645.76  | 9,668.69  | 9,683.97  | 9,697.35  |
| 87%         | 9,566.16  | 9,628.34  | 9,652.25  | 9,669.47  | 9,682.86  | 9,694.34  | 9,704.87  | 9,657.99  | 9,680.95  | 9,696.26  | 9,709.65  |
| 86%         | 9,578.15  | 9,640.41  | 9,664.35  | 9,681.59  | 9,695.00  | 9,706.50  | 9,717.03  | 9,670.10  | 9,693.09  | 9,708.41  | 9,721.82  |
| 85%         | 9,590.11  | 9,652.44  | 9,676.42  | 9,693.68  | 9,707.11  | 9,718.61  | 9,729.16  | 9,682.17  | 9,705.19  | 9,720.53  | 9,733.96  |
| 84%         | 9,602.12  | 9,664.54  | 9,688.54  | 9,705.83  | 9,719.27  | 9,730.79  | 9,741.35  | 9,694.30  | 9,717.35  | 9,732.71  | 9,746.16  |
| 83%         | 9,614.29  | 9,676.78  | 9,700.82  | 9,718.12  | 9,731.58  | 9,743.12  | 9,753.70  | 9,706.59  | 9,729.66  | 9,745.04  | 9,758.50  |
| 82%         | 9,626.70  | 9,689.27  | 9,713.34  | 9,730.67  | 9,744.15  | 9,755.70  | 9,766.29  | 9,719.12  | 9,742.22  | 9,757.62  | 9,771.10  |
| 81%         | 9,639.45  | 9,702.10  | 9,726.20  | 9,743.55  | 9,757.05  | 9,768.61  | 9,779.22  | 9,731.98  | 9,755.12  | 9,770.54  | 9,784.04  |
| 80%         | 9,652.62  | 9,715.36  | 9,739.49  | 9,756.87  | 9,770.38  | 9,781.97  | 9,792.58  | 9,745.29  | 9,768.45  | 9,783.90  | 9,797.41  |
| 79%         | 9,666.31  | 9,729.15  | 9,753.31  | 9,770.71  | 9,784.24  | 9,795.84  | 9,806.48  | 9,759.11  | 9,782.31  | 9,797.78  | 9,811.31  |
| 78%         | 9,680.62  | 9,743.55  | 9,767.75  | 9,785.17  | 9,798.73  | 9,810.34  | 9,820.99  | 9,773.56  | 9,796.79  | 9,812.28  | 9,825.83  |
| 77%         | 9,695.63  | 9,758.66  | 9,782.90  | 9,800.35  | 9,813.92  | 9,825.56  | 9,836.22  | 9,788.71  | 9,811.98  | 9,827.50  | 9,841.07  |
| 76%         | 9,711.45  | 9,774.57  | 9,798.85  | 9,816.33  | 9,829.93  | 9,841.58  | 9,852.26  | 9,804.68  | 9,827.98  | 9,843.52  | 9,857.12  |
| 75%         | 9,728.15  | 9,791.38  | 9,815.70  | 9,833.21  | 9,846.83  | 9,858.50  | 9,869.20  | 9,821.54  | 9,844.88  | 9,860.45  | 9,874.07  |
| 74%         | 9,745.83  | 9,809.18  | 9,833.54  | 9,851.09  | 9,864.73  | 9,876.42  | 9,887.14  | 9,839.39  | 9,862.78  | 9,878.37  | 9,892.02  |
| 73%         | 9,764.59  | 9,828.06  | 9,852.47  | 9,870.05  | 9,883.72  | 9,895.43  | 9,906.18  | 9,858.33  | 9,881.76  | 9,897.39  | 9,911.06  |
| 72%         | 9,784.52  | 9,848.11  | 9,872.58  | 9,890.19  | 9,903.89  | 9,915.63  | 9,926.39  | 9,878.45  | 9,901.93  | 9,917.58  | 9,931.28  |
| 71%         | 9,805.70  | 9,869.44  | 9,893.95  | 9,911.60  | 9,925.33  | 9,937.10  | 9,947.88  | 9,899.84  | 9,923.37  | 9,939.06  | 9,952.79  |
| 70%         | 9,828.24  | 9,892.12  | 9,916.70  | 9,934.39  | 9,948.15  | 9,959.94  | 9,970.75  | 9,922.59  | 9,946.18  | 9,961.90  | 9,975.66  |
| 69%         | 9,852.22  | 9,916.26  | 9,940.89  | 9,958.63  | 9,972.42  | 9,984.24  | 9,995.08  | 9,946.81  | 9,970.45  | 9,986.22  | 10,000.01 |
| 68%         | 9,877.75  | 9,941.95  | 9,966.65  | 9,984.43  | 9,998.25  | 10,010.11 | 10,020.97 | 9,972.57  | 9,996.28  | 10,012.08 | 10,025.91 |
| 67%         | 9,904.90  | 9,969.28  | 9,994.04  | 10,011.87 | 10,025.74 | 10,037.62 | 10,048.52 | 9,999.98  | 10,023.76 | 10,039.60 | 10,053.47 |
| 66%         | 9,933.77  | 9,998.34  | 10,023.17 | 10,041.06 | 10,054.96 | 10,066.88 | 10,077.81 | 10,029.13 | 10,052.98 | 10,068.87 | 10,082.78 |
| 65%         | 9,964.46  | 10,029.23 | 10,054.14 | 10,072.07 | 10,086.03 | 10,097.98 | 10,108.94 | 10,060.12 | 10,084.03 | 10,099.98 | 10,113.93 |
| 64%         | 9,997.05  | 10,062.03 | 10,087.03 | 10,105.02 | 10,119.02 | 10,131.01 | 10,142.01 | 10,093.03 | 10,117.02 | 10,133.01 | 10,147.01 |
| 63%         | 10,031.65 | 10,096.85 | 10,121.93 | 10,139.99 | 10,154.03 | 10,166.07 | 10,177.11 | 10,127.95 | 10,152.03 | 10,168.08 | 10,182.12 |
| 62%         | 10,068.34 | 10,133.78 | 10,158.95 | 10,177.07 | 10,191.17 | 10,203.25 | 10,214.33 | 10,164.99 | 10,189.16 | 10,205.26 | 10,219.36 |
| 61%         | 10,107.21 | 10,172.90 | 10,198.17 | 10,216.36 | 10,230.51 | 10,242.64 | 10,253.76 | 10,204.24 | 10,228.49 | 10,244.66 | 10,258.81 |
| 60%         | 10,148.35 | 10,214.32 | 10,239.69 | 10,257.96 | 10,272.16 | 10,284.34 | 10,295.51 | 10,245.78 | 10,270.13 | 10,286.37 | 10,300.58 |
| 59%         | 10,191.87 | 10,258.12 | 10,283.60 | 10,301.94 | 10,316.21 | 10,328.44 | 10,339.65 | 10,289.71 | 10,314.17 | 10,330.48 | 10,344.75 |
| 58%         | 10,237.85 | 10,304.40 | 10,329.99 | 10,348.42 | 10,362.75 | 10,375.04 | 10,386.30 | 10,336.13 | 10,360.71 | 10,377.09 | 10,391.42 |
| 57%         | 10,286.38 | 10,353.25 | 10,378.96 | 10,397.48 | 10,411.88 | 10,424.22 | 10,435.54 | 10,385.13 | 10,409.82 | 10,426.28 | 10,440.68 |
| 56%         | 10,337.56 | 10,404.76 | 10,430.60 | 10,449.21 | 10,463.68 | 10,476.09 | 10,487.46 | 10,436.81 | 10,461.62 | 10,478.16 | 10,492.63 |
| 55%         | 10,391.48 | 10,459.03 | 10,485.01 | 10,503.71 | 10,518.26 | 10,530.73 | 10,542.16 | 10,491.24 | 10,516.18 | 10,532.81 | 10,547.36 |
| 54%         | 10,448.23 | 10,516.15 | 10,542.27 | 10,561.08 | 10,575.70 | 10,588.24 | 10,599.73 | 10,548.54 | 10,573.61 | 10,590.33 | 10,604.96 |
| 53%         | 10,507.91 | 10,576.21 | 10,602.48 | 10,621.39 | 10,636.11 | 10,648.72 | 10,660.27 | 10,608.79 | 10,634.00 | 10,650.82 | 10,665.53 |
| 52%         | 10,570.60 | 10,639.31 | 10,665.74 | 10,684.76 | 10,699.56 | 10,712.25 | 10,723.87 | 10,672.08 | 10,697.45 | 10,714.36 | 10,729.16 |
| 51%         | 10,636.40 | 10,705.54 | 10,732.13 | 10,751.27 | 10,766.16 | 10,778.93 | 10,790.63 | 10,738.51 | 10,764.04 | 10,781.06 | 10,795.95 |
| 50%         | 10,705.40 | 10,774.99 | 10,801.75 | 10,821.02 | 10,836.01 | 10,848.85 | 10,860.63 | 10,808.17 | 10,833.87 | 10,850.99 | 10,865.98 |
| 49%         | 10,777.70 | 10,847.75 | 10,874.70 | 10,894.10 | 10,909.18 | 10,922.12 | 10,933.97 | 10,881.16 | 10,907.03 | 10,924.27 | 10,939.36 |
| 48%         | 10,853.38 | 10,923.92 | 10,951.06 | 10,970.59 | 10,985.79 | 10,998.81 | 11,010.75 | 10,957.57 | 10,983.62 | 11,000.98 | 11,016.18 |
| 47%         | 10,932.54 | 11,003.60 | 11,030.93 | 11,050.61 | 11,065.91 | 11,079.03 | 11,091.06 | 11,037.49 | 11,063.73 | 11,081.22 | 11,096.53 |
| 46%         | 11,015.27 | 11,086.87 | 11,114.41 | 11,134.23 | 11,149.65 | 11,162.87 | 11,174.99 | 11,121.01 | 11,147.45 | 11,165.08 | 11,180.50 |
| 45%         | 11,101.66 | 11,173.82 | 11,201.58 | 11,221.56 | 11,237.10 | 11,250.42 | 11,262.64 | 11,208.24 | 11,234.88 | 11,252.64 | 11,268.19 |
| 44%         | 11,191.81 | 11,264.56 | 11,292.54 | 11,312.68 | 11,328.35 | 11,341.78 | 11,354.09 | 11,299.25 | 11,326.11 | 11,344.02 | 11,359.69 |
| 43%         | 11,285.81 | 11,359.17 | 11,387.38 | 11,407.70 | 11,423.50 | 11,437.04 | 11,449.46 | 11,394.15 | 11,421.24 | 11,439.30 | 11,455.10 |
| 42%         | 11,383.75 | 11,457.74 | 11,486.20 | 11,506.70 | 11,522.63 | 11,536.29 | 11,548.81 | 11,493.03 | 11,520.36 | 11,538.57 | 11,554.51 |
| 41%         | 11,485.72 | 11,560.38 | 11,589.09 | 11,609.77 | 11,625.85 | 11,639.63 | 11,652.27 | 11,595.99 | 11,623.55 | 11,641.93 | 11,658.01 |
| 40%         | 11,591.82 | 11,667.17 | 11,696.15 | 11,717.01 | 11,733.24 | 11,747.15 | 11,759.90 | 11,703.10 | 11,730.92 | 11,749.47 | 11,765.70 |

| Load Degradation | 11        | 12        | 13        | 14        | 15        | 16        | 17        | 18        | 19        | 20        |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 100%             | 1.01610   | 1.01710   | 1.01140   | 1.01370   | 1.01520   | 1.01660   | 1.01780   | 1.01880   | 1.01280   | 1.01500   |
| 99%              | 9,539.16  | 9,548.55  | 9,495.04  | 9,516.63  | 9,530.71  | 9,543.86  | 9,555.12  | 9,564.51  | 9,508.18  | 9,528.83  |
| 98%              | 9,548.48  | 9,557.87  | 9,504.31  | 9,525.92  | 9,540.02  | 9,553.17  | 9,564.45  | 9,573.85  | 9,517.46  | 9,538.14  |
| 97%              | 9,556.99  | 9,566.39  | 9,512.78  | 9,534.41  | 9,548.52  | 9,561.69  | 9,572.98  | 9,582.38  | 9,525.95  | 9,546.64  |
| 96%              | 9,575.75  | 9,585.18  | 9,531.46  | 9,553.13  | 9,567.27  | 9,580.46  | 9,591.77  | 9,601.20  | 9,544.65  | 9,565.38  |
| 95%              | 9,593.45  | 9,602.89  | 9,549.07  | 9,570.79  | 9,584.95  | 9,598.17  | 9,609.50  | 9,618.94  | 9,562.29  | 9,583.06  |
| 94%              | 9,610.17  | 9,619.63  | 9,565.72  | 9,587.47  | 9,601.66  | 9,614.90  | 9,626.25  | 9,635.71  | 9,578.96  | 9,599.77  |
| 93%              | 9,626.02  | 9,635.49  | 9,581.49  | 9,603.28  | 9,617.49  | 9,630.75  | 9,642.12  | 9,651.59  | 9,594.75  | 9,615.60  |
| 92%              | 9,641.07  | 9,650.56  | 9,596.48  | 9,618.30  | 9,632.53  | 9,645.82  | 9,657.20  | 9,666.69  | 9,609.76  | 9,630.64  |
| 91%              | 9,655.44  | 9,664.94  | 9,610.78  | 9,632.63  | 9,646.89  | 9,660.19  | 9,671.59  | 9,681.10  | 9,624.08  | 9,644.99  |
| 90%              | 9,669.21  | 9,678.72  | 9,624.48  | 9,646.37  | 9,660.64  | 9,673.96  | 9,685.38  | 9,694.90  | 9,637.80  | 9,658.74  |
| 89%              | 9,682.47  | 9,692.00  | 9,637.68  | 9,659.60  | 9,673.89  | 9,687.23  | 9,698.67  | 9,708.20  | 9,651.02  | 9,671.99  |
| 88%              | 9,695.32  | 9,704.86  | 9,650.48  | 9,672.42  | 9,686.74  | 9,700.09  | 9,711.54  | 9,721.09  | 9,663.83  | 9,684.83  |
| 87%              | 9,707.86  | 9,717.41  | 9,662.95  | 9,684.93  | 9,699.26  | 9,712.64  | 9,724.10  | 9,733.65  | 9,676.33  | 9,697.35  |
| 86%              | 9,720.17  | 9,729.74  | 9,675.21  | 9,697.21  | 9,711.56  | 9,724.96  | 9,736.43  | 9,746.00  | 9,688.60  | 9,709.65  |
| 85%              | 9,732.36  | 9,741.94  | 9,687.34  | 9,709.37  | 9,723.74  | 9,737.15  | 9,748.64  | 9,758.22  | 9,700.75  | 9,721.82  |
| 84%              | 9,744.51  | 9,754.10  | 9,699.43  | 9,721.49  | 9,735.88  | 9,749.30  | 9,760.81  | 9,770.40  | 9,712.86  | 9,733.96  |
| 83%              | 9,756.72  | 9,766.32  | 9,711.59  | 9,733.67  | 9,748.08  | 9,761.52  | 9,773.04  | 9,782.64  | 9,725.03  | 9,746.16  |
| 82%              | 9,769.08  | 9,778.69  | 9,723.89  | 9,746.01  | 9,760.43  | 9,773.89  | 9,785.42  | 9,795.04  | 9,737.35  | 9,758.50  |
| 81%              | 9,781.69  | 9,791.32  | 9,736.44  | 9,758.59  | 9,773.03  | 9,786.50  | 9,798.06  | 9,807.68  | 9,749.92  | 9,771.10  |
| 80%              | 9,794.64  | 9,804.28  | 9,749.34  | 9,771.51  | 9,785.97  | 9,799.46  | 9,811.03  | 9,820.67  | 9,762.83  | 9,784.04  |
| 79%              | 9,808.03  | 9,817.68  | 9,762.66  | 9,784.86  | 9,799.34  | 9,812.85  | 9,824.44  | 9,834.09  | 9,776.17  | 9,797.41  |
| 78%              | 9,821.94  | 9,831.61  | 9,776.51  | 9,798.74  | 9,813.24  | 9,826.78  | 9,838.37  | 9,848.04  | 9,790.04  | 9,811.31  |
| 77%              | 9,836.48  | 9,846.16  | 9,790.98  | 9,813.25  | 9,827.77  | 9,841.32  | 9,852.94  | 9,862.62  | 9,804.53  | 9,825.83  |
| 76%              | 9,851.73  | 9,861.43  | 9,806.17  | 9,828.46  | 9,843.01  | 9,856.58  | 9,868.22  | 9,877.91  | 9,819.74  | 9,841.07  |
| 75%              | 9,867.80  | 9,877.51  | 9,822.16  | 9,844.49  | 9,859.06  | 9,872.66  | 9,884.31  | 9,894.02  | 9,835.75  | 9,857.12  |
| 74%              | 9,884.77  | 9,894.50  | 9,839.05  | 9,861.42  | 9,876.01  | 9,889.63  | 9,901.31  | 9,911.04  | 9,852.67  | 9,874.07  |
| 73%              | 9,902.74  | 9,912.48  | 9,856.93  | 9,879.35  | 9,893.97  | 9,907.61  | 9,919.31  | 9,929.05  | 9,870.58  | 9,892.02  |
| 72%              | 9,921.80  | 9,931.56  | 9,875.91  | 9,898.36  | 9,913.01  | 9,926.68  | 9,938.40  | 9,948.16  | 9,889.58  | 9,911.06  |
| 71%              | 9,942.05  | 9,951.83  | 9,896.06  | 9,918.56  | 9,933.24  | 9,946.94  | 9,958.68  | 9,968.46  | 9,909.76  | 9,931.28  |
| 70%              | 9,963.57  | 9,973.38  | 9,917.49  | 9,940.04  | 9,954.75  | 9,968.48  | 9,980.24  | 9,990.05  | 9,931.21  | 9,952.79  |
| 69%              | 9,986.48  | 9,996.30  | 9,940.28  | 9,962.89  | 9,977.63  | 9,991.39  | 10,003.18 | 10,013.01 | 9,954.04  | 9,975.66  |
| 68%              | 10,010.85 | 10,020.70 | 9,964.54  | 9,987.20  | 10,001.98 | 10,015.77 | 10,027.59 | 10,037.45 | 9,978.33  | 10,000.01 |
| 67%              | 10,036.78 | 10,046.66 | 9,990.35  | 10,013.07 | 10,027.89 | 10,041.72 | 10,053.57 | 10,063.45 | 10,004.18 | 10,025.91 |
| 66%              | 10,064.37 | 10,074.27 | 10,017.81 | 10,040.59 | 10,055.45 | 10,069.32 | 10,081.20 | 10,091.11 | 10,031.68 | 10,053.47 |
| 65%              | 10,093.70 | 10,103.64 | 10,047.02 | 10,069.86 | 10,084.76 | 10,098.67 | 10,110.59 | 10,120.53 | 10,060.92 | 10,082.78 |
| 64%              | 10,124.89 | 10,134.85 | 10,078.05 | 10,100.97 | 10,115.92 | 10,129.87 | 10,141.83 | 10,151.79 | 10,092.00 | 10,113.93 |
| 63%              | 10,158.01 | 10,168.00 | 10,111.02 | 10,134.01 | 10,149.01 | 10,163.00 | 10,175.00 | 10,185.00 | 10,125.02 | 10,147.01 |
| 62%              | 10,193.16 | 10,203.19 | 10,146.01 | 10,169.08 | 10,184.13 | 10,198.17 | 10,210.21 | 10,220.24 | 10,160.05 | 10,182.12 |
| 61%              | 10,230.44 | 10,240.50 | 10,183.11 | 10,206.27 | 10,221.37 | 10,235.47 | 10,247.55 | 10,257.62 | 10,197.21 | 10,219.36 |
| 60%              | 10,269.93 | 10,280.04 | 10,222.43 | 10,245.68 | 10,260.84 | 10,274.99 | 10,287.11 | 10,297.22 | 10,236.58 | 10,258.81 |
| 59%              | 10,311.74 | 10,321.89 | 10,264.05 | 10,287.39 | 10,302.61 | 10,316.82 | 10,329.00 | 10,339.14 | 10,278.25 | 10,300.58 |
| 58%              | 10,355.96 | 10,366.15 | 10,308.06 | 10,331.50 | 10,346.79 | 10,361.06 | 10,373.29 | 10,383.48 | 10,322.33 | 10,344.75 |
| 57%              | 10,402.68 | 10,412.92 | 10,354.56 | 10,378.11 | 10,393.47 | 10,407.80 | 10,420.09 | 10,430.32 | 10,368.90 | 10,391.42 |
| 56%              | 10,452.00 | 10,462.28 | 10,403.65 | 10,427.31 | 10,442.74 | 10,457.14 | 10,469.48 | 10,479.77 | 10,418.05 | 10,440.68 |
| 55%              | 10,504.00 | 10,514.34 | 10,455.41 | 10,479.19 | 10,494.70 | 10,509.17 | 10,521.57 | 10,531.91 | 10,469.89 | 10,492.63 |
| 54%              | 10,558.79 | 10,569.18 | 10,509.95 | 10,533.85 | 10,549.43 | 10,563.98 | 10,576.45 | 10,586.84 | 10,524.49 | 10,547.36 |
| 53%              | 10,616.45 | 10,626.90 | 10,567.34 | 10,591.38 | 10,607.05 | 10,621.68 | 10,634.21 | 10,644.66 | 10,581.97 | 10,604.96 |
| 52%              | 10,677.09 | 10,687.59 | 10,627.70 | 10,651.87 | 10,667.63 | 10,682.34 | 10,694.95 | 10,705.46 | 10,642.41 | 10,665.53 |
| 51%              | 10,740.79 | 10,751.36 | 10,691.11 | 10,715.42 | 10,731.27 | 10,746.07 | 10,758.76 | 10,769.33 | 10,705.90 | 10,729.16 |
| 50%              | 10,807.65 | 10,818.28 | 10,757.66 | 10,782.12 | 10,798.07 | 10,812.96 | 10,825.73 | 10,836.36 | 10,772.55 | 10,795.95 |
| 49%              | 10,877.76 | 10,888.46 | 10,827.44 | 10,852.07 | 10,868.12 | 10,883.11 | 10,895.96 | 10,906.66 | 10,842.43 | 10,865.98 |
| 48%              | 10,951.22 | 10,962.00 | 10,900.56 | 10,925.35 | 10,941.52 | 10,956.61 | 10,969.54 | 10,980.32 | 10,915.65 | 10,939.36 |
| 47%              | 11,028.12 | 11,038.97 | 10,977.11 | 11,002.07 | 11,018.35 | 11,033.54 | 11,046.57 | 11,057.42 | 10,992.30 | 11,016.18 |
| 46%              | 11,108.55 | 11,119.48 | 11,057.17 | 11,082.31 | 11,098.71 | 11,114.02 | 11,127.14 | 11,138.07 | 11,072.47 | 11,096.53 |
| 45%              | 11,192.61 | 11,203.63 | 11,140.84 | 11,166.18 | 11,182.70 | 11,198.12 | 11,211.34 | 11,222.36 | 11,156.26 | 11,180.50 |
| 44%              | 11,280.40 | 11,291.50 | 11,228.22 | 11,253.76 | 11,270.41 | 11,285.95 | 11,299.27 | 11,310.37 | 11,243.76 | 11,268.19 |
| 43%              | 11,372.00 | 11,383.19 | 11,319.40 | 11,345.14 | 11,361.93 | 11,377.60 | 11,391.03 | 11,402.22 | 11,335.07 | 11,359.69 |
| 42%              | 11,467.51 | 11,478.80 | 11,414.47 | 11,440.43 | 11,457.36 | 11,473.16 | 11,486.70 | 11,497.98 | 11,430.27 | 11,455.10 |
| 41%              | 11,567.03 | 11,578.41 | 11,513.53 | 11,539.71 | 11,556.78 | 11,572.72 | 11,586.38 | 11,597.77 | 11,529.46 | 11,554.51 |
| 40%              | 11,670.64 | 11,682.13 | 11,616.66 | 11,643.08 | 11,660.31 | 11,676.39 | 11,690.17 | 11,701.65 | 11,632.74 | 11,658.01 |
| 40%              | 11,778.45 | 11,790.04 | 11,723.97 | 11,750.63 | 11,768.02 | 11,784.25 | 11,798.16 | 11,809.75 | 11,740.20 | 11,765.70 |

### SCHEDULE 3 SAMPLE CALCULATIONS

#### Agreed Values

|                                                 |               |             |
|-------------------------------------------------|---------------|-------------|
| Contract Capacity (CC)                          | kW            | 225,000     |
| Annual Capacity Fee (ACF)                       | USD/kW-year   | 14,913.2468 |
| Annual Fixed O&M Fee (AFOM <sub>USD</sub> )     | USD/kW-year   | 19.2828     |
| Annual Fixed O&M Fee (AFOM <sub>PHP,ESC</sub> ) | PHP/kW-year   | 1,870.1836  |
| Variable O&M Fee (VOM)                          | PHP/kWh       | 0.1572      |
| Interconnection Facilities Capacity Fee         | PHP/kW-year   | 403.4155    |
| Interconnection Facilities FOM Fee              | PHP/kW-year   | 174.6456    |
| Scheduled Outage Allowance (SOA)                | Days          | 30.00       |
| Forced Outage Allowance (FOA)                   | Days          | 15.00       |
| Base US CPI (USCPI <sub>0</sub> )               | (1982-84=100) | 236.525     |
| Base Philippine CPI (PCPI <sub>0</sub> )        | (2006=100)    | 142.600     |

#### Assumed Values

|                                            |               |               |
|--------------------------------------------|---------------|---------------|
| Contract Year                              |               | 2019          |
| Days in the Contract Year                  |               | 365           |
| Billing Period Days                        | Days          | 31            |
| ΣBCQ                                       | kWh           | 133,920,000   |
| Heat Rate (HR) @ 80%LF                     | BTU/kWh       | 9,652.62      |
| Scheduled Outage Taken (SOT <sub>M</sub> ) | Days          | 0.00          |
| Forced Outage Taken (FOT <sub>M</sub> )    | Days          | 5.00          |
| USCPI <sub>i</sub>                         | (1982-84=100) | 236.916       |
| PCPI <sub>i</sub>                          | (2006=100)    | 142.900       |
| Coal Price - Newcastle Index               | USD/MT        | 50.38         |
| Forex rate                                 | PHP/USD       | 46.3550       |
| Real Property Tax Payment (RPTP)           | PHP           | 20,000,000.00 |
| Lease Fee (LF)                             | PHP           | 0.00          |
| Supplemental Payments (SP)                 | PHP           | 10,000,000.00 |
| Replacement Power (RP)                     | PHP           | 0.00          |

#### Component A - MONTHLY CAPACITY PAYMENT

$$MCP_{PHP} = DCP * CC * EDA_M$$

1. Calculation of Capacity Fees for each Full Load Equivalent Day Available

$$\begin{aligned} TEDA &= \text{Days in the Contract Year} - SOA - FOA \\ &= 365 - 30 - 15 \end{aligned}$$



$$= 320$$

$$\begin{aligned} \text{DCP} &= \text{CYF} * \text{ACF} / \text{TEDA} \\ &= 1 * 14,913.2468 / 320 \\ &= 46.603896 \end{aligned}$$

$$\begin{aligned} \text{2. Contract Capacity (kW)} \\ &= 225,000 \end{aligned}$$

3. Calculation of Full Load Equivalent Days Availability ( $\text{EDA}_M$ ) - Refer to Appendix E

$$\begin{aligned} \text{EDA}_M &= 26 \\ \text{MCP}_{\text{PHP}} &= \text{DCP} * \text{CC} * \text{EDA}_M \\ &= 46.603896 * 225,000 * 26 \\ &= \text{PHP } 272,632,793.06 \end{aligned}$$

### **Component B - MONTHLY FIXED O&M PAYMENT**

$$\text{MFOM} = \text{MFOM}_{\text{USD}} + \text{MFOM}_{\text{PHP,ESC}}$$

1. Calculation of FOM payment - US denominated portion

$$\begin{aligned} \text{DFOM}_{\text{USD}} &= \text{CYF} * \text{AFOM}_{\text{USD}} / \text{TEDA} \\ &= 1 * 19.2828 / 320 \\ &= 0.0603 \\ \text{MFOM}_{\text{USD}} &= \text{DFOM}_{\text{USD}} * \text{USCPI}_i / \text{USCPI}_o * \text{CC} * \text{EDA}_M * \text{FX} \\ &= 0.0603 * (236.916 / 236.525) * 225,000 * 26 * 46.36 \\ &= 16,367,784.9503 \end{aligned}$$

2. Calculation of FOM payment - PH denominated portion, escalating

$$\begin{aligned} \text{DFOM}_{\text{PHP,ESC}} &= \text{CYF} * \text{AFOM}_{\text{PHP,ESC}} / \text{TEDA} \\ &= 1 * 1,870.1836 / 320 \\ &= 5.8443 \\ \text{MFOM}_{\text{PHP,ESC}} &= \text{DFOM}_{\text{PHP,ESC}} * (\text{PCPI}_i / \text{PCPI}_o) * \text{CC} * \text{EDA}_M \\ &= 5.8443 * (142.90 / 142.60) * 225,000 * 26 \\ &= 34,261,220.9233 \\ \text{MFOM} &= \text{MFOM}_{\text{USD}} + \text{MFOM}_{\text{PHP,ESC}} \\ &= 16,367,784.95 + 34,261,220.92 \\ &= \text{PHP } 50,629,005.87 \end{aligned}$$

**Component C - MONTHLY FUEL PAYMENT**

**MFP = ΣFP<sub>h</sub>**

**FP<sub>h</sub> = ( MFCC + MFFC ) \* ( BCQ<sub>h</sub> \* GNP<sub>HR<sub>h</sub></sub> / 1,000,000) \* FX**

**1. Calculation of MFCC and MFTC**

**MFCC = Coal Price \* 0.04**  
**= 50.38 \* 0.04**  
**= 2.0152 USD/MMBTU**

**MFFC = Freight Price**  
**= 0.48 USD/MMBTU**

**MFP = ( MFCC + MFFC ) \* (ΣBCQ \* GNP<sub>HR</sub> / 1,000,000) \* FX**

**Typical Daily Calculation**

| <b>Hr</b>    | <b>MFCC + MFFC<br/>(USD/MMBTU)</b> | <b>BCQ<sub>h</sub><br/>(kWh)</b> | <b>Load Factor<br/>(%)</b> | <b>GNP<sub>HR<sub>h</sub></sub><br/>(MMBTU/kWh)</b> | <b>FX</b> | <b>FP<sub>h</sub><br/>(PHP)</b> |
|--------------|------------------------------------|----------------------------------|----------------------------|-----------------------------------------------------|-----------|---------------------------------|
| 1            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 2            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 3            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 4            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 5            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 6            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 7            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 8            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 9            | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 10           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 11           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 12           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 13           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 14           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 15           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 16           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 17           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 18           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 19           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 20           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 21           | 2.5960                             | 225,000                          | 100%                       | 9,388.01                                            | 46.36     | 254,185.42                      |
| 22           | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 23           | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| 24           | 2.5960                             | 148,500                          | 66%                        | 9,933.77                                            | 46.36     | 177,515.03                      |
| <b>TOTAL</b> |                                    | <b>4,482,000</b>                 |                            |                                                     |           | <b>5,180,405.48</b>             |

**= ΣFP<sub>h</sub>**  
**= 5,180,405.48 \* 31**

$$= \text{PHP } 160,592,569.88$$

#### **Component D - MONTHLY VARIABLE O&M PAYMENT**

$$\text{MVOM} = \text{VOM} * \text{PCPI}_i / \text{PCPI}_o * \Sigma \text{BCQ}$$

1. Calculation of Monthly VOM Payments

$$\begin{aligned} \text{MVOM} &= \text{VOM} * \text{PCPI}_i / \text{PCPI}_o * \Sigma \text{BCQ} \\ &= 0.1572 * (142.90 / 142.60) * 133,920,000 \\ &= \text{PHP } 21,096,513.39 \end{aligned}$$

#### **Component E - MONTHLY INTERCONNECTION FACILITIES PAYMENT**

$$\text{MIFP} = \text{MIFCP} + \text{MIFFOMP}$$

$$\begin{aligned} \text{MIFCP} &= (\text{CYF} * \text{IFPCP} / \text{TEDA}) * \text{CC} * \text{EDA}_M \\ &= 1 * (403.4155 / 320) * 225,000 * 26 \\ &= 7,374,939.61 \end{aligned}$$

$$\begin{aligned} \text{MIFFOMP} &= (\text{CYF} * \text{IFFOM} / \text{TEDA}) * (\text{PCPI}_i / \text{PCPI}_o) * \text{CC} * \text{EDA}_M \\ &= 1 * (174.6456 / 320) * (142.90 / 142.60) * 225,000 * 26 \\ &= 3,199,456.72 \end{aligned}$$

$$\begin{aligned} \text{MIFP} &= \text{MIFCP} + \text{MIFFOMP} \\ &= 7,374,939.61 + 3,199,456.72 \\ &= \text{PHP } 10,574,396.33 \end{aligned}$$

#### **Component F - MONTHLY REIMBURSIBLE COST PAYMENT**

$$\begin{aligned} \text{RCP} &= \text{RPTP} + \text{LF} + \text{SP} + \text{RP} \\ &= 20,000,000.00 + 0.00 + 0.00 + 10,000,000.00 + 0.00 \\ &= \text{PHP } 30,000,000.00 \end{aligned}$$

**Total Monthly Payment**

$$\begin{aligned} &= \text{Component A} + \text{Component B} + \text{Component C} + \text{Component D} + \text{Component E} + \\ &\quad \text{Component F} \\ &= 272,632,793.06 + 50,629,005.87 + 160,592,569.88 + 21,096,513.39 + 10,574,396.33 + \\ &\quad 30,000,000.00 \\ &= \text{PHP } 545,525,278.53 \end{aligned}$$

**SCHEDULE 4**  
**SAMPLE CALCULATIONS OF TEDA AND EDAM**

**A. Calculation of TEDA**

**Agreed Values**

|                                             |      |    |      |
|---------------------------------------------|------|----|------|
| Base Annual Scheduled Outage Allowance Days | BSOA | 30 | Days |
| Base Annual Forced Outage Allowance Days    | BFOA | 15 | Days |

**Assumed Values**

|               |                      |  |  |
|---------------|----------------------|--|--|
| Contract Year | 20YY (non-leap year) |  |  |
|---------------|----------------------|--|--|

**CASE 1: Operations Effective Date at December 26, 20YY-1**

**Other Assumed Values**

|                                  |     |     |      |
|----------------------------------|-----|-----|------|
| Contract Year Days for Year 20YY | CYD | 365 | Days |
|----------------------------------|-----|-----|------|

1. Calculation of TEDA

$$\begin{aligned} \text{TEDA} &= (\text{CYF} * 365) - \text{SOA} - \text{FOA} \\ &= (1.00 * 365) - 30.00 - 15.00 \\ &= \mathbf{320.00 \text{ Days}} \end{aligned}$$

Where:

$$\begin{aligned} \text{CYF} &= \text{CYD} / 365 \\ &= 365 / 365 = 1.00 \\ \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 1.00 * 30 \\ &= 30.00 \text{ Days} \\ \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 1.00 * 15 \\ &= 15.00 \text{ Days} \end{aligned}$$

**CASE 2: Operations Effective Date at May 26, 20YY**

**Other Assumed Values**

|                                     |                      |     |      |
|-------------------------------------|----------------------|-----|------|
| Contract Year Days for Year 20YY    | CYD <sub>FIRST</sub> | 214 | Days |
| Contract Year Days for Year 20YY+20 | CYD <sub>LAST</sub>  | 151 | Days |

**First Contract Year (May 26, 20YY to December 25, 20YY)**

1. Calculation of TEDA

$$\begin{aligned} \text{TEDA} &= (\text{CYF} * 365) - \text{SOA} - \text{FOA} \\ &= (0.59 * 365) - 17.59 - 8.79 \\ &= \mathbf{187.62 \text{ Days}} \end{aligned}$$



Where:

$$\begin{aligned} \text{CYF} &= \text{CYD}_{\text{FIRST}} / 365 \\ &= 214 / 365 = 0.59 \end{aligned}$$

$$\begin{aligned} \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 0.59 * 30 \\ &= 17.59 \text{ Days} \end{aligned}$$

$$\begin{aligned} \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 0.59 * 15 \\ &= 8.79 \text{ Days} \end{aligned}$$

**Last Contract Year (December 26, 20YY+19 to May 25, 20YY+20)**

1. Calculation of TEDA

$$\begin{aligned} \text{TEDA} &= (\text{CYF} * 365) - \text{SOA} - \text{FOA} \\ &= (0.41 * 365) - 12.41 - 6.21 \\ &= 132.38 \text{ Days} \end{aligned}$$

Where:

$$\begin{aligned} \text{CYF} &= \text{CYD}_{\text{LAST}} / 365 \\ &= 151 / 365 = 0.41 \end{aligned}$$

$$\begin{aligned} \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 0.41 * 30 \\ &= 12.41 \text{ Days} \end{aligned}$$

$$\begin{aligned} \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 0.41 * 15 \\ &= 6.21 \text{ Days} \end{aligned}$$

**B. Calculation of EDA<sub>M</sub>**

Assumed Values

| Contract Year                       | 20YY                           |        |      |
|-------------------------------------|--------------------------------|--------|------|
| Contract Year Days                  | CYD                            | 365.00 | Days |
| Operations Effective Date           | December 26, 20YY-1            |        |      |
| Billing Period                      | June 26, 20YY to July 25, 20YY |        |      |
| Contract Year Factor                | CYF                            | 1.00   |      |
| Target Equivalent Days Availability | TEDA                           | 320.00 | Days |
| Billing Period Days                 | BPD                            | 30.00  | Days |
| Scheduled Outage Allowance Days     | SOA                            | 30.00  | Days |
| Forced Outage Allowance Days        | FOA                            | 15.00  | Days |

CASE 1: NO OUTAGE

Other Assumed Values

Previous Months

|                     | EDAM      | SOTM | FOTM | FMTM |
|---------------------|-----------|------|------|------|
| January             | 31        | 0    | 0    | 0    |
| February            | 31        | 0    | 0    | 0    |
| March               | 28        | 0    | 0    | 0    |
| April               | 31        | 0    | 0    | 0    |
| May                 | 30        | 0    | 0    | 0    |
| June                | 31        | 0    | 0    | 0    |
| Current Month: July |           | 0    | 0    | 0    |
| TOTAL               | EDAA(M-1) | SOTA | FOTA | FMTA |
|                     | 182       | 0    | 0    | 0    |

EDAM = GEDAM + AADE – AADU

1. Calculation of GEDAM

GEDAM = BPD – SOTM – FOTM – FMTM  
= 30 – 0 – 0 – 0  
= 30.00 Days

2. Calculation of AADE

AADE = SOEM + FOEM  
= 0.00 + 0.00  
= 0.00 Days

SOEM = Maximum [Minimum (SOTA – SOA, SOTM), 0]  
= Maximum [Minimum (0 – 30, 0), 0]  
= Maximum [Minimum (-30, 0), 0]  
= 0.00 Days

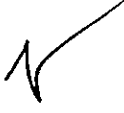
FOEM = Maximum [Minimum (FOTA – FOA, FOTM), 0]  
= Maximum [Minimum (0 – 15, 0), 0]  
= Maximum [Minimum (-15, 0), 0]  
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAA(M-1) + GEDAM) – (TEDA – FMTA), 0]  
= Maximum [(182 + 30) – (320 – 0), 0]  
= Maximum [-108, 0]  
= 0.00 Days

EDAM = GEDAM + AADE – AADU

= 30 + 0 – 0  
= 30.00 Days



CASE 2: OUTAGES WITHIN THE ALLOWANCE

Other Assumed Values

| Previous Months     | EDAM   | SOTM | FOTM | FMTM |
|---------------------|--------|------|------|------|
| January             | 31     | 0    | 0    | 0    |
| February            | 31     | 0    | 0    | 0    |
| March               | 28     | 0    | 0    | 0    |
| April               | 31     | 0    | 0    | 0    |
| May                 | 30     | 0    | 0    | 0    |
| June                | 31     | 0    | 0    | 0    |
| Current Month: July |        | 5    | 3    | 0    |
| TOTAL               | EDAM-1 | SOTA | FOTA | FMTA |
|                     | 182    | 5    | 3    | 0    |

EDAM = GEDAM + AADE - AADU

1. Calculation of GEDAM

GEDAM = BPD - SOTM - FOTM - FMTM  
= 30 - 5 - 3 - 0  
= 22.00 Days

2. Calculation of AADE

AADE = SOEM + FOEM  
= 0.00 + 0.00  
= 0.00 Days

SOEM = Maximum [Minimum (SOTA - SOA, SOTM), 0]  
= Maximum [Minimum (5 - 30, 5), 0]  
= Maximum [Minimum (-25, 5), 0]  
= 0.00 Days

FOEM = Maximum [Minimum (FOTA - FOA, FOTM), 0]  
= Maximum [Minimum (3 - 15, 3), 0]  
= Maximum [Minimum (-12, 3), 0]  
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAM-1 + GEDAM) - (TEDA - FMTA), 0]  
= Maximum [(182 + 22) - (320 - 0), 0]  
= Maximum [-116, 0]  
= 0.00 Days

EDAM = GEDAM + AADE - AADU

= 22 + 0 - 0  
= 22.00 Days

N

CASE 3: OUTAGES BEYOND THE ALLOWANCE

Other Assumed Values

Previous Months

|                     | EDA <sub>M</sub>      | SOT <sub>M</sub> | FOT <sub>M</sub> | FMT <sub>M</sub> |
|---------------------|-----------------------|------------------|------------------|------------------|
| January             | 21                    | 10               | 0                | 0                |
| February            | 31                    | 0                | 0                | 0                |
| March               | 28                    | 0                | 0                | 0                |
| April               | 26                    | 0                | 5                | 0                |
| May                 | 25                    | 0                | 5                | 0                |
| June                | 26                    | 5                | 0                | 0                |
| Current Month: July |                       | 5                | 3                | 0                |
| TOTAL               | EDA <sub>A(M-1)</sub> | SOT <sub>A</sub> | FOT <sub>A</sub> | FMT <sub>A</sub> |
|                     | 157                   | 20               | 13               | 0                |

EDA<sub>M</sub> = GEDA<sub>M</sub> + AADE – AADU

1. Calculation of GEDA<sub>M</sub>

GEDA<sub>M</sub> = BPD – SOT<sub>M</sub> – FOT<sub>M</sub> – FMT<sub>M</sub>  
= 30 – 5 – 3 – 0  
= 22.00 Days

2. Calculation of AADE

AADE = SOE<sub>M</sub> + FOE<sub>M</sub>  
= 0.00 + 0.00  
= 0.00 Days

SOE<sub>M</sub> = Maximum [Minimum (SOT<sub>A</sub> – SOA, SOT<sub>M</sub>), 0]  
= Maximum [Minimum (20 – 30, 5), 0]  
= Maximum [Minimum (-10, 5), 0]  
= 0.00 Days

FOE<sub>M</sub> = Maximum [Minimum (FOT<sub>A</sub> – FOA, FOT<sub>M</sub>), 0]  
= Maximum [Minimum (13 – 15, 3), 0]  
= Maximum [Minimum (-2, 3), 0]  
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDA<sub>A(M-1)</sub> + GEDA<sub>M</sub>) – (TEDA – FMT<sub>A</sub>), 0]  
= Maximum [(157 + 22) – (320 – 0), 0]  
= Maximum [-141, 0]  
= 0.00 Days

EDA<sub>M</sub> = GEDA<sub>M</sub> + AADE – AADU

= 22 + 0 – 0  
= 22.00 Days





CASE 4: OUTAGES DUE TO FORCE MAJEURE

Other Assumed Values

| Previous Months     | EDAM    | SOTM | FOTM | FMTM |
|---------------------|---------|------|------|------|
| January             | 31      | 0    | 0    | 0    |
| February            | 31      | 0    | 0    | 0    |
| March               | 28      | 0    | 0    | 0    |
| April               | 31      | 0    | 0    | 0    |
| May                 | 30      | 0    | 0    | 0    |
| June                | 31      | 0    | 0    | 0    |
| Current Month: July |         | 0    | 0    | 5    |
| TOTAL               | EDAM(I) | SOTA | FOTA | FMTA |
|                     | 182     | 0    | 0    | 5    |

EDAM = GEDAM + AADE – AADU

1. Calculation of GEDAM

GEDAM = BPD – SOTM – FOTM – FMTM  
= 30 – 0 – 0 – 5  
= 25.00 Days

2. Calculation of AADE

AADE = SOEM + FOEM  
= 0.00 + 0.00  
= 0.00 Days

SOEM = Maximum [Minimum (SOTA – SOA, SOTM), 0]  
= Maximum [Minimum (0 – 30, 0), 0]  
= Maximum [Minimum (-30, 0), 0]  
= 0.00 Days

FOEM = Maximum [Minimum (FOTA – FOA, FOTM), 0]  
= Maximum [Minimum (0 – 15, 0), 0]  
= Maximum [Minimum (-15, 0), 0]  
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAM(I) + GEDAM) – (TEDA – FMTA), 0]  
= Maximum [(182 + 25) – (320 – 5), 0]  
= Maximum [-108, 0]  
= 0.00 Days

EDAM = GEDAM + AADE – AADU

= 25 + 0 – 0  
= 25.00 Days

**CASE 5: UNUTILIZED OUTAGES ALLOWANCE TOWARDS THE END OF CONTRACT YEAR**

**Other Assumed Values**

| Previous Months                | EDAM             | SOTM        | FOTM        | FMTM        |
|--------------------------------|------------------|-------------|-------------|-------------|
| January                        | 21               | 10          | 0           | 0           |
| February                       | 31               | 0           | 0           | 0           |
| March                          | 23               | 0           | 5           | 0           |
| April                          | 29               | 0           | 2           | 0           |
| May                            | 30               | 0           | 0           | 0           |
| June                           | 31               | 0           | 0           | 0           |
| July                           | 30               | 0           | 0           | 0           |
| August                         | 31               | 0           | 0           | 0           |
| September                      | 31               | 0           | 0           | 0           |
| October                        | 30               | 0           | 0           | 0           |
| November                       | 31               | 0           | 0           | 0           |
| <b>Current Month: December</b> |                  | <b>0</b>    | <b>0</b>    | <b>0</b>    |
| <b>TOTAL</b>                   | <b>EDAA(M-1)</b> | <b>SOTA</b> | <b>FOTA</b> | <b>FMTA</b> |
|                                | <b>318</b>       | <b>10</b>   | <b>7</b>    | <b>0</b>    |

**EDAM = GEDAM + AADE – AADU**

1. Calculation of GEDAM
$$\begin{aligned}
 \text{GEDAM} &= \text{BPD} - \text{SOTM} - \text{FOTM} - \text{FMTM} \\
 &= 30 - 0 - 0 - 0 \\
 &= 30.00 \text{ Days}
 \end{aligned}$$

2. Calculation of AADE
$$\begin{aligned}
 \text{AADE} &= \text{SOEM} + \text{FOEM} \\
 &= 0.00 + 0.00 \\
 &= 0.00 \text{ Days}
 \end{aligned}$$

$$\begin{aligned}
 \text{SOEM} &= \text{Maximum} [\text{Minimum} (\text{SOTA} - \text{SOA}, \text{SOTM}), 0] \\
 &= \text{Maximum} [\text{Minimum} (10 - 30, 0), 0] \\
 &= \text{Maximum} [\text{Minimum} (-20, 0), 0] \\
 &= 0.00 \text{ Days}
 \end{aligned}$$

$$\begin{aligned}
 \text{FOEM} &= \text{Maximum} [\text{Minimum} (\text{FOTA} - \text{FOA}, \text{FOTM}), 0] \\
 &= \text{Maximum} [\text{Minimum} (7 - 15, 0), 0] \\
 &= \text{Maximum} [\text{Minimum} (-8, 0), 0] \\
 &= 0.00 \text{ Days}
 \end{aligned}$$

3. Calculation of AADU

$$\begin{aligned} \text{AADU} &= \text{Maximum} [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A), 0] \\ &= \text{Maximum} [(318 + 30) - (320 - 0), 0] \\ &= \text{Maximum} [28, 0] \\ &= 28.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} EDA_M &= GEDA_M + AAE - AADU \\ &= 30 + 0 - 28 \\ &= 2.00 \text{ Days} \end{aligned}$$

## SCHEDULE 5 CALCULATION OF FULL LOAD EQUIVALENT OUTAGE DAYS

### 1. Full Load Equivalent Scheduled Outages Days Taken

The Full Load Equivalent Scheduled Outages Days (SOT) Taken for each Billing Period shall be calculated based on the following formula:

$$SOT = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CSO_{ij})}{(CC * Int)} \quad CSO = CC - ACSO$$

Where:

SOT = Full Load Equivalent Scheduled Outages Days Taken

CSO = capacity on Scheduled Outage

CC = as provided in Appendix E

ACSO = Available Capacity resulting from Scheduled Outage as declared in the Day-ahead Capacity Availability of the Power Supplier

Int = number of trading intervals per Day in accordance with the WESM Rules

BPD = as previously defined

### 2. Full Load Equivalent Forced Outages Days Taken

The Full Load Equivalent Forced Outages Days (FOT) Taken for each Billing Period shall be calculated based on the following formula:

$$FOT = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CFO_{ij})}{(CC * Int)} \quad CFO = CC - ACFO$$

Where:

FOT = Full Load Equivalent Forced Outages Days Taken

CFO = capacity on Forced Outage

CC = as provided in Appendix E

ACFO = Available Capacity resulting from Forced Outage as declared in the Day-ahead Capacity Availability of the Power Supplier

Int = as previously defined

BPD = as previously defined

### 3. Full Load Equivalent Force Majeure Days Taken

The Full Load Equivalent Force Majeure Days (FMT) Taken for each Billing Period shall be calculated based on the following formula:

$$FMT = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CFM_{ij})}{(CC * Int)} \quad CFM = CC - ACFM$$

Where:

FMT = Full Load Equivalent Force Majeure Days Taken

CFM = capacity on Force Majeure

CC = as provided in Appendix E

ACFM = Available Capacity resulting from Force Majeure

Int = as previously defined

BPD = as previously defined

**SCHEDULE 6**  
**SAMPLE CALCULATION OF NON-FIRM ENERGY**

**Agreed Values**

|                                                 |               |             |
|-------------------------------------------------|---------------|-------------|
| Annual Capacity Fee (ACF)                       | USD/kW-year   | 14,913.2468 |
| Annual Fixed O&M Fee (AFOM <sub>USD</sub> )     | USD/kW-year   | 19.2828     |
| Annual Fixed O&M Fee (AFOM <sub>PHP,ESC</sub> ) | PHP/kW-year   | 1,870.1836  |
| Variable O&M Fee (VOM)                          | PHP/kWh       | 0.1572      |
| Base US CPI (USCPI <sub>o</sub> )               | (1982-84=100) | 236.525     |
| Base Philippine CPI (PCPI <sub>o</sub> )        | (2006=100)    | 142.600     |

**Assumed Values**

|                              |               |            |
|------------------------------|---------------|------------|
| Calendar Year                | days          | 8760       |
| USCPI <sub>i</sub>           | (1982-84=100) | 236.916    |
| PCPI <sub>i</sub>            | (2006=100)    | 142.900    |
| Coal Price - Newcastle Index | USD/MT        | 50.38      |
| Supplemental Payment (SP)    | PHP           | 30,000,000 |
| Forex rate                   | PHP/USD       | 46.3550    |
| Heat Rate (HR) @ 80%LF       | BTU/kWh       | 9,652.62   |

$$\begin{aligned} \text{NEP}_{\text{HCF}} &= \text{ACF} / \text{Calendar Year} \\ &= 14,913.2468 / 8,760.0000 \\ &= 1.7024 \end{aligned}$$

$$\begin{aligned} \text{NEP}_{\text{FOM}} &= ((\text{AFOM}_{\text{USD}} * \text{USCPI}_i / \text{USCPI}_o * \text{FX}) + (\text{AFOM}_{\text{PHP,ESC}} * \text{PCPI}_i / \text{PCPI}_o)) / \\ &\quad \text{Calendar Year} \\ &= ((19.2828 * (236.9160 / 236.5250) * 46.3550) + (1,870.1836 * (142.900 / 142.600))) / \\ &\quad 8,760. \\ &= 0.3161 \end{aligned}$$

$$\begin{aligned} \text{NEP}_{\text{FUEL}} &= (\text{MFCC} + \text{MFFC}) * (\text{GNPHR} / 1,000,000) * \text{FX} \\ \text{MFFC} &= \text{Coal Price} * 0.04 \\ &= 50.38 * 0.04 \\ &= 2.0152 \text{ USD/MMBTU} \end{aligned}$$

$$\begin{aligned} \text{MFFC} &= \text{Freight Price} \\ &= 0.48 \text{ USD/MMBTU} \end{aligned}$$

$$\begin{aligned} \text{MFP} &= (\text{MFCC} + \text{MFFC}) * (\text{GNPHR} / 1,000,000) * \text{FX} \\ &= 0.48 \text{ USD/MMBTU} \end{aligned}$$

$$\begin{aligned} \text{NEP}_{\text{VOM}} &= \text{VOM} * (\text{PCPI}_i / \text{PCPI}_o) \\ &= 0.1572 * (142.9000 / 142.6000) \\ &= 0.1569 \end{aligned}$$

| Hr | NEOh<br>(kWh) | NEP <sub>HCF</sub><br>(PHP) | NEP <sub>FOM</sub><br>(PHP) | NEP <sub>FUEL</sub><br>(PHP) | NEP <sub>VOM</sub><br>(PHP) | NEP<br>(PHP)   |
|----|---------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|----------------|
| 1  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 2  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 3  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 4  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 5  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 6  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 7  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 8  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 9  | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 10 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 11 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 12 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 13 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 14 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 15 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 16 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 17 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 18 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 19 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 20 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 21 | 140,005,710   | 1.7024                      | 0.3161                      | 1.0859                       | 0.1569                      | 456,601,574.37 |
| 22 | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 23 | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |
| 24 | 148,144,764   | 1.7024                      | 0.3161                      | 1.1490                       | 0.1569                      | 492,497,211.96 |

N

**Appendix F**  
**LIST OF ACCEPTABLE BANKS**

**A. International Banks**

1. The Hongkong and Shanghai Banking Corporation Ltd. (Manila Branch)
2. Australia and New Zealand Banking Group Ltd. (Manila Branch)
3. Citibank N.A. (Manila Branch)
4. Mizuho Corporate Bank, Ltd. (Manila Branch)
5. ING Bank N.V. (Manila Branch)
6. Bank of Tokyo Mitsubishi UFJ, Ltd. (Manila Branch)
7. Standard Chartered Bank Philippines (Manila Branch)
8. Deutsche Bank A.G. (Manila Branch)
9. Maybank Philippines Inc. (Manila Branch)
10. JP Morgan Chase Bank N.A. (Manila Branch)
11. Bank of America, N.A. (Manila Branch)

**B. Domestic Banks**

1. BDO Unibank Inc.
2. Bank of the Philippine Island
3. Metropolitan Bank and Trust Company
4. Rizal Commercial Banking Corporation
5. Philippine National Bank
6. China Banking Corporation
7. Security Bank Corporation



**Appendix G**  
**SAMPLE CALCULATION (Agreed Damages)**

Sample Calculation (Buy Out)

**Given**

| Amounts in PHP, Millions | 31-Dec-13 | 31-Dec-14 | 31-Dec-15 | 31-Dec-16 | 31-Dec-17 | 31-Dec-18 | 31-Dec-19 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| COD                      | 01-Jan-18 |           |           |           |           |           |           |
| Equity Investment        | 1,000     | 2,000     | 3,000     | 4,000     | 5,000     |           |           |
| Distributions Received   |           |           |           |           |           | 1,500     | 2,500     |
| Agreed Return            | 15.00%    |           |           |           |           |           |           |

**Scenario 1 - Meralco Buyout = 01-Jan-18**

|                              |           | Days Outstanding              |       | Formula                              |        |
|------------------------------|-----------|-------------------------------|-------|--------------------------------------|--------|
| Buyout of Equity Invested on | 31-Dec-13 | Days 31-Dec-13 to 01-Jan-18 = | 1,462 | $\{1,000 * (1-15\%)^{(1,462/365)}\}$ | 1,750  |
| Buyout of Equity Invested on | 31-Dec-14 | Days 31-Dec-14 to 01-Jan-18 = | 1,097 | $\{2,000 * (1-15\%)^{(1,097/365)}\}$ | 3,044  |
| Buyout of Equity Invested on | 31-Dec-15 | Days 31-Dec-15 to 01-Jan-18 = | 732   | $\{3,000 * (1-15\%)^{(732/365)}\}$   | 3,971  |
| Buyout of Equity Invested on | 31-Dec-16 | Days 31-Dec-16 to 01-Jan-18 = | 366   | $\{4,000 * (1-15\%)^{(366/365)}\}$   | 4,602  |
| Buyout of Equity Invested on | 31-Dec-17 | Days 31-Dec-17 to 01-Jan-18 = | 1     | $\{5,000 * (1-15\%)^{(1/365)}\}$     | 5,002  |
| Total Equity Buyout          |           |                               |       |                                      | 18,369 |

**Scenario 2 - Meralco Buyout = 31-Dec-18**

|                               |           | Days Outstanding              |       | Formula                              |         |
|-------------------------------|-----------|-------------------------------|-------|--------------------------------------|---------|
| Buyout of Equity Invested on  | 31-Dec-13 | Days 31-Dec-13 to 31-Dec-18 = | 1,826 | $\{1,000 * (1-15\%)^{(1,826/365)}\}$ | 2,012   |
| Buyout of Equity Invested on  | 31-Dec-14 | Days 31-Dec-14 to 31-Dec-18 = | 1,461 | $\{2,000 * (1-15\%)^{(1,461/365)}\}$ | 3,499   |
| Buyout of Equity Invested on  | 31-Dec-15 | Days 31-Dec-15 to 31-Dec-18 = | 1,095 | $\{3,000 * (1-15\%)^{(1,095/365)}\}$ | 4,564   |
| Buyout of Equity Invested on  | 31-Dec-16 | Days 31-Dec-16 to 31-Dec-18 = | 730   | $\{4,000 * (1-15\%)^{(730/365)}\}$   | 5,290   |
| Buyout of Equity Invested on  | 31-Dec-17 | Days 31-Dec-17 to 31-Dec-18 = | 365   | $\{5,000 * (1-15\%)^{(365/365)}\}$   | 5,750   |
| Net: Distribution Received on | 31-Dec-18 |                               |       |                                      | (1,500) |
| Total Equity Buyout           |           |                               |       |                                      | 19,616  |

**Scenario 3 - Meralco Buyout = 31-Dec-19**

|                               |           | Days Outstanding              | Formula |                                      |         |
|-------------------------------|-----------|-------------------------------|---------|--------------------------------------|---------|
| Buyout of Equity Invested on  | 31-Dec-13 | Days 31-Dec-13 to 31-Dec-19 = | 2,191   | $\{1,000 * (1-15\%)^{(2,191/365)}\}$ | 2,314   |
| Buyout of Equity Invested on  | 31-Dec-14 | Days 31-Dec-14 to 31-Dec-19 = | 1,826   | $\{2,000 * (1-15\%)^{(1,826/365)}\}$ | 4,024   |
| Buyout of Equity Invested on  | 31-Dec-15 | Days 31-Dec-15 to 31-Dec-19 = | 1,461   | $\{3,000 * (1-15\%)^{(1,461/365)}\}$ | 5,249   |
| Buyout of Equity Invested on  | 31-Dec-16 | Days 31-Dec-16 to 31-Dec-19 = | 1,095   | $\{4,000 * (1-15\%)^{(1,095/365)}\}$ | 6,084   |
| Buyout of Equity Invested on  | 31-Dec-17 | Days 31-Dec-17 to 31-Dec-19 = | 730     | $\{5,000 * (1-15\%)^{(730/365)}\}$   | 6,613   |
| Net: Distribution Received on | 31-Dec-18 |                               |         |                                      | (1,500) |
| Net: Distribution Received on | 31-Dec-19 |                               |         |                                      | (2,500) |
| Total Equity Buyout           |           |                               |         |                                      | 20,283  |

Note: All figures used are for illustration purpose only.



Sample Calculation (Buy Back)

|                            |           |           |           |
|----------------------------|-----------|-----------|-----------|
|                            | 31-Dec-20 | 31-Dec-21 | 30-Jun-22 |
| Payment of Equity Interest | 500.00    |           |           |
| Equity Infusion            | 10,000.00 | 15,000.00 |           |
| Distribution Received      |           |           | 2,500.00  |

|                            |               |                                           |                                |           |
|----------------------------|---------------|-------------------------------------------|--------------------------------|-----------|
| Buyback Date:              | 31-Jan-23     |                                           |                                |           |
|                            | Cashflow Date | Days Outstanding                          | Formula                        | Amount    |
| Payment of Equity Interest | 31-Dec-20     | = December 31, 2020 to Jan 31, 2023 = 761 | = (500) * (1+12%)^(761/365)    | 633.27    |
| Equity Infusion 1          | 31-Dec-20     | = December 31, 2020 to Jan 31, 2023 = 761 | = (10,000) * (1+12%)^(761/365) | 12,665.32 |
| Equity Infusion 2          | 31-Dec-21     | = December 31, 2020 to Jan 31, 2023 = 396 | = (10,000) * (1+12%)^(396/365) | 16,962.48 |
| Distribution Received      | 30-Jun-22     | = June 30, 2022 to Jan 31, 2023 = 215     | = (-2,500) * (1+12%)^(215/365) | -2,672.58 |
| Buyback Price:             |               |                                           |                                | 27,588.49 |

Note: All figures used are for illustration purpose only.

**Appendix H**  
**OPERATING PROCEDURES**

**1. DEFINITIONS**

All capitalized terms used herein shall have the meanings given to them in Article 1 of this Agreement, except as otherwise defined herein.

**Daily BCQ Nomination** means the BCQ referred to in Section 6.4 of this Agreement.

**Trading Office** means in the case of Power Supplier, the department responsible for coordinating the scheduling of Plant dispatch with Meralco's nomination, and in the case of Meralco, the department responsible for coordinating the scheduling of its contractual nomination with Power Supplier.

**Weekly BCQ Nomination** has the meaning given to it in Section 4.2 below.

**WEP** means the WESM Ex-Ante Price at RPE Trading Node.

**2. GENERAL**

The purpose of this Appendix is to prescribe the procedures for coordinating (a) the nomination and WESM declaration of BCQs, and (b) Scheduled Outages. Nothing in this Agreement (including in this Appendix) shall be construed, by virtue of the absence of a specific reference, as relieving either Party of the responsibility for communicating with the other Party in a manner that will allow both Parties to operate their respective facilities in a safe manner consistent with Dispatch Instructions, Prudent Operating Practices and Relevant Operating Regulations.

**3. COORDINATING COMMITTEE**

**3.1 Establishment of the Coordinating Committee**

3.1.1 No later than fifteen (15) Days after Commissioning of the Plant, the Parties shall establish the Coordinating Committee as contemplated by this Agreement. During the time prior to the Commercial Operations Date the Coordinating Committee shall work towards putting into place the scheduling arrangements so that the nominations and other matters handled by the Coordinating Committee can proceed seamlessly on and after the occurrence of the Commercial Operations Date.

3.1.2 The Coordinating Committee shall consist of four (4) members, two (2) members appointed by Meralco and two (2) members appointed by Power Supplier.

3.1.3 Either Party, upon written notice to the other, may from time to time remove or replace any Coordinating Committee member appointed by it. Any vacancies that occur within the membership of the Coordinating Committee shall be immediately filled by the appropriate Party.

3.1.4 Meralco and Power Supplier shall each pay the expenses of its respective Coordinating Committee members.

3.1.5 All other expenses incurred by the Coordinating Committee and approved by the Parties shall be shared equally by Power Supplier and Meralco, or as determined by the Coordinating Committee.

### **3.2 Duties of the Coordinating Committee**

3.2.1 The duties of the Coordinating Committee shall include the following:

3.2.1.1 in case of disputes on the Provisional Invoice, reconciliation of nomination and Delivery of BCQs and Allowed Outages prior to issuance of a Final Invoice and payment;

3.2.1.2 coordination of maintenance schedules;

3.2.1.3 coordination of short range and long range forecasts of load and capabilities; and

3.2.1.4 consideration of such other Plant operational matters as may be referred to the Coordinating Committee by the mutual agreement of Power Supplier and Meralco.

### **3.3 Decisions of the Coordinating Committee**

3.3.1 Decisions of the Coordinating Committee must be unanimous.

3.3.2 If the Coordinating Committee is unable to reach a unanimous decision on any matter within seven (7) Business Days after the matter is first raised to the Coordinating Committee, such disputed matter shall, at the request of a Party, be referred to the senior management of Power Supplier and the senior management of Meralco for immediate review. If Power Supplier and Meralco do not reach a mutual agreement concerning the disputed matter within fifteen (15) Days after it has been referred to the review by senior management, the dispute shall be resolved in accordance with Article 20.

### **3.4 Communications**

Power Supplier shall maintain multi-communication systems between Power Supplier's Trading Office and appropriate communication systems of the Meralco's Trading Office, which shall consist of, but not be limited to, (a) telephone, (b) facsimile, (c) email or other agreed electronic communication and (d) cellular phone. Each Party shall notify the other Party in writing of its point of contact fifteen (15) Days after the Effective Date and prior to changing any previously established point(s) of contact. The Parties shall maintain communications in accordance with Prudent Operating Practices and, as necessary, shall (without prejudice to the other provisions of this Agreement) inform the other Party with respect to the operating conditions and requirements of their respective facilities that may affect the other Party's operating requirements.

Communication Channels

Power Supplier

|                 |  |
|-----------------|--|
| Contact Person: |  |
| Designation:    |  |
| Address:        |  |
| Telephone:      |  |
| Facsimile:      |  |
| Email:          |  |

Meralco

|                 |                                               |                                               |
|-----------------|-----------------------------------------------|-----------------------------------------------|
| Contact Person: | Rolando M. Cagampan                           | Ciprinilo C. Meneses                          |
| Designation:    | Head, Energy Management                       | Head<br>Energy Sourcing Office                |
| Address:        | Meralco Center, Ortigas<br>Avenue, Pasig City | Meralco Center, Ortigas<br>Avenue, Pasig City |
| Telephone:      | 1622-6483                                     | 1622-6656                                     |
| Facsimile:      | (632) 632-8683                                | (632) 632-8643                                |
| Email:          | rmcagampan@meralco.com.ph                     | ccmeneses@meralco.com.ph                      |

4. Annual, Monthly and Weekly Nomination Schedule

In accordance with Section 6.3.2, Meralco shall furnish Power Supplier with non-binding year-ahead energy nomination schedules, month-ahead nomination schedules, and week-ahead nomination schedules. Such nomination schedules shall reflect Meralco’s good faith estimate of its projected requirements for each of the hours during such periods.

4.1 Year-ahead Energy Nomination Schedule

When establishing the year-ahead energy nomination schedule, the Parties shall observe the following:

(a) Power Supplier shall furnish Meralco the year-ahead capacity Availability schedule of the Plant for a relevant Contract Year (in the form prescribed in Schedule 1 of this Appendix H) at least one hundred and fifty (150) Days prior to start of the next Contract Year. Meralco shall furnish Power Supplier with the year-ahead energy nomination schedule (in the form prescribed in Schedule 2 to this Appendix H) at least one hundred and twenty (120) Days prior to the start of the next Contract Year. When establishing the year-ahead energy nomination schedule, Meralco shall provide an hourly estimate of energy nomination to Power Supplier for each hour of the Contract. The year-ahead energy nomination schedule shall be based upon Meralco’s good faith estimates of its energy requirements to serve its customers’ aggregate demand, as such estimates may be revised during the course of the Contract Year (as shown in the month-ahead, week-ahead and day-ahead nominations) to reflect the actual variation in customer demand. In the case of the first Contract Year, Meralco shall furnish Power Supplier with the year-ahead energy nomination schedule within five (5) Days after Commercial Operations Date.

(b) Upon receipt of the year-ahead energy nomination schedule submitted by Meralco, Power Supplier shall confirm in writing receipt of such schedule within twenty-four (24) hours.

#### 4.2 Month-ahead and Week-ahead Nomination Schedules

When establishing the month-ahead and week-ahead nomination schedules, the Parties shall observe the following:

(a) Power Supplier shall furnish Meralco the month-ahead capacity Availability schedule of the Plant for a Billing Period (in the form prescribed in Schedule 3 of this Appendix H on or before 1200H of every first (1<sup>st</sup>) Day of the calendar month in which such Billing Period starts, and for the week-ahead capacity Availability schedule (in the form prescribed in Schedule 4 of this Appendix H on or before 1200H of every Thursday of the preceding week.

(b) The month-ahead capacity Availability schedule shall indicate the hourly estimate of capacity Availability (in kW) of the Plant in accordance with the contracted capacity for each of the hours of the Billing Period (e.g., 720 hours for a 30-Day month) and the Scheduled Outages calendared for the Billing Period as approved by the System Operator, if any, and changes thereat in the annual capacity Availability schedule submitted for the Contract Year.

(c) The week-ahead capacity Availability schedule shall indicate the hourly estimate of capacity Availability (in kW) of the Plant in accordance with the contracted capacity for each of the hours of the week (e.g., 168 hours) and the Scheduled Outages calendared for the week as approved by the System Operator, if any, and changes thereat in the month-ahead capacity Availability schedule submitted for the Billing Period.

(d) Upon receipt of the month-ahead and week-ahead capacity Availability schedules submitted by Power Supplier, Meralco shall send written confirmation of receipt of such schedules by facsimile and e-mail not later than 1500H of the same Day of receipt.

(e) Meralco shall furnish Power Supplier with the month-ahead nomination schedule (in the form prescribed in Schedule 5 of this Appendix H) on or before 1200H of the 19th calendar Day of the calendar month in which such Billing Period starts, and for the week-ahead nomination schedule (in the form prescribed in Schedule 6 of this Appendix H on or before 1200H of every Friday of the preceding week.

(f) The month-ahead and week-ahead nomination schedules shall contain the hourly quantity offers of Meralco for each hour of the Billing Period or week taking into account any Scheduled Outages of the Plant submitted by Power Supplier in accordance to the WESM rules and the Grid Code.

(g) Upon receipt of the month-ahead and week-ahead nomination schedules submitted by Meralco, Power Supplier shall send written confirmation of receipt of such schedules by facsimile and e-mail not later than 1500H of the same Day of receipt.

## **5. Day-Ahead Nomination Schedule**

Meralco shall furnish Power Supplier with binding day-ahead 24-hour energy quantity nominations subject to the Plant Technical Limits. The following guidelines shall be followed:

- 5.1 Power Supplier shall furnish Meralco the Plant's day-ahead capacity Availability schedule (in the form prescribed in Schedule 7 of this Appendix H) on or before 1000H of the preceding day. The day-ahead capacity Availability schedule shall indicate the binding 24-hourly capacity Availability (in kW) of the Plant in accordance with the contracted capacity and the Scheduled Outages scheduled for the succeeding day, if any, and changes thereat in the week-ahead capacity Availability schedule submitted for the week. If Power Supplier does not furnish Meralco the Plant's day-ahead capacity Availability schedule, the capacity for the same Day in the week-ahead capacity Availability schedule shall be deemed the available capacity for the Day.
- 5.2 Upon receipt of the day-ahead capacity Availability schedule submitted by Power Supplier, Meralco shall send to Power Supplier written confirmation of receipt of such schedule by facsimile and e-mail within two (2) hours of receipt.
- 5.3 Meralco shall furnish Power Supplier with the day-ahead 24-hour energy quantity nomination (in the form prescribed in Schedule 8 of this Appendix H) on or before 1400H of the preceding day, which shall be consistent with the Plant Technical Limits. If Meralco does not furnish Power Supplier with its day-ahead nomination, the nomination for the same day in the week-ahead nomination shall be deemed the nominated price and quantity offers for the Day.
- 5.4 Upon receipt of the day-ahead binding 24-hour energy nomination schedule submitted by Meralco, Power Supplier shall send to Meralco written confirmation of receipt of such schedule by facsimile and e-mail within two (2) hours of receipt.
- 5.5 Power Supplier shall be responsible for submitting its price and quantity offers to the WESM for the Dispatch schedule of the Plant in accordance with the WESM Rules. If necessary, Power Supplier shall coordinate with the System Operator the Dispatch schedule of the Plant in accordance with the Rules under the Grid Code. Energy Imbalance Fees resulting from the actual Dispatch of the Plant shall be for the account of Power Supplier.
- 5.6 Subject to Section 5 of this Appendix H and the Technical Limits, Meralco may revise the nominations stated in its day-ahead nominations, provided that any revision shall be submitted by Meralco to Power Supplier at least two (2) hours (or such other period as may be allowed by the WESM Rules) before gate closure, as provided in the WESM Rules, of the first affected Trading Interval.

## **6. BCQ Declaration with Market Operator**

- 6.1 Power Supplier shall be responsible for declaring BCQ with the Market Operator at least four (4) hours before the deadline set under the WESM Rules. Power Supplier shall ensure that such BCQ declaration is as nominated by Meralco in its day-ahead

nomination, except for the quantities affected by Forced Outages, Force Majeure, and any scheduled outages beyond the Scheduled Outage Allowances.

- 6.2 In the event of Scheduled or Forced Outages beyond the Outage Allowances, Power Supplier shall declare the quantities stated in the day-ahead nomination of Meralco as BCQ for all Trading Intervals. In case of an Event of Force Majeure, Power Supplier shall have no obligation to declare BCQ to Meralco during the affected trading intervals.
- 6.3 On a daily basis, Power Supplier shall furnish Meralco a copy of its BCQ declaration with the Market Operator within one (1) hour of its declaration. Meralco shall have the right, but not the obligation, to review such reports and upon its review, shall inform Power Supplier of any discrepancies or exceptions it may find. Power Supplier shall immediately notify Market Operator of any corrections to its BCQ declarations in accordance with the WESM Rules.

## **7. Confirmation After the Billing Month**

- 7.1 At every twenty-eighth (28<sup>th</sup>) of the month before 1200H, Power Supplier will provide Meralco, by fax or email, a summary of the BCQs nominated for Meralco in the immediately preceding Billing Period (the "**Billing Period BCQ Summary**"). The Billing Period BCQ Summary shall contain the BCQs in each of the WESM trading intervals based on the Daily BCQ Nominations that Meralco made in the immediately preceding Billing Period. It shall likewise contain any adjustments or re-declaration of lower BCQs due to Events of Force Majeure affecting Meralco's ability to receive electricity at the Delivery Point previously re-declared under Section 6.2, above, and which has been duly certified by NGCP.
- 7.2 Meralco shall forthwith review the Billing Period BCQ Summary and shall endeavor to notify Power Supplier, by fax or email, by not later than 1700H of the same Day the Billing Period BCQ Nomination is received if there is any mathematical error in or discrepancy between the Billing Period BCQ Summary and the Daily BCQ Nominations that Meralco made in the immediately preceding Billing Period. Upon receipt of notice by Power Supplier of any mathematical error or discrepancy, the Parties shall immediately take steps to resolve such error or discrepancy.
- 7.3 If Meralco fails to notify Power Supplier of any mathematical error or discrepancy, the Billing Period BCQ Summary as sent to Meralco is deemed to be correct. The failure of Meralco to notify Power Supplier of any error or discrepancy in accordance with Section 7.2, above, shall constitute a waiver by Meralco of any claim for the adjustment or correction of the Associated Energy for the Billing Period.

## **8. 3-Year and Annual Scheduled Maintenance Outages**

- 8.1 In accordance with Section 8.4 of this Agreement, Power Supplier shall furnish Meralco its proposed scheduled maintenance outages including 3-year provisional maintenance and annual maintenance programs (in the form prescribed in Schedule 9 of this Appendix H). Power Supplier shall submit to Meralco said maintenance programs at least thirty (30) Days prior to submitting such program to the System Operator in compliance with the Grid Code. Such maintenance programs shall indicate

the dates and duration of each proposed scheduled outage for the relevant Contract Years. Within five (5) Days after the Commercial Operations Date, Power Supplier shall submit to Meralco its 3-year maintenance and annual maintenance program.

- 8.2 Power Supplier shall furnish Meralco a copy of the 3-year and annual maintenance programs approved by the System Operator within three (3) Days of receipt from the System Operator.

**9. Implementation of Scheduled Maintenance Outage**

- 9.1 Power Supplier shall confirm to Meralco seven (7) Days prior to the implementation of a scheduled maintenance outage the schedule of activities leading to the implementation of such maintenance outage from the schedule of shut-down, duration of maintenance outage, and schedule of completion and start-up.
- 9.2 From time-to-time, Power Supplier shall inform Meralco of any changes requested by Power Supplier in the schedule of maintenance outage including possible delays in the shut-down and completion schedules or early completion of scheduled outage.
- 9.3 Power Supplier shall continue to submit its month-ahead, week-ahead and day-ahead capacity availability schedule indicating the capacity availability of the Plant and the schedule of maintenance outage to Meralco in accordance with the procedure above. In the same manner, Meralco shall continue to submit its month-ahead, week-ahead and day-ahead energy nomination schedule indicating the appropriate energy nomination during the hours of scheduled maintenance outage.
- 9.4 In case of delay in the completion of scheduled outage, Power Supplier shall immediately inform Meralco and advise new schedule of completion at least seven (7) Days before the original completion date. Otherwise, the additional outage days shall be considered a Forced Outage. Power Supplier shall submit a revised month-ahead, week-ahead and day-ahead capacity availability schedules indicating the revised capacity availability of the Plant and the revised schedule of maintenance outage to Meralco in accordance with the procedure above. In the same manner, Meralco shall revise its month-ahead, week-ahead and day-ahead energy nomination schedules indicating the appropriate energy nomination during the hours of the revised scheduled maintenance outage up to the Scheduled Outage Allowance for the Contract Year. If the revised scheduled maintenance outage may cause Power Supplier to exceed its Scheduled Outage Allowance, Power Supplier shall be responsible for providing replacement power at the same Price. Meralco shall submit its day-ahead energy nomination schedule indicating its required energy for each of the 24-hours.
- 9.5 In case of early completion, Power Supplier shall immediately inform Meralco of such event and advise Meralco of resumption of delivery of Contract Capacity and Associated Energy at a time earlier than that originally scheduled for completion of the scheduled outage. Power Supplier shall submit a revised month-ahead, week-ahead and day-ahead capacity availability schedules indicating the revised capacity availability of the Plant and the revised schedule completion of maintenance outage to Meralco in accordance with the procedure above. In the same manner, Meralco shall revise its month-ahead, week-ahead and day-ahead energy nomination schedules indicating its



revised energy nominations during the hours of the revised completion of the scheduled maintenance outage.

## 10. Forced Outages

If in the course of operation of the Plant, a Forced Outage occurs, the following procedures shall be followed:

- 10.1 Power Supplier shall inform Meralco in accordance with Article 9 of the Agreement of such outage occurrence, nature and expected duration of the Forced Outage, informally at first (such as by telephone, cellular phone, email, or text message) and thereafter, Power Supplier shall promptly furnish Meralco with a copy of the report with the best estimate of the probable duration of such outage ("**Incident Report**").
- 10.2 As soon as possible after a Forced Outage has occurred, Power Supplier shall submit a revised day-ahead capacity schedule to Meralco and shall revise, as necessary, the price and quantity offers to the WESM in accordance with the WESM Rules. The hourly energy amounts in Meralco's day-ahead nomination shall be treated as deemed delivered up to the trading period that the WESM recognized the revisions made by Power Supplier.
- 10.3 Upon receipt by Meralco of the revised day-ahead capacity schedule, Meralco shall have twelve (12) hours to submit to Power Supplier a correspondingly-revised day-ahead energy nomination.
- 10.4 If the Forced Outage was of a short duration such that the twenty-four (24) hourly capacity nominations to Meralco for the succeeding day can be met by the Plant, Power Supplier need not submit a revised Day-Ahead Capacity Nomination to Meralco, but Power Supplier shall still submit an Incident Report to Meralco in accordance with Section 10.1 of this Appendix H.
- 10.5 If Power Supplier anticipates that the Forced Outage will extend beyond seven (7) Days, Power Supplier may send notice to Meralco indicating that the portion of the outage beyond seven (7) Days shall be considered a Scheduled Outage; provided that the conversion shall take effect at least seven (7) Days after receipt by Meralco of such notice from Power Supplier.
- 10.6 For the entire duration of the Forced Outage, Power Supplier shall declare to the WESM the Meralco BCQs in respect of this Agreement for all the trading intervals during which the Plant was subject to the Forced Outage.
- 10.7 Any Energy Imbalance Fees (Power Supplier) imposed by the WESM as a result of the Forced Outage shall be for the account of Power Supplier.
- 10.8 Following the occurrence of a Forced Outage, Power Supplier shall endeavour to immediately restore the Plant to its normal operating condition. Once the Plant is restored, Power Supplier shall immediately inform Meralco and submit a revised day-ahead capacity Availability schedule to reflect the restored available Contract Capacity of the Plant.

- 10.9 Power Supplier shall keep track of the cumulative Full Load Equivalent Forced Outage Days and shall submit to Meralco such figure in a written report for Meralco's validation. If after the validation, Meralco's figure does not match that of Power Supplier, representatives from both parties shall meet and discuss the issue at the soonest time to resolve the discrepancy in the figures.

SCHEDULE 1  
FORM OF POWER SUPPLIER'S YEAR-AHEAD CAPACITY AVAILABILITY SCHEDULE

[NAME OF POWER SUPPLIER]  
Nomination of Year-Ahead Available Capacity for MERALCO (in MW)  
[Month] 26, 20\_\_ to [Month] 25, 20\_\_

| Hour   | 26-Month | 27-Month | 28-Month | 29-Month | 30-Month | 31-Month | 1-Month | 2-Month | 3-Month | 4-Month | 5-Month | 6-Month | 7-Month | 8-Month | 9-Month |
|--------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 2      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 3      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 4      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 5      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 6      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 7      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 8      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 9      |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 10     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 11     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 12     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 13     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 14     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 15     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 16     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 17     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 18     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 19     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 20     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 21     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 22     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 23     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 24     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| Chksum |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |

| Hour       | 10-Month | 11-Month | 12-Month | 13-Month | 14-Month | 15-Month | 16-Month | 17-Month | 18-Month | 19-Month | 20-Month | 21-Month | 22-Month | 23-Month | 24-Month | 25-Month |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 4          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 5          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 6          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 7          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 8          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 9          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 10         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 11         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 12         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 13         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 14         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 15         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 16         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 17         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 18         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 19         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 20         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 21         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 22         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 23         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 24         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Chksum     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Check Sum: |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Remark:    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

NOMINATED BY:

Firstname M. Surname  
[Title]  
[Name of Power Supplier]

ACKNOWLEDGED BY:

Firstname M. Surname  
[Title]  
MERALCO

**SCHEDULE 2**  
**FORM OF MERALCO'S YEAR-AHEAD NOMINATION SCHEDULE**

**MANILA ELECTRIC COMPANY (MERALCO)**  
Nomination of Year-Ahead Energy for [Name of Power Supplier] (in MWh)  
[Month] 25, 20\_\_\_\_ to [Month] 25, 20\_\_\_\_

| Hour  | 26-Month | 27-Month | 28-Month | 29-Month | 30-Month | 31-Month | 1-Month | 2-Month | 3-Month | 4-Month | 5-Month | 6-Month | 7-Month | 8-Month | 9-Month |
|-------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 2     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 3     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 4     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 5     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 6     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 7     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 8     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 9     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 10    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 11    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 12    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 13    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 14    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 15    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 16    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 17    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 18    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 19    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 20    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 21    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 22    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 23    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 24    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| Total | -        | -        | -        | -        | -        | -        | -       | -       | -       | -       | -       | -       | -       | -       | -       |

| Hour  | 10-Month | 11-Month | 12-Month | 13-Month | 14-Month | 15-Month | 16-Month | 17-Month | 18-Month | 19-Month | 20-Month | 21-Month | 22-Month | 23-Month | 24-Month | 25-Month |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 4     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 5     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 6     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 7     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 8     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 9     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 10    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 11    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 12    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 13    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 14    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 15    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 16    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 17    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 18    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 19    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 20    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 21    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 22    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 23    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 24    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Total | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        |

|                     |   |
|---------------------|---|
| Total for the month | - |
|---------------------|---|

#### ACKNOWLEDGED BY

**NOMINATED BY**

Firstname M. Surname  
[Title]  
(Name of Power Supplier)

Firstname M. Surname  
[Title]  
MERALCO

SCHEDULE 3

FORM OF POWER SUPPLIER'S MONTH-AHEAD CAPACITY AVAILABILITY SCHEDULE

[NAME OF POWER SUPPLIER]

Nomination of Month-Ahead Available Capacity for MERALCO (in MW)

[Month] 26, 20\_\_ to [Month] 26, 20\_\_

| Hour     | 26-Month | 27-Month | 28-Month | 29-Month | 30-Month | 31-Month | 1-Month | 2-Month | 3-Month | 4-Month | 5-Month | 6-Month | 7-Month | 8-Month | 9-Month |
|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 2        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 3        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 4        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 5        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 6        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 7        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 8        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 9        |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 10       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 11       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 12       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 13       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 14       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 15       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 16       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 17       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 18       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 19       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 20       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 21       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 22       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 23       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 24       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| Checksum | -        | -        | -        | -        | -        | -        | -       | -       | -       | -       | -       | -       | -       | -       | -       |

| Hour     | 10-Month | 11-Month | 12-Month | 13-Month | 14-Month | 15-Month | 16-Month | 17-Month | 18-Month | 19-Month | 20-Month | 21-Month | 22-Month | 23-Month | 24-Month | 25-Month |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 4        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 5        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 6        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 7        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 8        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 9        |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 10       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 11       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 12       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 13       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 14       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 15       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 16       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 17       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 18       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 19       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 20       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 21       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 22       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 23       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 24       |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Checksum | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        |

Check Sum: -

Remark:

NOMINATED BY:

Firstname M. Surname

[Title]

[Name of Power Supplier]

ACKNOWLEDGED BY:

Firstname M. Surname

[Title]

MERALCO

7

SCHEDULE 4

FORM OF POWER SUPPLIER'S WEEK-AHEAD CAPACITY AVAILABILITY SCHEDULE

[NAME OF POWER SUPPLIER]

Nomination of Week-Ahead Available Capacity for MERALCO (in MW)

For the week of \_\_\_\_\_ - \_\_\_\_\_, 20\_\_\_\_

| Time        | [Day<br>Week] | of | [Day<br>Week] | of | [Day<br>Week] | of | [Day<br>Week] | of | [Day<br>Week] | of | [Day<br>Week] |
|-------------|---------------|----|---------------|----|---------------|----|---------------|----|---------------|----|---------------|
| 0000H-0100H |               |    |               |    |               |    |               |    |               |    |               |
| 0100H-0200H |               |    |               |    |               |    |               |    |               |    |               |
| 0200H-0300H |               |    |               |    |               |    |               |    |               |    |               |
| 0300H-0400H |               |    |               |    |               |    |               |    |               |    |               |
| 0400H-0500H |               |    |               |    |               |    |               |    |               |    |               |
| 0500H-0600H |               |    |               |    |               |    |               |    |               |    |               |
| 0600H-0700H |               |    |               |    |               |    |               |    |               |    |               |
| 0700H-0800H |               |    |               |    |               |    |               |    |               |    |               |
| 0800H-0900H |               |    |               |    |               |    |               |    |               |    |               |
| 0900H-1000H |               |    |               |    |               |    |               |    |               |    |               |
| 1000H-1100H |               |    |               |    |               |    |               |    |               |    |               |
| 1100H-1200H |               |    |               |    |               |    |               |    |               |    |               |
| 1200H-1300H |               |    |               |    |               |    |               |    |               |    |               |
| 1300H-1400H |               |    |               |    |               |    |               |    |               |    |               |
| 1400H-1500H |               |    |               |    |               |    |               |    |               |    |               |
| 1500H-1600H |               |    |               |    |               |    |               |    |               |    |               |
| 1600H-1700H |               |    |               |    |               |    |               |    |               |    |               |
| 1700H-1800H |               |    |               |    |               |    |               |    |               |    |               |
| 1800H-1900H |               |    |               |    |               |    |               |    |               |    |               |
| 1900H-2000H |               |    |               |    |               |    |               |    |               |    |               |
| 2000H-2100H |               |    |               |    |               |    |               |    |               |    |               |
| 2100H-2200H |               |    |               |    |               |    |               |    |               |    |               |



SCHEDULE 5

FORM OF MERALCO'S MONTH-AHEAD NOMINATION SCHEDULE

MANILA ELECTRIC COMPANY (MERALCO)

Nomination of Month-Ahead Energy for [Name of Power Supplier] (in MWh)

[Month] 26, 20\_\_ to [Month] 25, 20\_\_



| Hour  | 26-Month | 27-Month | 28-Month | 29-Month | 30-Month | 31-Month | 1-Month | 2-Month | 3-Month | 4-Month | 5-Month | 6-Month | 7-Month | 8-Month | 9-Month |
|-------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 2     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 3     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 4     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 5     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 6     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 7     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 8     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 9     |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 10    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 11    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 12    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 13    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 14    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 15    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 16    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 17    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 18    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 19    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 20    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 21    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 22    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 23    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| 24    |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |
| Total | -        | -        | -        | -        | -        | -        | -       | -       | -       | -       | -       | -       | -       | -       | -       |

| Hour  | 10-Month | 11-Month | 12-Month | 13-Month | 14-Month | 15-Month | 16-Month | 16-Month | 17-Month | 18-Month | 19-Month | 20-Month | 21-Month | 22-Month | 23-Month | 24-Month | 25-Month |
|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 2     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 3     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 4     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 5     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 6     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 7     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 8     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 9     |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 10    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 11    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 12    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 13    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 14    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 15    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 16    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 17    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 18    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 19    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 20    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 21    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 22    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 23    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| 24    |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
| Total | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        |

|                     |   |
|---------------------|---|
| Total for the month | - |
|---------------------|---|

Remark:

NOMINATED BY:  
  
Firstname M. Surname  
[Title]  
MERALCO

ACKNOWLEDGED BY:  
  
Firstname M. Surname  
[Title]  
(Name of Power Supplier)



SCHEDULE 6  
FORM OF MERALCO'S WEEK-AHEAD NOMINATION SCHEDULE  
MANILA ELECTRIC COMPANY (MERALCO)  
Nomination of Week-Ahead Energy for [Name of Power Supplier] (in MWh)  
For the week of \_\_\_\_\_, 20\_\_\_\_



| Time        | [Day of Week] | [Day of Week] | [Day of Week] | [Day of Week] | [Day of Week] | [Day of Week] | [Day of Week] |
|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 0000H-0100H |               |               |               |               |               |               |               |
| 0100H-0200H |               |               |               |               |               |               |               |
| 0200H-0300H |               |               |               |               |               |               |               |
| 0300H-0400H |               |               |               |               |               |               |               |
| 0400H-0500H |               |               |               |               |               |               |               |
| 0500H-0600H |               |               |               |               |               |               |               |
| 0600H-0700H |               |               |               |               |               |               |               |
| 0700H-0800H |               |               |               |               |               |               |               |
| 0800H-0900H |               |               |               |               |               |               |               |
| 0900H-1000H |               |               |               |               |               |               |               |
| 1000H-1100H |               |               |               |               |               |               |               |
| 1100H-1200H |               |               |               |               |               |               |               |
| 1200H-1300H |               |               |               |               |               |               |               |
| 1300H-1400H |               |               |               |               |               |               |               |
| 1400H-1500H |               |               |               |               |               |               |               |
| 1500H-1600H |               |               |               |               |               |               |               |
| 1600H-1700H |               |               |               |               |               |               |               |
| 1700H-1800H |               |               |               |               |               |               |               |
| 1800H-1900H |               |               |               |               |               |               |               |
| 1900H-2000H |               |               |               |               |               |               |               |
| 2000H-2100H |               |               |               |               |               |               |               |
| 2100H-2200H |               |               |               |               |               |               |               |
| 2200H-2300H |               |               |               |               |               |               |               |



SCHEDULE 7  
FORM OF POWER SUPPLIER'S DAY-AHEAD CAPACITY AVAILABILITY  
SCHEDULE

[NAME OF POWER SUPPLIER]  
Nomination of Day-Ahead Available Capacity for MERALCO

For \_\_\_\_\_, 20\_\_ ([Day of Week])

| Time        | Available Capacity |
|-------------|--------------------|
| 0000H-0100H |                    |
| 0100H-0200H |                    |
| 0200H-0300H |                    |
| 0300H-0400H |                    |
| 0400H-0500H |                    |
| 0500H-0600H |                    |
| 0600H-0700H |                    |
| 0700H-0800H |                    |
| 0800H-0900H |                    |
| 0900H-1000H |                    |
| 1000H-1100H |                    |
| 1100H-1200H |                    |
| 1200H-1300H |                    |
| 1300H-1400H |                    |
| 1400H-1500H |                    |
| 1500H-1600H |                    |
| 1600H-1700H |                    |
| 1700H-1800H |                    |
| 1800H-1900H |                    |
| 1900H-2000H |                    |
| 2000H-2100H |                    |
| 2100H-2200H |                    |
| 2200H-2300H |                    |
| 2300H-2400H |                    |
| Check Sum   |                    |

Remark:

NOMINATED BY: ACKNOWLEDGED BY:

Firstname M. Surname  
[Title]  
[Name of Power Supplier]

Firstname M. Surname  
[Title]  
MERALCO



**FORM OF MERALCO'S DAY-AHEAD NOMINATION SCHEDULE**  
**MANILA ELECTRIC COMPANY (MERALCO)**  
*may liwanag ang buhay*

SCHEDULE 8

Nomination of Day-Ahead Price and Quantity Offers for [Name of Power Supplier]

For \_\_\_\_\_, 20\_\_ ([Day of Week])

| Time        | Energy (MWh) |
|-------------|--------------|
| 0000H-0100H |              |
| 0100H-0200H |              |
| 0200H-0300H |              |
| 0300H-0400H |              |
| 0400H-0500H |              |
| 0500H-0600H |              |
| 0600H-0700H |              |
| 0700H-0800H |              |
| 0800H-0900H |              |
| 0900H-1000H |              |
| 1000H-1100H |              |
| 1100H-1200H |              |
| 1200H-1300H |              |
| 1300H-1400H |              |
| 1400H-1500H |              |
| 1500H-1600H |              |
| 1600H-1700H |              |
| 1700H-1800H |              |
| 1800H-1900H |              |
| 1900H-2000H |              |
| 2000H-2100H |              |
| 2100H-2200H |              |
| 2200H-2300H |              |
| 2300H-2400H |              |
| Total       |              |
| Remark:     |              |

NOMINATED BY:

ACKNOWLEDGED BY:

Firstname M. Surname  
[Title]  
[Name of Power Supplier]

Firstname M. Surname  
[Title]  
MERALCO



Appendix I  
**INVOICING AND PAYMENT PROCEDURES**

**1. Definitions**

All capitalized terms used herein shall have the meanings given to them in Article 1 of this Agreement, except as otherwise defined herein.

**Invoice** means any Invoice rendered according to Appendix E

**Final Invoice** means any Final Invoice rendered according to Section 3 below

**Payment Date** shall have the meaning given to it in Section 4 below.

**Provisional Invoice** means any Provisional Invoice rendered according to Section 2 below.

**Receipt** means any Receipt issued according to Section 6, below.

**2. Preparation of Invoice**

(a) Each Invoice rendered by Power Supplier pursuant to Article 11 hereof shall be rendered in the first instance in the form of a provisional invoice (the "**Provisional Invoice**"). Power Supplier shall deliver the Provisional Invoice to Meralco no later than the last Day of the calendar month of the Billing Period.

(b) Within ten (10) Days after receipt of the Provisional Invoice, Meralco shall notify Power Supplier in writing of any questions or exceptions it may have with respect to the Provisional Invoice. Meralco and Power Supplier shall confer within three (3) Days thereafter to discuss and seek to resolve any discrepancies or disputes in the Provisional Invoice prior to the issuance of the Final Invoice.

**3. Final Invoice**

On the fifteenth (15<sup>th</sup>) day of the immediately succeeding month after the end of the Billing Period, Power Supplier shall provide Meralco with a Final Invoice for such Billing Period, in the same format as the Provisional Invoice (the "**Final Invoice**"); provided that the Final Invoice shall reflect any corrections or adjustments agreed to by the Parties.

**4. Payment Date**

Provided that Meralco receives the Final Invoice within the time set forth in Section 2 of this Appendix I, each Final Invoice shall be due and payable not later than the last Day of the immediately succeeding month after the end of the month of the Billing Period, provided that if the last Day is not a Business Day then the payment shall be due and payable on the immediately next Business Day ("**Payment Date**").

Notwithstanding any provision in the Agreement to the contrary, if a Party fails to pay any amount due under this Agreement in accordance with the terms of this Agreement, the following rates shall apply on the outstanding amount, computed from the due date until full payment is received by Party entitled thereto:

- No interest, provided that payment is made in full no later than seven (7) Days from the due date
- PDST-R2 plus two hundred fifty (250) basis points; provided that payment is made in full no later than sixty (60) Days from due date
- Such interest rate to be defined by the Party entitled to receive payment, if payment in full is not made within sixty (60) Days from due date

#### **5. Withholding Tax**

Meralco shall deduct and withhold from the amounts payable under a Final Invoice, the applicable creditable withholding tax and Meralco shall remit any amounts withheld for such tax to the relevant taxing authorities and the corresponding documentation due to the prevailing regulation of such withholding to Power Supplier. If Power Supplier believes such withholding tax is not applicable to it, Power Supplier shall provide Meralco with such documents and evidence acceptable to Meralco to demonstrate that payments to Power Supplier are not subject to such withholding tax. Power Supplier shall indemnify Meralco for any assessment, liability, surcharge, interests, penalties and other costs or fees arising from Meralco's non-withholding or failure to withhold creditable withholding tax if Meralco does not withhold such tax upon Power Supplier's request, including any change, reversal or ruling affecting Power Supplier's status or claim of not being subject to a creditable or withholding tax.

#### **6. Method of Payment**

All payments by Meralco pursuant to this Appendix shall be made by wire transfer of cleared funds to the accounts to be notified by Power Supplier by written notice to Meralco.

#### **7. Receipt**

Power Supplier shall issue a value-added tax-qualified official receipt to Meralco acknowledging receipt of any payment hereunder on the date of such payment.

#### **8. Option to Pay in US Dollars**

Meralco has the option to pay in Philippine Peso or US Dollars, the USD-denominated portions of the Monthly Power Bill, provided, if Meralco opts to pay in US Dollars, it shall send written notice to the Power Supplier within 10 days after the receipt of the Provisional Invoice.

**Appendix J**  
**FORM OF DIRECT AGREEMENT**

**FORM OF NOTICE TO COUNTERPARTY**

Date [            ]

To: Manila Electric Company (**Counterparty**)

Re: \_\_\_\_\_ dated \_\_\_\_\_ (**the Agreement**) between Counterparty  
and REDONDO PENINSULA ENERGY, INC. (**the Company**)

Dear Sirs:

1. In this notice:

**Direct Agreement** has the meaning set forth in Clause 5(ii) hereof;

**Secured Parties** means the lenders and other credit providers represented by the Security Trustee which have provided funds, commitments and other credit to the Company, and any of their successors and assigns.

**Substituted Party** has the meaning set forth in Clause 3(ii) hereof.

**Transfer Notice** means a notice in substantially the form of Attachment A hereto.

2. We hereby give you this notice that, pursuant to a security assignment dated \_\_\_\_\_ (**the Assignment**) made between the Company and \_\_\_\_\_ (**the Security Trustee**) as agent and on behalf of the Secured Parties, the Company has assigned to the Security Trustee for the account of the Secured Parties as of the date of the Assignment effective immediately, the following:

- (i) all rights, claims and benefits to receive any sums payable under the Agreement in respect of monetary claims arising thereunder; and
- (ii) all rights to assign rights under the Agreement (except as contemplated hereunder).

3. We further give Counterparty notice that pursuant to the Assignment, the Company has agreed that:

- (i) it has conditionally assigned to the Security Trustee all of its rights and benefits under the Agreement (which assignment shall become effective upon the Security Trustee issuing a Transfer Notice); and
- (ii) subject to satisfaction of the requirements in regard to assignments set forth in the Agreement, if any, the Security Trustee may (a) substitute itself as a party to the Agreement in place of the Company by way of transfer and novation of rights and obligations thereunder, and (b) assign such right to any

other person (the Substituted Party), in each case following the issuance of a Transfer Notice.

4. The Company and the Security Trustee have agreed that:

(i) subject to the assignment provision under the Agreement, if any, and upon the issuance of the Transfer Notice, the Security Trustee or the Substituted Party shall be bound by all the terms and conditions of the Agreement and shall be obliged and liable to Counterparty under the Agreement the same as the Company;

(ii) such assignment shall not release the Company's duties and liabilities to Counterparty under the Agreement arising prior to the effectiveness of such assignment and the Company shall remain liable to perform all the Company's obligations under the Agreement (including any sums owed by the Company to Counterparty); and

(iii) any amount payable by the Counterparty to the Company pursuant to the Agreement shall be paid to the order of "[ ] for the account of REDONDO PENINSULA ENERGY, INC." or such other account as the Security Trustee may otherwise specify to Counterparty from time to time.

5. We request you:

(i) to give to the Security Trustee notice of any breach of the Agreement by the Company as soon as you become aware of the same; and

(ii) to sign and return to the Security Trustee an acknowledgment and consent (with this notice, constituting the "Direct Agreement" between us) in the form of Attachment B attached hereto.

6. The Assignment, this notice of assignment, the Direct Agreement and the Transfer Notice shall be amended, varied, or modified only in writing and signed by all the parties concerned. For the avoidance of doubt, references in this notice of assignment shall be construed as reference to the Assignment as the same may have been, or may from time to time be amended, varied, novated or supplemented and shall include any document which is supplemental to, is expressed to be collateral with or is entered into pursuant to or in accordance with the terms of this Assignment.

7. This notice and your related Direct Agreement shall be governed by the laws of [England and Wales][New York][the Philippines] *[To be determined by Secured Parties]*.

8. The terms of this notice and the Direct Agreement shall remain in effect until the Security Trustee has given you written notice to the contrary.

Please acknowledge receipt of this notice and confirm your consent without delay to the terms hereof by signing and returning one copy of the attached form of Direct Agreement to the Company and the Security Trustee.



REDONDO PENINSULA ENERGY, INC.

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

[Name of Security Trustee]  
as Security Trustee on behalf of the Secured Parties

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

- Attachments:
- 1. Form of Direct Agreement of Counterparty.
  - 2. Form of Transfer Notice to Counterparty.
  - 3. Two copies of this Notice of Assignment.

## Date [ ]

Attention: [Name and position of responsible officer]  
(Counterparty)

[

Title: \_\_\_\_\_

**ATTACHMENT B**  
**Form of Reply**

Date [            ]

To: \_\_\_\_\_ (the Security Trustee)

From: Manila Electric Company (Counterparty)

Re: \_\_\_\_\_ dated \_\_\_\_\_ (the Agreement) between Counterparty and REDONDO PENINSULA ENERGY, INC (the Company) (as the same may be amended, modified, supplemented and in effect from time-to-time).

Dear Sirs:

We hereby acknowledge receipt of the notice of assignment dated \_\_\_\_\_ (the Notice of Assignment) between the Company and the Secured Parties represented by the Security Trustee in respect of the Agreement (the Assignment). We, the Counterparty, hereby consent to the assignment by the Company of the Agreement (this acknowledgement with the Notice of Assignment together being a **Direct Agreement** between us) under the Assignment and to the terms specified in the said Notice of Assignment. We acknowledge and agree to the terms stated in the Notice of Assignment and agree as follows:

1. Unless otherwise defined in this Direct Agreement, terms defined in the Notice of Assignment shall have the same meaning when used herein.
2. Counterparty represents and warrants to the Security Trustee and each Secured Party that, as at the date hereof:
  - (i) it is a corporation duly organized and validly existing under the laws of the Republic of the Philippines with power to enter into this Direct Agreement and the Agreement and to perform its obligations thereunder and all corporate, statutory, governmental and other action required to authorize the execution and delivery by it of this Direct Agreement and the Agreement and its performance of such obligations have been duly taken;
  - (ii) the execution, delivery and performance by it of this Direct Agreement and the Agreement do not and will not
    - (b) require any consent, approval, authorization or permit which has not been obtained,
    - (c) violate any provision of any law, rule, regulation, cabinet resolution, order, writ, judgment, injunction, decree, determination or award which applies to Counterparty,
    - (d) result in a breach of or constitute a default under any agreement relating to management or affairs of Counterparty or any loan or other material agreement, lease or instrument to which Counterparty is a party or by which Counterparty or its properties may be bound or affected, or
    - (e) result in, or require, the creation or imposition of any mortgage, pledge, lien, security interest or other charge or encumbrance of any nature (other than contemplated by this Direct Agreement or the



Agreement) upon or with respect to any of the properties Counterparty now owns or hereafter acquires; and

(f) Counterparty is not in violation, breach or default of any provision of any law, rule or regulation, cabinet resolution, order, writ, judgment, injunction, decree, determination or award which applies to it or any agreement or other agreement, lease or instrument referred to above in clause (c) of this subsection (ii), which violation, breach or default might have a material adverse effect on the ability of Counterparty to perform its obligations under this Direct Agreement and the Agreement;

(iii) this Direct Agreement and the Agreement are in full force and effect and constitute legal, valid, and binding obligations of Counterparty enforceable in accordance with their respective terms;

(iv) Except as disclosed by Counterparty to the Security Trustee in writing on or before the date hereof, there are no actions, suits or proceedings pending or, to Counterparty's knowledge, threatened, against or affecting Counterparty before any court or administrative body or arbitral tribunal that might materially adversely affect the validity, binding effect or enforceability of this Direct Agreement or the Agreement;

(v) insofar as we are aware, the Company is not in default under any material covenant or obligation under the Agreement;-and

(vi) Counterparty has not taken steps or started legal proceedings and to the best of its knowledge and belief, no other steps have been taken nor legal proceedings started or threatened against it for its winding-up dissolution or reorganization or for the appointment of a receiver or similar officer of it or all or any of its assets or revenues which could materially and adversely affect the financial condition or operation of Counterparty or its ability to perform its obligations under, or which purports to affect the legality, validity or enforceability of this Direct Agreement or the Agreement.

3. Counterparty has not received any other notice of assignment of any rights or obligations under the Agreement.
4. Counterparty will pay to the order of "[ ]" for the account of REDONDO PENINSULA ENERGY, INC all amounts otherwise payable by it to the Company under and in accordance with the provisions of the Agreement (if any) to such account as the Security Trustee may specify to it from time to time, save with respect to payments that have been made by the Counterparty to the Company prior to the date of receipt of the Notice of Assignment by the *[position of the relevant officer]* of the Counterparty.
5. Counterparty will give to the Security Trustee (or the Substituted Party, as defined in a Transfer Notice delivered pursuant to the Assignment) notice of any breach of the Agreement by the Company as soon as it becomes aware of the same.
6. Counterparty agrees to the transfer of all rights and obligations of the Company to the Security Trustee or such Substituted Party as the Security Trustee may designate

(including the purchaser or other transferee of the rights and obligations of the Company) and agrees to reasonably consider and sign such documents as may be reasonably requested to record the said transfer. Counterparty agrees that, subject to satisfaction of the requirements in regard to assignments set forth in the Agreement, if any, the substitution of the Security Trustee, the Substituted Party, purchaser or other transferee shall become effective and binding upon delivery to the *[position of the relevant officer]* of the Counterparty of a Transfer Notice, as defined in the Assignment, signed by the Security Trustee and the Substituted Party, purchaser or other transferee.

7. Counterparty will not exercise any right to terminate the Agreement or to suspend performance of its obligations thereunder without first giving at least ninety (90) days prior written notice to the Security Trustee after the earlier of (a) the date such right has arisen, and (b) with respect to defaults by the Company for which cure periods in favor of the Company apply, the date which is thirty (30) days before the expiration of the applicable cure period, and, in the case of clause (b), giving the Security Trustee and/or the Substituted Party a reasonable period of time to cure the default thereafter. Counterparty confirms that during the foregoing notice periods and, in the case of clause (b), such additional reasonable period as is given the Security Trustee and/or Substituted Party to cure the default, provided in all cases that during any such period:

- (i) a remedy of the default is being diligently pursued; or
- (ii) the Security Trustee is conducting bona fide negotiations to acquire or dispose of the Company's interest in the Agreement and the project,

Counterparty will not exercise such right of termination or suspension during any such period and will continue therein to perform its obligations under the Agreement. In the event that the default is remedied during any such period, Counterparty will not exercise such right of termination or suspension. Counterparty confirms that it will not treat any enforcement action against the Company by the Security Trustee as constituting a default or event of default under the Agreement. During such ninety (90) day period, the Company shall continue to perform its obligations under the Agreement.

8. Before the date a Transfer Notice has been delivered and the Assignment becomes fully effective pursuant to the last sentence of paragraph 6 herein (the date Assignment becomes fully effective pursuant to the last sentence of paragraph 6 herein, the "**Assignment Effectivity Date**"), neither the Security Trustee nor the Substituted Party shall be under any obligation of any kind whatsoever under the Agreement nor under any liability whatsoever in the event of any failure by the Company to perform its obligation thereunder. From and after the Assignment Effectivity Date, Counterparty agrees that the Security Trustee, the Substituted Party, purchaser or other transferee shall acquire rights under the Agreement identical to those of the Company thereunder and shall assume obligations (from and after the Assignment Effectivity Date) toward Counterparty identical to the obligations owed by the Company to Counterparty under the Agreement, and the Company shall cease to be entitled to exercise such rights and benefits and shall be released from continuing obligations from and after the Assignment Effectivity Date. Such assumption of obligations by the Security Trustee, Substituted Party, purchaser or other transferee shall not include any liability for any failure by the Company prior to such assumption to perform its obligations under the

Agreement (other than liability to pay for services performed or goods delivered by Counterparty to the Company if any) and Counterparty will not exercise or purport to exercise any right of set-off or similar right against the Security Trustee, the Substituted Party, purchaser or other transferee which may arise from such failure to perform.

9. Counterparty agrees not to claim and hereby waives any immunity from any legal action, suit or proceeding, jurisdiction of any court, judgment, order, award, execution, set-off or other enforcement process which it is or may be able to claim for itself or its property, assets or revenues (whether by reason of sovereignty or otherwise) in respect of its obligations hereunder or under any assigned agreement, to the extent permitted by the governing law.
10. Counterparty agrees to abide by all the terms and conditions as specified herein and to act accordingly upon the effectiveness of the assignment.
11. This Direct Agreement shall take effect and be governed by and construed in accordance with the laws [set forth in the Notice of Assignment][selected to govern the Agreement][*to be selected*], subject to the same conflicts of laws qualifications, if any, therein.
12. In the event that Counterparty does not otherwise have the right to terminate the Agreement in accordance with the terms of the Agreement and subject to paragraph 6 herein, Counterparty agrees that if the Security Trustee is unable to effect a transfer of the Agreement to itself or a Substituted Party because of (i) the effect of existing bankruptcy or other similar laws currently in effect (including, without limitation, a possible termination of the Agreement by a receiver in bankruptcy) or (ii) the effect of bankruptcy or similar laws enacted after the date hereof, Counterparty will, if requested by the Security Trustee and to the extent allowed by the governing law, enter into a new agreement with such Substituted Party as the Security Trustee may designate (including the purchaser or other transferee of the rights and obligations of the Company or the Security Trustee) having terms (other than the identity of the Company and the Sponsors) which are identical to the terms of the Agreement.
13. Counterparty agrees to execute and deliver any appointment documentation for an agent for service of process for purposes of this Direct Agreement upon request of the Security Trustee.

For and on behalf of  
[Name of Counterparty]

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

## **Appendix K**

### **TESTS**

#### **PART A – ANNUAL NET DEPENDABLE CAPACITY**

##### **1. Annual NDC Test**

- 1.1 The purpose of the Annual NDC Test is to demonstrate the maximum Net Dependable Capacity of the Plant.
- 1.2 Each NDC Test shall consist of an uninterrupted period of 8 hours where Plant is in steady state preceded by a continuous period of generation. Periods during which the Plant is ramping up (a "Ramp Up Period") shall not constitute part of the test period. If there will be interruptions during the test lasting more than one (1) hour, the test shall be correspondingly extended to complete the 8-hour testing period. If test extensions cannot be immediately undertaken, a re-test shall be scheduled for a later date no later than two months following the interrupted test.
- 1.3 The test methods employed and the test result calculations shall be in accordance with the standards set forth herein.
- 1.4 All NDC Tests will be conducted using the permanently installed facility instrumentation.
- 1.5 A test director will be assigned by the Plant O&M Contractor (and approved by Power Supplier) to be responsible for setting up and conducting the NDC Tests in accordance with this Appendix K.
- 1.6 Power Supplier shall notify Buyer of the name of the test director and the company which employs such test director.

##### **2. Conduct of Tests**

- 2.1 NDC Tests and any re-testing under this Appendix K will be performed by Power Supplier. Buyer shall have the right to witness the conduct of any NDC Test.
- 2.2 Prior to the commencement of any of the tests or re-tests under this Appendix K, Power Supplier and Buyer shall agree on the content and format of a report recording the results of such tests or re-tests.

##### **3. Test Parameters**

The actual net power factor at the Delivery Point during any test or re-test shall be within the range of 0.85 lagging to 0.90 leading and the frequency shall be stable and within the range of 59.7 Hz to 60.3 Hz.

#### 4. Interruption/Stoppage of Testing

- 4.1 Prior to the commencement of any test or re-test under this Appendix K the Plant shall be entitled to establish a level of availability for a reasonable period.
- 4.2 Testing to determine Tested Net Dependable Capacity shall be conducted for a continuous period of eight (8) hours.
- 4.3 Power Supplier shall have the right to interrupt or stop any test in the event of (i) a System Emergency; (ii) an Event of Force Majeure; (iii) instability of the Luzon Grid or other abnormal conditions on the Luzon Grid; (iv) restrictions are placed on the dispatch of the Plant by Buyer or the System Operator; (v) the test parameters set forth in paragraph 3 above are not being maintained in a relatively consistent manner; (vi) a problem develops with plant or equipment which makes it prudent to interrupt or stop the test in order to safeguard the health or safety of personnel, the environment, the equipment at the Plant or for other reasons required by prudent utility practice; or (vii) any other provision of this Agreement applies which has the effect of permitting an interruption of the test.
- 4.4 Buyer shall have the right to interrupt or stop any test in the event that the test is not being conducted in accordance with the terms of this Appendix K.
- 4.5 During any period of time that testing is interrupted by either Party pursuant to Sections 4.3 or 4.4 of this Part A (an "Interruption Period"), testing shall be deemed to be suspended, the Interruption Period shall not be considered to be part of the test period and any test data collected during such Interruption Period shall not be used to calculate the test results under Section 5 of this Part A.
- 4.6 If any test is interrupted for any period of time which is less than eight (8) hours, the duration of the testing period shall be extended for a period of time equal to the Interruption Period.
- 4.7 If testing has proceeded for less than two (2) hours and is interrupted by an Interruption Period lasting for more than four (4) consecutive hours due to the occurrence of events set forth in Section 4.3 of this Part A that are not attributable to the fault or negligence of Power Supplier, then the test shall be incomplete and the entire test shall be re-started as soon as practicable upon reasonable prior written notification by Power Supplier to Buyer. If testing is interrupted and restarted pursuant to this Section 4 four (4) consecutive times, the test shall be deemed to be successfully completed at the time of the occurrence of the fourth interruption and the test data taken during the four attempted tests shall be used to calculate the test results pursuant to Section 5 of this Part A.
- 4.8 If testing has proceeded for more than two (2) hours but less than four (4) hours and is interrupted by an Interruption Period lasting for more than four (4) consecutive hours due to the occurrence of events set forth in Section 4.3 of this Part A that are not attributable to the fault or negligence of Power Supplier, then the test shall be suspended during the Interruption Period and re-started as soon as practicable



following the termination of the Interruption Period. If Buyer is unable to procure the dispatch of the Plant at levels necessary for the continuation of the test within 48 hours after the termination of the Interruption Period, the test shall be deemed to be successfully completed at the time of the occurrence of the interruption and the test data taken prior to the interruption shall be used to calculate the test results pursuant to Section 5 of this Part A of Appendix K.

- 4.9 If testing has proceeded for more than four (4) hours but less than eight (8) hours and is interrupted by an Interruption Period lasting for more than four (4) consecutive hours due to the occurrence of events set forth in Section 4.3 of this Part A that are not attributable to the fault or negligence of Power Supplier, then the test shall be deemed to be successfully completed at the time of the occurrence of the interruption and the test data taken prior to the interruption shall be used to calculate the test results pursuant to Section 5 of this Part A of Appendix K.

## **5. Test Measurements and Results**

- 5.1 All manual readings during a NDC Test shall be recorded at five (5) minute intervals and data logged using automatic logging equipment shall be recorded at thirty (30) second intervals.
- 5.2 The Net Dependable Capacity of the Plant as determined pursuant to an NDC Test shall be the quantity, in MW, of electric power which can be generated and delivered by the Plant over the specified test period (excluding Interruption Periods, Ramp-Up Periods and Excluded Periods) as measured by the Plant's billing metering equipment located at the Plant substation on the Site. This shall be computed as the average of the 15-minute meter readings from the Plant's billing metering equipment located at the Plant's switchyard.
- 5.3 Upon successful completion of any test under this Appendix K, Power Supplier shall, within forty eight (48) hours, notify Buyer in writing of the test results. In such notification, Power Supplier shall also indicate its acceptance or rejection of such test results and in the event that the test results are accepted, to further indicate its declaration of the amount of the Net Dependable Capacity of the Plant.
- 5.4 Buyer shall have the right to dispute the results of the test. If the test results are not acceptable to Buyer, the Parties shall meet within the next month to discuss and resolve the disputed results.

## **6. Re-Tests**

- 6.1 Where the test results are rejected by Power Supplier in accordance with the procedures set out above, Power Supplier shall be entitled to re-test the Net Dependable Capacity.
- 6.2 Any re-test shall be carried out as soon as reasonably practicable in accordance with the testing procedures set out in this Appendix K and upon serving forty-eight (48) hours prior written notice by Power Supplier to Buyer.

- 6.3 The results of such re-test shall be notified to Buyer in writing within forty-eight (48) hours of completion of such re-test. In such notification, Power Supplier shall also indicate its declaration of the value of the Net Dependable Capacity.
- 6.4 The results of any successfully completed re-test shall be used as the Net Dependable Capacity of the Plant.
- 6.5 Buyer shall have the right to dispute the results of the re-test. If the re-test results are not acceptable to Buyer, the Parties shall meet within the next month to discuss and resolve the disputed results.

## **7. Costs and Expenses**

- 7.1 Each Party shall bear its own costs and expense incurred in monitoring the tests or re-tests under this Appendix K and also in reviewing the results thereof.
- 7.2 Excluding all costs and expenses associated with the operations of the Plant during the tests or re-tests under this Appendix K, all costs and expenses which may be incurred in respect of conducting such tests or re-tests shall be borne by Power Supplier.
- 7.3 Notwithstanding anything contained in the foregoing, if Buyer interrupts a test or a re-test under this Appendix K without reasonable cause, it shall bear the costs and expenses incurred by Power Supplier in conducting, monitoring or supervising such test or re-test.

## **PART B – NET PLANT HEAT RATE**

### **1. Introduction**

The definitions of terms, calculation methods, uncertainty and final heat rate computational results are defined in the ASME PTC codes. The Plant test procedure defined herein conforms to ASME PTC 6S, PM and associated referenced standards for routine tests unless specified otherwise. Other capitalized terms not defined in this Appendix K shall have the meanings ascribed to such terms in this Agreement. The following protocols apply:

- Testing will be conducted in accordance with the procedures provided within this Appendix K.
- All test data required in the calculations will be collected using instrumentation calibrated in accordance with the procedures provided within this Appendix K.
- If possible, the feedwater flow nozzle will be inspected prior to the test.
- Changes in the design of the Plant due to Change in Circumstances after the date of the Agreement which negatively affect Net Plant Heat Rate will be accounted for in the results of the Net Plant Heat Rate Test.

- A Test Director will be assigned by the Plant O&M Contractor (and approved by Power Supplier) to be responsible for setting up and conducting the Net Plant Heat Rate Test in accordance with this Appendix K.
- Power Supplier shall notify Buyer of the names of the Test Director and the Independent Engineer and the companies which employ such Test Director and Independent Engineer.

## **2. Application**

Corrections associated with this Test shall be determined in the pre-test planning process in accordance with ASME PTC PM and 6S. The corrections shall only apply for converting to Standard Conditions, unnecessary accuracy below 4% uncertainty or other basis beyond the control of Plant O&M Contractor.

The Test shall be conducted in accordance with ASME PTC 6S "Procedures for Routine Performance tests of Steam Turbines", ASME PTC 4.1 "Steam Generating Units", and ASME PTC PM - 1993 "Performance Guidelines For Steam Power Plants."

## **3. Overview**

The Test shall be designed to provide a Plant instrument uncertainty of no more than 4%, as defined in the ASME PTC 6S, PM and 19.1. A pre-test uncertainty analysis and a post-test uncertainty analysis is required to be conducted and shall be submitted by Plant O&M Contractor to Power Supplier for review and approval by Power Supplier, with the concurrence of the Independent Engineer (acting reasonably) as to the conformance with the ASME PTC referenced in this Appendix K of the calculations and methodology used in determining the pre-test uncertainty analysis and post-test uncertainty analysis for the Test. All instruments used for this Test shall be calibrated per ASME PTC guidelines. The pre-test uncertainty calculation shall be completed prior to the date scheduled for the Test to allow for sufficient time to purchase, install and calibrate any special precision test instrumentation necessary for a 4% heat rate test uncertainty.

## **4. Plant Description**

The Plant will be or is as described in Appendix A of this Agreement.

## **5. Test Pre-requisites**

### **5.1 Test Procedures Generally**

The Test shall be governed by the ASME PTC PM and 6S, and a 4% heat rate test uncertainty.

### **5.2 Identify Deficient Equipment and/or Design Changes**

Prior to the Test, any deficient equipment and equipment design changes shall be identified and remedied by Power Supplier.

### 5.3 Instrument Calibration Documentation

All plant instruments required in the calculations shall be calibrated within six (6) months immediately prior to the Test and in accordance with ASME PTC and the calibration records shall be kept on file.

### 5.5 Operating Conditions

5.5.1 The Table below provides guidelines for the determination of steady state prior to the initiation of the Test. Variations are defined as the standard deviation over a one-hour period. If the operating conditions are within the guidelines, testing may proceed. If any operating condition is outside the guideline, the Test Director in concurrence with Independent Engineer shall decide if the Test should commence. Concurrence that steady state conditions were achieved will be documented via print outs from the Distributed Control System ("DCS").

Table 5.5.1 Steady State Conditions Guidelines

| Test Condition         | Units | Fluctuations* from Set point |
|------------------------|-------|------------------------------|
| Main Steam Pressure    | Psig  | ± 3%                         |
| Main Steam Temperature | °F    | ± 10°F                       |
| Main Steam Flow        | PPH   | ± 5%                         |

\*Based on a one-hour trend determined via the DCS collected data.

5.5.2 The Plant Continuous Emissions Monitoring System ("CEMS") shall be in place.

5.5.3 Necessary sampling stations to collect coal and ash samples during the tests shall have been set up, and the testing team is ready to begin collection.

5.5.4 The DCS and the plant's on-line performance monitoring system software shall have been set up to monitor and scan required measured parameters, calculate deviations from design conditions, calculate required averages, and print results.

5.5.5 Supply of performance coal shall be available to complete the testing without interruption. Coal silos shall be full. The ash silo shall not be full.

5.5.6 The flue gas cleanup system shall be operating normally. The ash collection system shall be in operation. The electrostatic precipitator hopper level shall be within normal operating range. The FGD Plant shall be in service.

5.5.7 Immediately prior to the start of the Test, the following valve line-ups shall have been verified in preparation for the Test.

- Drain valves and connections in the main steam lines shall be closed.
- Inlet turbine casing drain valves shall be closed.
- Emergency drain valves and extraction pipe connections to the condenser shall be closed.
- The condensate piping circuit shall be closed.
- The feedwater piping circuit shall be closed.
- The auxiliary steam piping circuit shall be closed.
- Steam traps shall be in operation or isolated as indicated by the isolation procedure.
- Soot blowing shall be isolated.
- Boiler blowdown shall be isolated.
- Steam coil air heater shall be isolated.

5.5.8 All non-essential service air shall have been taken out of operation by isolating all air connections or branch lines.

5.5.9 The ASME PTC 6S code requires a test run to be conducted prior to the actual heat rate Test to confirm the Test plan objectives. A pre-test review of all raw data to be collected during the Test shall be conducted by the Test Director, prior to initiation of the Test, to ensure the plant is operating as expected and all required data is being collected.

## **6. Test Instrumentation**

### **6.1 General**

Calibrated Plant instrumentation will be used for data collection wherever available and appropriate and supplemented with special test instrumentation where needed.

### **6.2 Special Test Instrumentation**

High accuracy test instruments shall be installed if found necessary based on the 4% heat rate uncertainty target.

### **6.3 Gas Exit Temperature and Oxygen (O<sub>2</sub>) Level**

Boiler exit gas shall be measured at the boiler economizer outlet with a grid of gas analysis equipment consistent with the requirements of the ASME PTC code. Points downstream of the economizer outlet result in excessive air in-leakage for balanced draft furnaces and shall not be used. Gas test access ports shall be installed, as necessary. The grid shall consist of at least 30 points or whatever value is required for a test uncertainty of no more than 4%. The Plant O&M Contractor shall purchase test instrumentation similar or equivalent to Teledyne model 3000 PA of sufficient quantity to provide collection of CO and O<sub>2</sub> per the ASME PTC requirements.

### **6.4 Instrument Calibrations**



All instruments used in the calculations shall be calibrated within six (6) months of the testing and shall be consistent with ASME PTC guidelines. Documentation of these calibrations shall be made available, if requested, to the Independent Engineer prior to testing. The Independent Engineer or its representative shall be notified of the calibration schedule to allow the Independent Engineer to witness the calibrations if desired. Copies of the calibration records shall be included in the Test report.

At the discretion of the Test Director, instruments and transmitters may be recalibrated to ensure the accuracy of the test measurements and data collection.

## **6.5 Typical Datalog**

### **6.5.1 DCS data collection**

The necessary parameters required for the Test shall be monitored in the DCS. Each parameter shall be scanned at an interval of not greater than 1 minute and an average value of the measured parameter shall be logged every 60 minutes. Each hour, the DCS shall also log each parameter and its average values over the previous hour. A 1-minute log data shall be available on the disk.

When plant operation has stabilized at approximately the guaranteed plant net electrical output corrected to ambient conditions, the Plant O&M Contractor shall start recording data.

### **6.5.2 Electrical output**

Gross electrical plant output shall be measured using the gross power readings for the Test. Precision test instruments shall be used if needed to meet the test uncertainty requirements specified herein. Gross MW readings by DCS shall be logged at the same time for reference or back up.

Net electrical output shall be obtained from the revenue meter with the reading of back up revenue meter being recorded as backup. Right after the Test, the data log of these meters shall be downloaded and used for the calculation.

### **6.5.3 Emissions monitoring**

Emissions monitoring for the Test shall be as recorded in the Plant CEMS.

### **6.5.4 Miscellaneous readings**

The following shall be recorded manually in 10 minute intervals from the beginning of the Test:

- Sea water level measured at circulating water intake structure, Ft-in (for reference only);
- Barometric pressure, inches mercury absolute;
- Ambient dry-bulb temperature, using the psychrometer, °F; and

- Ambient wet-bulb temperature, using the psychrometer, °F.

The duration service hours of the following shall be recorded manually during the period of the Test:

- Service air system (each non-essential connection) operation time, line number/location, air pressure (at receiver) hours/psig;
- Motor driven firewater pump operation time, hours;
- Auxiliary boiler status operation time, hours; and

The following water levels shall be recorded by DCS at the beginning and end of each Test:

- Steam Drum;
- Condensate hotwell;
- Deaerator storage tank;
- Condensate storage tank; and
- Distillate Tank.

## **7. Test Procedures**

### **7.1 Operating Conditions**

In general, the Plant shall be operated under normal steady state conditions as set out in 5.5.1 with the following exceptions:

#### **7.1.1 Auxiliary Power**

Any additional or abnormal auxiliary loads to normal steady state operation will be identified and used to adjustment the net electrical output.

There should be no use of firewater pumps or the auxiliary boiler during the Test. If during the Test the use of any of these is unavoidable, adjustments shall be made to the net electrical output.

#### **7.1.2 Auxiliary Fuel**

The Test shall be performed without auxiliary fuel. If wet coal conditions require the use of auxiliary fuel a delay in the Test shall be considered. If a delay is not possible, the auxiliary fuel heat input shall be measured and accounted for in the calculations.

#### **7.1.3 Boiler Blowdown**

Continuous boiler blowdown shall be isolated for the Test.



#### **7.1.4 Sootblowing**

Sootblowing shall end at least 1 hour prior to the start of any Test and shall not occur during any Test.

#### **7.1.5 Steam Coil Air Heaters**

Steam coil air heaters shall be isolated unless required for air heater cold end average temperature protection. If not isolated, determination of weighted air inlet temperature shall be incorporated into the calculations.

#### **7.2 Interruptions**

Any time period during the Test during which a test interruption occurs that is beyond the control of Plant O&M Contractor shall be excluded from the test period for test data analysis. Interruptions shall be governed by the requirements for acceptable testing per the ASME PTC. Subject to the provisions of this Appendix K, any test that does not meet the requirements of the ASME PTC referenced in this Appendix K the Test shall be considered invalid. Types of interruptions excluded from the Test period shall include interruptions caused by force majeure, test instrumentation malfunction, unavailability of design fuel or other materials, problems in disposing of discharge, materials, and operating and dispatching decisions and other causes outside Plant O&M Contractor's control.

#### **7.3 Number of Tests**

There shall be two 4-hour tests (net of test interruptions) performed using an uncertainty band of  $\pm 4\%$ .

#### **7.4 Sampling**

A series of representative coal samples shall be taken by the Plant's automatic coal sampler at least 24 hours prior to the start of the heat rate test. However, if the automatic coal sampler is not available prior to or at the time of the Test, coal and ash sample collection frequency will be in accordance with the Table 7.4.

Each coal sample collected shall be placed in a container with a sealable lid to retain moisture until the sample can be mixed and divided. Each sample, at a time convenient to all parties, shall be mixed and separated in a manner agreeable to all involved parties. After mixing, the sample shall be divided into at least three (3) triplicates samples, one of which shall be sent to an independent laboratory, the second of which shall be analyzed at the Plant site laboratory and the third of which shall be kept at the Plant site. This third sample shall serve as back up sample in the event that a problem should arise with either of the first two coal samples.





**Table 7.4 Coal and Ash Sample Collection Frequency and Control**

| Material   | Location                   | Equipment Type and Quantity | Frequency | Remarks                                              |
|------------|----------------------------|-----------------------------|-----------|------------------------------------------------------|
| Coal       | Silo Poke Hole @ each silo | Sampler<br>1 Quart each     | 30 min.   |                                                      |
| Bottom Ash | Drag chain conveyor        | Sampler<br>1 Quart each     | 30 min.   | Use hot material gloves and boots                    |
| Fly Ash    | ESP Hoppers                | Sampler<br>1 Quart each     | 30 min.   | Use hot material gloves and boots and eye protection |

### 7.5 Fuel Lab Analysis

Each coal sample submitted to the independent laboratory and the Plant site laboratory shall be analyzed for moisture, high heating value, hydrogen, oxygen, nitrogen, sulfur, chlorine, ash content, grindability and ash fusion temperature in accordance with the applicable ASTM methods.

### 7.6 Residue Lab Analysis

7.6.1 Each bottom ash sample, at a time convenient to all parties, shall be mixed and separated in a manner agreeable to all involved parties. After mixing, the sample shall be divided into at least two (2) duplicates samples, one of which shall be sent to the independent laboratory and the other of which shall be analyzed at the Plant site laboratory. Each sample shall be analyzed for unburned combustibles in accordance with the applicable ASTM methods.

7.6.2 Each bottom and fly ash sample, at a time convenient to all parties, shall be mixed and separated in a manner agreeable to all involved parties. After mixing, the sample shall be divided into at least two (2) duplicates samples one of which shall be sent to the independent laboratory and the other of which shall be analyzed at the Plant site laboratory. Each shall be analyzed for unburned combustibles in accordance with the applicable ASTM methods.

7.6.3 Upon completion of the tests, the Test Director shall review all test data and determine if the requirements set forth herein have been met. If additional data is required, collection of the data shall be continued. When it is determined by the Test Director that the requirements have been met, the Test Director shall call for the end of data collection and gather all data sheets for analysis and review.

## 7.7 Data and Report Transmittal

Power Supplier shall cooperate, and procure cooperation by the O&M Contractor for transmittal of data to the Independent Engineer in furtherance of completion of the Net Plant Heat Rate Test Certificate contemplated for purposes of the Commercial Operations Date in the Agreement.

## 8. Data Analysis and Calculations

The Net Plant Heat Rate shall be calculated in accordance with ASME PTC 6S, 4.1, and PM as specified herein.

Corrected Net Plant Heat Rate, HRcorr in Btu/kWh, shall be calculated as the corrected thermal heat input from fuel, Qcorr in Btu/hr, divided by the corrected net plant power, Pcorr in kW.

$$\text{HRcorr (Btu/kWh)} = \frac{\text{Qcorr (Btu/hr)}}{\text{Pcorr (kW)}} \times \text{heat rate corrections}$$

Since:

$$\text{Qcorr} = \text{Qmeas} \pm \text{corrections}$$

and

$$\text{Pcorr} = \text{Pmeas} \pm \text{corrections}$$

$$\text{HRcorr (Btu/kWh)} = \frac{\{\text{Qmeas (Btu/hr)} + \text{corrections}\}}{\{\text{Pmeas (kW)} \pm \text{corrections}\}} \times \text{heat rate corrections}$$

Corrections specific to this contract may include:

$\Sigma \Delta_i$  - additive corrections for P (consisting of power factor correction and adjustments on additional auxiliary loads.

$\Sigma \omega_i$  - additive corrections for Q (none, i.e. = 0)

$\Pi \alpha_j$  - multiplicative corrections for P (seawater temp. and desal. load)

$\Pi \beta_j$  - multiplicative corrections for Q (not used)

$\Pi f_j$  - multiplicative corrections for HR (not used)

The existing correction curves for seawater temperature and desalination load require that the multiplicative power corrections,  $\Pi \alpha_j$ , be applied to the measured generator gross power, before the net power,  $P_{meas}$ , is calculated.

Therefore,

$P_{meas} = P_{corrected, \text{ generator}} - P_{measured, \text{ aux}} - P_{transformer \text{ losses}} - P_{line \text{ losses}}$

And creating the new equation,

$P_{corrected, \text{ generator}} = P_{measured, \text{ generator}} \times \Pi \alpha_j$

So that becomes,

$P_{meas} = \{P_{measured, \text{ generator}} \times \Pi \alpha_j\} - P_{measured, \text{ aux}} - P_{transformer \text{ losses}} - P_{line \text{ losses}}$

Note, this is the reason why  $P_{meas}$  cannot be the directly measured net power.

Since,

- $P_{measured, \text{ aux}}$  is calculated using measured gross and measured net MW,  $P_{transformer \text{ losses}}$  are inherently included in  $P_{measured, \text{ aux}}$
- $P_{measured, \text{ aux}} = P_{measured, \text{ generator}} - P_{measured \text{ net}}$
- $P_{line \text{ losses}}$  are considered negligible
- There are no additive or multiplicative corrections to  $Q_{ro}$ , i.e.  $\Sigma \omega_i = 0$  and  $\Pi \beta_j = 0$

There shall be two 4-hour tests performed. Using an uncertainty band of  $\pm 4\%$ , the test results shall be evaluated in accordance with the test plan developed by the O&M Contractor for approval by the Power Supplier.

## 9. References

- 9.1 ASME PTC 6S "Procedures for Routine Performance tests of Steam Turbines"
- 9.2 ASME PTC PM "Performance Guidelines for Steam Power Plants"
- 9.3 ASME PTC 19.1 "Measurement Uncertainty"
- 9.4 ASME PTC 4.1 "Steam Generating Units"

ACKNOWLEDGMENT

REPUBLIC OF THE PHILIPPINES )  
PASIG CITY ) s.s.

BEFORE ME, a Notary Public for and in Pasig City, Philippines, this APR 20 2016, personally appeared the following individuals who presented to me their government issued ID and were identified by me through competent evidence of identity:

|                        | Competent Evidence of Identity | Date and Place Issued  |
|------------------------|--------------------------------|------------------------|
| Alfredo S. Panlilio    | Passport ID with No. EB5654502 | June 15, 2012/Manila   |
| Ronnie L. Aperoch      | Passport ID with No. EB9627487 | Nov. 20, 2013/Manila   |
| Luis Miguel O. Aboitiz | Passport ID with No. EC3582726 | March 4, 2015/NCR East |

all known to me and to me known to be the same persons who executed the foregoing instrument for and in behalf of their respective corporations, and they acknowledged before me that the same is their free and voluntary act and deed, as well as that of their respective corporations, and that they are duly authorized to sign, execute and deliver the same.

This instrument consists of 153 pages, including this page on which this Acknowledgment is written, and Appendices A to K, which are attached to this Power Supply Agreement, and all pages have been signed by the instrumental witnesses of the parties on each and every page hereof, and sealed with my notarial seal.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and the place first above-written.

Doc. No: 179 ;  
Page No: 37 ;  
Book No: IV ;  
Series of 2016.

  
ATTY. CARMEN GRACE S. RAMOS  
NOTARY PUBLIC  
Pasig, Pateros, Taguig & San Juan  
Issued on July 13, 2015 at Pasig City  
until December 31, 2016  
Roll No. 55945; IBP No. 1023723; 01/08/16; RSM Chapter  
PTR No. 1473409; 01/21/16; Pasig City  
7<sup>th</sup> Floor, Lopez Bldg., Ortigas Ave., Pasig City

Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

ANNEX " B "

IN THE MATTER OF THE  
APPLICATION FOR THE  
APPROVAL OF THE POWER  
SUPPLY AGREEMENT (PSA)  
BETWEEN MANILA ELECTRIC  
COMPANY (MERALCO) AND  
REDONDO PENINSULA  
ENERGY, INC. (RPE),

ERC CASE NO. 2016 - \_\_\_\_ RC

MANILA ELECTRIC COMPANY  
(MERALCO) AND REDONDO  
PENINSULA ENERGY, INC.  
(RPE),

*Applicants.*

X-----X

**JUDICIAL AFFIDAVIT OF CIPRINILO C. MENESES**

The following examination of witness Mr. Ciprinilo C. Meneses, of legal age, with office address at 4<sup>th</sup> Floor, Technical Services Building, MERALCO Compound, Ortigas Avenue, Pasig City, who is employed at the Manila Electric Company ("MERALCO") as Head of the Energy Sourcing Office, was conducted by Atty. Adrian Rex C. Dimalanta, counsel for Applicant MERALCO, at the 7<sup>th</sup> Floor, Lopez Building, Ortigas Avenue, Pasig City, this 27<sup>th</sup> day of April 2016.

The testimony of Mr. Ciprinilo C. Meneses is being offered to show and prove:

1. The existence and details of the Power Supply Agreement ("PSA") executed between MERALCO and Redondo Peninsula Energy, Inc. ("RPE");
2. The necessity for the approval of the PSA to allow MERALCO to meet customer demand requirements and to afford MERALCO's customers the full benefits thereof;

3. The reasonableness and fairness of the provisions of the PSA, including the contract price thereunder;
4. Identification of documents in the course of the hearing; and
5. Other matters relevant to the Joint Application.

I, **CIPRINILO C. MENESES**, Filipino, of legal age, married, with office address at 4<sup>th</sup> Floor, Technical Services Building, MERALCO Compound, Ortigas Avenue, Pasig City, after being sworn in in accordance with law, hereby depose and state:

**QUESTION 1:** What are your educational and professional qualifications?

**ANSWER 1:** I have obtained a Bachelor's degree in Electrical Engineering and in Computer Engineering from the Mapua Institute of Technology and a Master's degree in Electrical Engineering from the University of the Philippines-Diliman. Also, I am a Registered Electrical Engineer.

**Q2:** Where are you presently employed?

**A2:** At present, I am employed at the Manila Electric Company ("MERALCO") as Head of the Energy Sourcing Office.

**Q3:** Since when have you been employed at MERALCO?

**A3:** I have been employed at MERALCO since 5 May 1982. On 20 January 2011, I became the Head of the Energy Sourcing Office.

**Q4:** What are some of your duties and responsibilities as the Head of the Energy Sourcing Office?

**A4:** My duties and responsibilities include, among others, planning for the sourcing of MERALCO's capacity and energy requirements, managing MERALCO's energy sourcing operations, overseeing the energy accounting and power supplier bill validations, and participating in the negotiations for power supply agreements and contracts.

**Q5:** Are you familiar with the case entitled: *"In the Matter of the Application for the Approval of the Power Supply Agreement (PSA) between Manila Electric Company (MERALCO) and Redondo Peninsula Energy, Inc. (RPE), with Motion for Confidential Treatment of Information"* jointly filed by Applicants MERALCO and RPE? If so, why?

**A5:** Yes, I am familiar with the same as I was directly involved in the preparation of the Joint Application and its Annexes, for submission to the Energy Regulatory Commission (“ERC”) for approval. Also, as a member of the power supply agreement working team of MERALCO, I am cognizant of the Power Supply Agreement (“PSA”) that was executed between MERALCO and RPE.

**Q6:** For what purpose is your Judicial Affidavit being taken?

**A6:** My Judicial Affidavit is being taken in support of the aforesaid Joint Application for the Approval of the PSA between MERALCO and RPE.

**Q7:** What are the salient provisions of the PSA?

**A7:** The salient provisions of the PSA are as follows:

## **“ARTICLE 2 PURPOSE; TERM**

xxx

### **Section 2.2 Term of Agreement**

2.2.1 This Agreement shall become effective upon the satisfaction (or the waiver by the relevant Party) of the conditions set out in Section 3.1 (the “**Effective Date**”).

2.2.2 The term of this Agreement (the “**Term**”) shall commence on the Effective Date and shall expire on the date falling twenty (20) years after the Operations Effective Date xxx.

xxx

## **ARTICLE 3 EFFECTIVE DATE, COMMENCEMENT DATE AND COMMERCIAL OPERATIONS DATE**

### **Section 3.1 Effective Date**

3.1.1 The Effective Date shall be the date that the following conditions shall have been satisfied or waived by the relevant Party, as certified by Power Supplier and Meralco xxx.

xxx

### **Section 3.2 Commencement Date**



3.2.1 The “**Commencement Date**” shall occur upon the satisfaction of the conditions below;

- (a) the conditions set out in Section 3.1 have been fulfilled;
- (b) each Party has delivered to the other Party a certification dated no earlier than two (2) Days prior to the proposed Commencement Date to the effect that its representations and warranties contained herein shall be true and correct in all material respects on and as of the Commencement Date;
- (c) on or before the Longstop Date, (i) the ERC shall have approved in the ERC Final Approval this Agreement, including the pricing structure as set out herein (or as otherwise acceptable to Power Supplier), and (ii) the Acceptance Date has occurred; and
- (d) Financial Close or NTP Issuance shall have occurred within the period contemplated under Section 3.2.2.

Power Supplier shall deliver written notice to Meralco of the satisfaction of these conditions and Meralco shall confirm in writing the occurrence of the Commencement Date.

3.2.2 Power Supplier covenants to achieve Financial Close or NTP Issuance within ninety (90) Days from the Acceptance Date (the “**Required Financial Completion Date**”).

xxx

### **Section 3.3 Operations Effective Date**

3.3.1 Subject to the occurrence of the Commencement Date, Operations Effective Date shall occur on the date that is forty-four (44) months from the Commencement Date. From and after the Operations Effective Date, the obligations of Power Supplier and Meralco under this Agreement with respect to the sale and purchase of Contract Capacity and Associated Energy shall become effective.

3.3.2 If, at any time after the occurrence of the Operations Effective Date, Power Supplier fails to supply Meralco with Contract Capacity and Associated Energy, Meralco shall be entitled to procure Replacement Power from the WESM and Power Supplier shall be liable to pay Meralco the amount equivalent to the difference between (i) the WESM cost of the Replacement Power and (ii) the amount Meralco would have paid for the Replacement Power had it been paid at the Price (the “**WESM**”).

**Differential**”). For the avoidance of doubt, if the WESM Differential is a negative number, Meralco shall have no liability whatsoever to Power Supplier.

- 3.3.3 After Meralco receives the invoice from the WESM that includes the WESM Differential, Meralco shall be entitled to invoice Power Supplier for payment of the WESM Differential. Power Supplier shall pay the WESM Differential within five (5) Days from receipt of such invoice.
- 3.3.4 In the event Power Supplier fails to pay Meralco the WESM Differential within the period stated in Section 3.3.3, Meralco shall be entitled to draw on the Performance Security, subject to the obligation of Power Supplier to replenish the Performance Security in accordance with Section 4.5.
- 3.3.5 In the event that Power Supplier fails to supply Contract Capacity and Associated Energy to Meralco for sixty (60) Days, Meralco shall have the right, by written notice to Power Supplier, to terminate this Agreement. In case of such termination, Meralco shall have the right to forfeit as liquidated damages the amount of the Performance Security and to draw on the Performance Security for the settlement of such liquidated damages.

#### **Section 3.4 Commercial Operations Date and Scheduled Commercial Operations Date**

- 3.4.1 The “**Commercial Operations Date**” shall occur upon delivery by Power Supplier of the documents enumerated below, in each case, in the form and substance satisfactory to Meralco:
  - (a) Capacity Test Certificate xxx;
  - (b) a Net Plant Heat Rate Test Certificate xxx;
  - (c) all permits, licenses, authorizations and other approvals from all Government Authorities and third parties needed for the operation of the Plant and the supply of electricity by the Power Supplier to Meralco xxx;
  - (d) a Commercial Operations Date Certificate; and
  - (e) certification by Power Supplier’s insurance advisor or broker that the insurances required for the Plant under this Agreement relevant for at least the first Contract Year have been obtained.

xxx

### **Section 3.5 Early Occurrence of the Commercial Operations Date**

- 3.5.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Operations Effective Date ("Early Commercial Operations Date"), Power Supplier shall promptly deliver to Meralco written notice (the "Early COD Notice") of such anticipated Early Commercial Operations Date, indicating the anticipated date thereof, at least three (3) months prior to the then anticipated date of the Early Commercial Operations Date.
- 3.5.2 Upon receipt of such Early COD Notice, Meralco shall, by written notice to Power Supplier, choose between the following options:
- (a) Consider that the Operations Effective Date shall occur on the Early Commercial Operations Date or on such other date as the Parties may agree; or
  - (b) Elect to have Power Supplier deliver, on a non-firm basis during the Interim Supply Period and until the occurrence of the Operations Effective Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

xxx

## **ARTICLE 6 SALE AND PURCHASE OF CONTRACT CAPACITY AND ASSOCIATED ENERGY**

### **Section 6.1 Sale and Purchase of Power**

- 6.1.1 Subject to the terms and conditions of this Agreement, from the Operations Effective Date until the expiration of the Term, Power Supplier shall:
- (a) make available to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Contract Capacity of the Plant; and
  - (b) sell and Deliver to Meralco, and Meralco shall purchase from Power Supplier, at the Price determined in accordance with Appendix E, the Associated Energy, to the extent of Meralco's relevant day-ahead nominations as provided in Appendix H;

provided that, Power Supplier may make available Contract Capacity and Deliver Associated Energy to Meralco from other

sources, including the WESM, at the Price; and any such Associated Energy Delivered from such other sources shall be deemed Delivered by Power Supplier by declaration made from the Plant.

The Dispatch of Contract Capacity and Associated Energy shall meet the requirements set out in Appendix B.

- 6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent, sell, divert, grant, transfer, dedicate, reserve or assign all or any portion of the Contract Capacity and Associated Energy to any Person other than Meralco.
- 6.1.3 The supply of Contract Capacity and Associated Energy by Power Supplier to Meralco shall be in accordance with the WESM Rules. Each Party shall, during the Term, always keep and maintain its registration as a Direct WESM Member.
- 6.1.4 Power Supplier shall source its supply for Meralco from the Plant except during (i) the Interim Supply Period; (ii) Outages; (iii) any curtailment due to Dispatch Instructions; (iv) ramping limitations and (v) system frequency fluctuations.

xxx

## **ARTICLE 9 OUTAGES**

### **Section 9.1 Scheduled Outage and Major Maintenance Outage Allowances**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages not to exceed the Full Load Equivalent Scheduled Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which times reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Scheduled Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Scheduled Outage Allowance Days.

Power Supplier shall be entitled to the Full Load Equivalent Major Maintenance Outage Allowance Days to undertake major repair, overhaul and maintenance of the Plant in accordance with the

technical requirements of the Plant; provided that, it shall, in no case, be availed of more frequently than once every four (4) years; and provided further, that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after the occurrence of the Commercial Operations Date.

## **Section 9.2 Forced Outage Allowance**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Forced Outages not to exceed the Full Load Equivalent Forced Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which time reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Forced Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Forced Outage Allowance Days.

## **Section 9.3 Replacement Power**

- 9.3.1 During outages within the Full Load Equivalent Forced Outage Allowance Days, Full Load Equivalent Scheduled Outage Allowance Days and the Full Load Equivalent Major Maintenance Outage Allowance Days, Power Supplier shall not be required to supply Meralco with Replacement Power. In such circumstances, Meralco, at its own cost, shall source the Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.
- 9.3.2 During any period in which an Event of Force Majeure affects Power Supplier or Meralco, Meralco shall procure its own Replacement Power from the WESM to the extent supply or offtake is so affected.
- 9.3.3 During any period of Scheduled Outage for which unutilized Full Load Equivalent Scheduled Outage Allowance Days is not available, or Major Maintenance Outage for which unutilized Full Load Equivalent Major Maintenance Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E. During any period of Forced Outage for which unutilized Full Load Equivalent Forced Outage

Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier and delivered to Meralco under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E.

xxx

## **ARTICLE 10**

### **ASSIGNMENT OR TRANSFER OF CONTRACT CAPACITY**

#### **Section 10.1 Implementation of Open Access and Retail Competition or Reduction in Demand of Captive Customers**

With the implementation of Open Access and Retail Competition in phases in accordance with the guidelines issued by the ERC or in relation to any reduction in demand of Meralco's captive customers, the amount of Contract Capacity may be adjusted in accordance with the terms hereof.

#### **Section 10.2 Notification of Reduction in Contract Capacity**

In respect of the start of each phase under Open Access and Retail Competition or in case of any reduction in demand of Meralco's captive customers, Meralco shall deliver to Power Supplier written notice specifying the reduced amount of Contract Capacity under this Agreement resulting from transfers made in accordance with Section 10.3.

#### **Section 10.3 Assignment or Transfer of Contract Capacity Due to Open Access and Retail Competition or Reduction in Demand of Captive Customers**

- 10.3.1 Meralco shall be entitled to assign, transfer, designate, delegate or allocate (collectively in this context, "**Transfer**") its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to any of its business segments or its Retail Electricity Supplier ("**RES**") Affiliate, without the prior consent of the Power Supplier. In the event that Meralco has two or more RES Affiliates, Power Supplier shall have the option to choose the RES Affiliate to which Meralco shall Transfer its rights and obligations, which option shall be communicated to Meralco within five (5) Days from receipt of the Transfer Notice (defined below).
- 10.3.2 Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity that is no

longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to (i) any of its Affiliates or (ii) to any other Person, subject to the consent of Power Supplier, which consent shall not be unreasonably withheld delayed or conditioned, it being understood that withholding consent would not be considered unreasonable if the proposed Transfer would be contrary to the reasonable requirements of Finance Parties under the Finance Documents, as evidenced by a written confirmation by the relevant Finance Parties. Power Supplier shall exert reasonable efforts to (i) procure that only the consent of Finance Parties representing no more than seventy-five percent (75%) of the debt plus undrawn commitments shall be required for a Transfer under the Finance Documents; and (ii) upon written notice being given by Meralco, procure such consent for the Transfer. Meralco shall endeavor to cooperate with Power Supplier by providing documents and information in relation to the Transfer as may be reasonably required by the Finance Parties.

xxx

## **ARTICLE 11 BILLING AND PAYMENT**

xxx

### **Section 11.2 Payments**

- 11.2.1 Meralco shall pay the entire amount indicated in the Final Invoice (subject to Appendix I) when due and payable, provided that Meralco shall not be required to make payment on any Invoice that is manifestly in error, apparently invalid or not in the form or substance contemplated by this Agreement until the same has been corrected following prompt notice by Meralco to Power Supplier of such error, invalidity or absence of proper form or substance.

xxx

## **ARTICLE 12 TAXES, FEES AND COSTS**

xxx

### **Section 12.2 Charges Due to Change in Circumstances**

- 12.2.1 If, as a result of a Change in Circumstances, Meralco becomes liable to pay any new charges, fees, taxes, duties, assessments or other similar amounts ("**New Charges**"), or any increase in

existing charges, fees, taxes, duties, assessments or other similar amounts ("**Increased Charges**") become payable with respect to this Agreement, the New Charges or Increased Charges shall form part of the price that Meralco will charge to its customers.

12.2.2 In the event that, as a result of a Change in Circumstances and pursuant to a corresponding order of the ERC or any relevant Government Instrumentality:

- (a) Meralco is prevented from making a timely pass through to its customers of any charges under this Agreement as approved by the ERC in the ERC Final Approval as accepted by Power Supplier (such amounts referred to hereinafter as "**Disallowed Pass-Through Amounts**"); or
- (b) any portion of the Price that has been paid to Power Supplier is required to be refunded to Meralco or Meralco's customers in connection with the ERC Application or any petition, claim, case, proceeding or other action involving any of the Parties brought before any judicial, administrative or quasi-judicial body (such portion of the Price referred to hereinafter as "**Refundable Amounts**"),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement to restore Meralco's commercial position prior to such Change in Circumstances, including an adjustment of the Price; provided that in the case of Section 12.2.2(b), Power Supplier shall refund all Refundable Amounts to Meralco or Meralco's customers in the manner and within the period as required by the ERC or any other relevant Government Instrumentality (as applicable). If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the provisions of Section 18.6.6(a) will apply.

12.2.3 If as a result of a Change in Circumstances affecting Power Supplier, Power Supplier becomes liable to pay any New Charges or any Increased Charges with respect to this Agreement, or Power Supplier is no longer able to require payment from Meralco for Disallowed Pass-Through Amounts, or Power Supplier is required to refund Refundable Amounts, or a Change in Circumstances materially increases the operating costs or capital expenditures associated with the Plant or materially and adversely affects its performance of its obligations under this Agreement, adversely affects the sale by Power Supplier of Contract Capacity and Associated Energy in accordance with this Agreement, makes the Power Supplier's administration or operational aspects of such performance



materially more burdensome (whether made at the direction of any Governmental Instrumentality or otherwise) or causes serious damage to, or materially and adversely affects the financial condition of Power Supplier, Power Supplier shall send a notice to Meralco of the occurrence of such Change in Circumstances (**"Notice of Change in Circumstances"**) together with an analysis of the cost impact of such Change in Circumstances and Meralco shall file the necessary application with the ERC for the adjustment of the Price (**"Application for Price Adjustment"**) within thirty (30) Days from receipt of the Notice of Change in Circumstances; provided that, Meralco shall not be liable to pay any adjustment in the Price from the time the Change in Circumstances becomes effective until the ERC approves the Application for Price Adjustment (**"Interim Period"**); and provided, further, that New Charges or Increased Charges for which the Power Supplier sends a Notice of Change in Circumstances in accordance with this Section 12.2.3 shall not include charges, fees, taxes, duties or other similar amounts relating to (i) taxes on the income of Power Supplier, (ii) taxes on the real property owned, held by or in possession of Power Supplier, and (iii) business taxes on the operations of Power Supplier.

12.2.4 In the event that:

- (a) Meralco is unable to file an Application for Price Adjustment within thirty (30) Days from receipt of the Notice of Change in Circumstances, or
- (b) the ERC denies, in whole or in part, the Application for Price Adjustment, or
- (c) if no order is issued granting the Application for Price Adjustment within sixteen (16) months from receipt of the Notice of Change in Circumstances, or
- (d) the total amount of unreimbursed New Charges, Increased Charges, Disallowed Pass-Through Amounts that Power Supplier is unable to collect from Meralco, and the Refundable Amounts actually refunded by Power Supplier, accumulated during the Interim Periods for all Change in Circumstances events occurring for the entire Term (**"Unreimbursed New or Increased Charges and Refundable Amounts"**) exceeds the equivalent of two percent (2%) of the Capacity Payments for one (1) Contract Year (**"Threshold Level 1"**),

the Parties shall enter into good faith negotiations to agree on a satisfactory solution regarding the amendment of this Agreement

to restore Power Supplier's commercial position prior to such Change in Circumstance, including an adjustment of the Price. If the Parties fail to reach a mutually satisfactory resolution within sixty (60) Days from the commencement of negotiations, the Power Supplier shall be entitled to terminate this Agreement in accordance with the provisions of Section 18.6.6(b).

xxx

## **ARTICLE 14 COVENANTS**

### **Section 14.1 ERC Application**

- 14.1.1 Within five (5) Business Days after receipt from Power Supplier of the documents set forth in Part 3 of Appendix C (or such other period agreed upon by the Parties), the Parties shall jointly file with the ERC the necessary application for the approval of this Agreement ("**ERC Application**") and shall exert best efforts to obtain such approval as promptly as practicable following the submission of the ERC Application and to allow for the issuance of the ERC Final Approval and occurrence of the Acceptance Date on or before the Longstop Date.

xxx

### **Section 14.2 ERC Approval**

- 14.2.1 Subject to the non-occurrence of the Longstop Date, Power Supplier shall immediately inform Meralco of its receipt of the ERC Final Approval by providing proof thereof. Power Supplier shall have ten (10) Days from the date of such receipt of the ERC Final Approval to notify Meralco in writing that (i) it accepts such ERC Final Approval or (ii) it does not accept the ERC Final Approval, stating the grounds for non-acceptance.
- 14.2.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration and Meralco shall cooperate and use reasonable efforts to support any such motion. Any order on a motion for reconsideration filed shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.2, and Power Supplier shall accept or reject such ERC Final Approval in accordance with Section 14.2.1 above.
- 14.2.3 If the ERC's Final Approval requires an amendment of any provision herein, including provisions on amounts payable under this Agreement, or subjects such approval to any material term or condition that is not acceptable to either Party, acting

reasonably ("**ERC Conditional Approval**"), the Parties shall cooperate in good faith to resolve the required ERC amendment or to address the material term or condition. The Parties may:

- (a) within fifteen (15) Days after the receipt of the ERC Conditional Approval, seek reconsideration of the ERC Conditional Approval; or
- (b) within sixty (60) Days after receipt of the ERC Conditional Approval, revise and file an amended Agreement incorporating changes (other than the Price) for approval by the ERC ("**Amended Agreement**");

provided that, if the motion for reconsideration is denied by the ERC, or the Amended Agreement is disapproved by the ERC, or approved by the ERC but still with any material term or condition that is not acceptable to either Party, acting reasonably, the Party adversely affected may terminate this Agreement upon sixty (60) Days prior written notice to the other Party in accordance with the provisions of Section 18.6.2.

xxx

## **ARTICLE 17 FORCE MAJEURE**

xxx

### **Section 17.5 Effect of Extended Force Majeure**

If any Event of Force Majeure prevents Power Supplier from making available the Contract Capacity or Delivering the Associated Energy or Meralco from accepting Contract Capacity or Associated Energy, in each case for a continuous period of more than one hundred eighty (180) Days, then either Party may upon written notice, require the other Party to meet as soon as practicable to reasonably discuss any modification, change or amendment of this Agreement under such reasonable terms, to the extent necessary to resolve the issues arising from the Event of Force Majeure and maintain, to the extent feasible, the rights and obligations of the Parties under this Agreement.

If the Parties do not reach such satisfactory solution prior to the end of such one hundred eighty (180) Day period, or such other time as may be agreed upon, either Party may terminate this Agreement in accordance with Section 18.6.5.

xxx

## **ARTICLE 18**

## EVENTS OF DEFAULT AND TERMINATION

xxx

### Section 18.3 Remedies in case of an Event of Default

- 18.3.1 During the Curing Period with respect to a Power Supplier Event of Default, Meralco shall, for each time Power Supplier fails to make Available the Contract Capacity or to Deliver the Associated Energy, be entitled to source energy from the WESM. In such case, and provided that Power Supplier is able to cure the Power Supplier Event of Default prior to the exercise by Meralco of its rights under Section 18.3.3, Power Supplier shall be liable to pay Meralco the difference between the amount Meralco actually paid for such energy and the Price. It is understood and agreed that, despite the cure of a Power Supplier Event of Default, Meralco's rights under Section 18.3.3 continues to subsist until Power Supplier makes full payment of its liability under this Section 18.3.1.
- 18.3.2 During the Curing Period with respect to a Meralco Event of Default, Power Supplier shall, from the time of Meralco's failure to accept or pay for the Contract Capacity and Associated Energy, be entitled to sell the Contract Capacity and Associated Energy to the WESM. In such case, and provided that Meralco is able to cure the Meralco Event of Default prior to the exercise by Power Supplier of its rights under Section 18.3.4, Meralco shall be liable to pay Power Supplier the difference between the amount Power Supplier actually received from such sale to the WESM and the Price. It is understood and agreed that, despite the cure of a Meralco Event of Default, Power Supplier's rights under Section 18.3.4 continues to subsist until Meralco makes full payment of its liability under this Section 18.3.2.

xxx"

A copy of the PSA, including its attachments, is attached to the Joint Application as Annex "A".

- Q8:** What is the contract capacity and associated energy contracted under the PSA?
- A8:** The PSA is for the purchase of up to 225 MW Contract Capacity and Associated Energy.

**Q9:** What is the effective rate under the PSA?

**A9:** Given a certain set of assumptions, the annual effective rate under the PSA is PhP3.8466 per kWh. A copy of the RPE PSA – Rate Impact is attached to the Joint Application as Annex “O”.

**Q10:** If approved, how much will be the simulated delivered price under the PSA?

**A10:** Given the assumptions provided in Annex “O”, the simulated delivered price under the PSA would result in the reduction of MERALCO’s generation charge by about PhP0.1327 per kWh.

**Q11:** Do you affirm and confirm the truthfulness and veracity of your answers to the questions asked?

**A11:** Yes.

**IN WITNESS WHEREOF**, I have hereunto affixed my signature this 27<sup>th</sup> day of April 2016, at Pasig City, Philippines.



**CIPRINILO C. MENESES**  
*Affiant*

### **ATTESTATION**

I, **ATTY. ADRIAN REX C. DIMALANTA**, of legal age, Filipino, with office address at 7<sup>th</sup> Floor, Lopez Building, MERALCO Compound, Ortigas Avenue, Pasig City attest to the following that:

1. I am the lawyer who conducted the examination of witness, Mr. Ciprinilo C. Meneses;

2. I have faithfully recorded or caused to be recorded the questions I asked and the answers given by the witness;

3. Neither I nor any other person coached the witness regarding his answers.

**IN WITNESS WHEREOF**, I have hereunto affixed my signature this 27<sup>th</sup> day of April 2016, at Pasig City, Philippines.



**ATTY. ADRIAN REX C. DIMALANTA**  
*Affiant*

**SUBSCRIBED AND SWORN TO** before me this 27<sup>th</sup> day of April 2016 by Engr. Ciprinilo C. Meneses and Atty. Adrian Rex C. Dimalanta exhibiting their SSS IDs with Nos. 03-6515286-8 and 34-0968670-5, respectively, as proof of their identities.

Doc. No.: 192 ;  
Page No.: 40 ;  
Book No.: IV ;  
Series of 2016.

  
ATTY. CARMEN GRACE S. RAMOS  
NOTARY PUBLIC

Pasig, Pateros, Taguig & San Juan  
Issued on July 13, 2015 at Pasig City  
until December 31, 2016  
Roll No. 55945; IBP No. 1023723; 01/08/16; RSM Chapter  
PTR No. 1473409; 01/21/16; Pasig City  
7<sup>th</sup> Floor, Lopez Bldg., Ortigas Ave., Pasig City

# SEC Express System

1604060190800166



ANNEX "C"

Recipient  
Maria Teresa Estrecho Ruiz

Company Name / Delivery Address  
MERALCO POWERGEN CORPORATION  
ORTIGAS AVE.  
8F ROCKWELL BUSINESS CENTER I  
PASIG CITY AND PATEROS, Metro Manila, Philippines  
0 C

Loc: PAG

Contact Information 09399369665  
6615700  
truiz@meralcopowergen.com

FOR O.R. INFORMATION

Payors Name MERALCO POWERGEN CORPORATION  
Company Address 8F ROCKWELL BUSINESS CENTER I, ORTIGAS AVE., BGY UGONG, PASIG CITY 1604  
TIN Number 214664682000  
Business Style PRIVATE

5 Documents

| Type                              | SEC Number  | Company Name                   | Copies | Authenticated | Pouch    | Form Type                         |
|-----------------------------------|-------------|--------------------------------|--------|---------------|----------|-----------------------------------|
| General Information Sheet (GIS)   | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 10 | GENERAL INFORMATION SHEET         |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 12 | AMENDED ARTICLES OF INCORPORATION |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 22 | AMENDED ARTICLES OF INCORPORATION |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 57 | AMENDED ARTICLES OF INCORPORATION |

197367



Combined  
Articles of  
Incorporation  
and By-Laws

CS200708532

REDONDO  
PENINSULA  
ENERGY,  
INC.

1 of 1

Yes

LP1 -  
35

ARTICLES OF  
INCORPORATION  
AND BY-LAWS

Thank you for using the SEC Express System.

Printed By: M.Payao





REPUBLIC OF THE PHILIPPINES  
**SECURITIES AND EXCHANGE COMMISSION**

SEC Building, EDSA, Greenhills,  
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS200708532

**CERTIFICATE OF FILING  
OF  
AMENDED ARTICLES OF INCORPORATION**

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the amended articles of incorporation of the

**REDONDO PENINSULA ENERGY, INC.**  
(Amending Articles III and VII thereof)

copy annexed, adopted on December 19, 2012 by majority vote of the Board of Directors and by the vote of the stockholders owning or representing at least two-thirds of the outstanding capital stock and certified under oath by the Secretary and a majority of the Board of Directors of the corporation was approved by the Commission on this date pursuant to the provision of Section 16 of the Corporation Code of the Philippines, Batas Pambansa Blg. 68, approved on May 1, 1980 and copies thereof are filed with the Commission.

Unless this corporation obtains or already has obtained the appropriate Secondary License from this Commission, this Certificate does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/broker/merchant, financing company, pre-need plan issuer, general agent in pre-need plans and time shares/club shares/ membership certificates issuers or selling agents thereof. Neither does Certificate constitute as permit to undertake activities for which other government agencies require a license or permit.

IN WITNESS WHEREOF, I have set my hand and caused the seal of this Commission to be affixed to this Certificate at Mandaluyong City, Metro Manila, Philippines, this 24th day of May, Twenty Thirteen.

Date: 6-4-2016 Time: 2:11:43 PM

  
FERDINAND B. SALES

Acting Director

www.sec.gov.ph

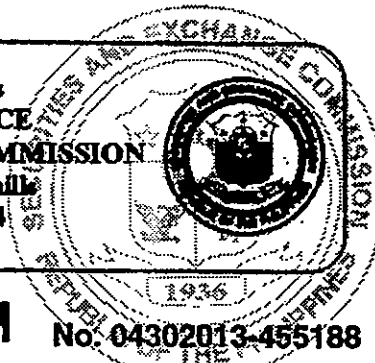
Company Registration and Monitoring Department

BA/ghlo

**CERTIFIED TRUE COPY**

Page 1 of 10 pages

Verified by: L. ALDAY Date Issued: APR 07 2016



26

**No. 04302013-455188**

| <b>DATE</b>                                                      | <b>RESPONSIBILITY CENTER<br/>(DEPARTMENT)</b> |                                                      |
|------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------|
| 04/30/2013                                                       | GRMD                                          |                                                      |
| <b>PAYOR:</b> REDONDO PENINSULA ENERGY, INC.<br>SBMA             |                                               |                                                      |
| NATURE OF COLLECTION                                             | ACCOUNT CODE                                  | AMOUNT                                               |
| LRF (A0823)                                                      | 131                                           | 39,210.00                                            |
| INCREASE/DECREASE CAPITAL STOCK                                  | 606                                           | 3,920,000.00                                         |
| AMENDED ARTICLES                                                 | 606                                           | 500.00                                               |
|                                                                  |                                               |                                                      |
|                                                                  |                                               |                                                      |
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|                                                                  |                                               |                                                      |
| <b>TOTAL AMOUNT TO BE PAID</b>                                   |                                               | Php 3,959,710.00                                     |
| <b>Assigned by:</b><br><b>BLESS</b>                              |                                               | OR#0893283 May 2, 2013 02:54P<br>Q8rbfan PHP 3,959.7 |
| <b>Machine Validation:</b><br>165 20130503-38<br>APX 20130503-39 |                                               |                                                      |

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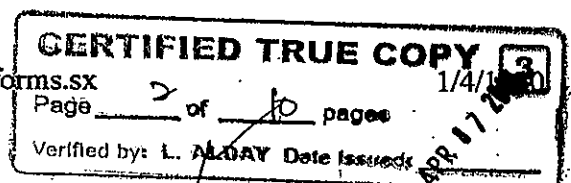
*[Signature]*

Date: 6-4-2016 Time: 2:11:45 PM

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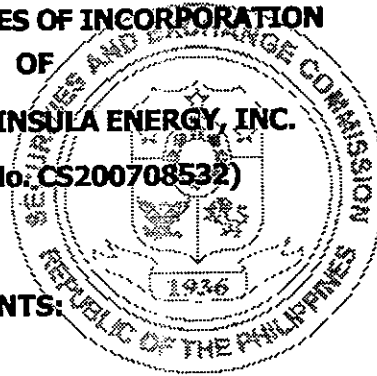
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**AMENDED ARTICLES OF INCORPORATION  
OF**

**REDONDO PENINSULA ENERGY, INC.**

**(SEC Reg. No. CS200708532)**



**KNOW ALL MEN BY THESE PRESENTS:**

The undersigned incorporators, all of legal age and majority of whom are residents of the Philippines, have this day voluntarily agreed to form a stock corporation under the laws of the laws of the Republic of the Philippines.

**THAT WE HEREBY CERTIFY:**

**FIRST:** The name of this corporation shall be:

**REDONDO PENINSULA ENERGY, INC.**

**SECOND:** That the purpose for which said corporation is formed are:

**PRIMARY PURPOSE**

To build, own and operate power plants in the Philippines to provide electric energy, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose. (Amendment duly approved by the Board of Directors of the Corporation on 19 September 2012 and the Shareholders of the Corporation on 19 September 2012.)<sup>1</sup>

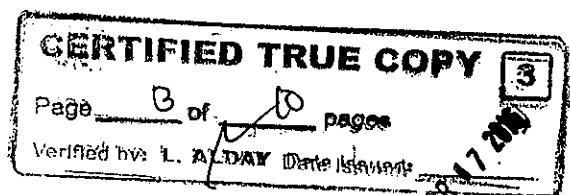
**SECONDARY PURPOSES**

That the corporation shall have all the express powers of a corporation as provided for under Section 36 of the Corporation Code of the Philippines. *Date: 6-4-2016 Time: 2:11:46 PM*

**THIRD:** That the place where the principal office of the corporation is to be established at:

*www.sec.gov.ph*

**Unit 310, The Venue, Rizal Hi-way, Subic Bay Industrial Park  
Phase I, Subic Bay Freeport Zone, 222 Philippines.\*** (\*As amended  
by the Board of Directors and ratified by the stockholders  
representing at least two-thirds (2/3) of the outstanding capital stock



of the Corporation at their meeting held on December 19, 2012)

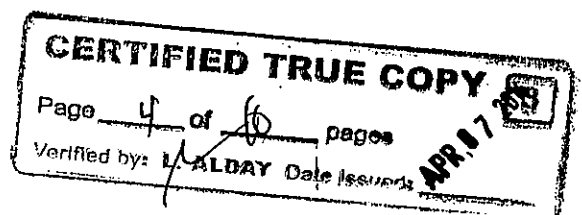
FOURTH: That the term for which the corporation is to exist is fifty (50) years from and the after the date of issuance of the certificate of incorporation.

FIFTH: That the names, nationalities, and residences of the incorporators, majority of whom are residents of the Philippines, are as follows:

| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                              |
|---------------------|--------------------|-------------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | #6 Lantana St. North<br>Town Homes Subd.,<br>Nasipit, Talamban, Cebu City     |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes,<br>58 McKinley Road, Makati<br>City                 |
| Benjamin Cariaso    | Filipino           | BF Homes Las Pinas                                                            |
| Hsu, Sung-Fou       | Filipino           | 6F 392 Rul Guang Road,<br>Neihu, Taipei, Taiwan, 114                          |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rul Guang Road,<br>Neihu, Taipei, Taiwan, 114                          |
| Cheng, Tsahn, Barn  | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi<br>Street, Legaspi<br>Village, Makati City |

SIXTH: That the number of directors of the corporation shall be Nine (9) and that the names, nationalities and residences of the first directors who are to serve until their successors are elected and qualified as provided by the by-laws are as follows (Amendment duly approved by the Board of Directors and Shareholders of the Corporation on April 14, 2011):

| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                          |
|---------------------|--------------------|---------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | #6 Lantana St. North<br>Town Homes Subd.,<br>Nasipit, Talamban, Cebu City |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes,<br>58 McKinley Road, Makati<br>City             |
| Benjamin Cariaso    | Filipino           | BF Homes Las Pinas                                                        |



|                    |           |                                                                               |
|--------------------|-----------|-------------------------------------------------------------------------------|
| Hsu, Sung-Fou      | Filipino  | 6F, 392 Rul Guang Road,<br>Neihu, Taipei, Taiwan, 114                         |
| Wu, Hong-Neng      | Taiwanese | 6F 392 Rul Guang Road,<br>Neihu, Taipei, Taiwan, 114                          |
| Cheng, Tsahn, Barn | Taiwanese | 6 <sup>th</sup> Floor, 140 Legaspi<br>Street, Legaspi<br>Village, Makati City |

SEVENTH: That the authorized capital stock of the corporation is **Two Billion Pesos (Php2,000,000,000.00)\*** in lawful money of the Philippines, divided into **Twenty Million (20,000,000)\*** shares with the par value of One Hundred Pesos (Php100.00) per share. (\*As amended by the Board of Directors and ratified by the stockholders representing at least two-thirds (2/3) of the outstanding capital stock of the Corporation at their meeting held on December 19, 2012)

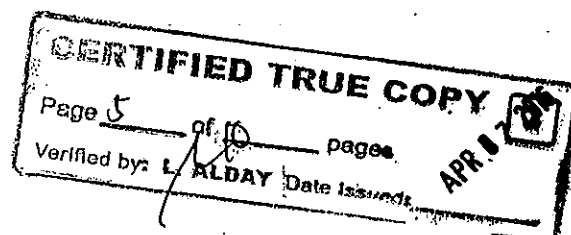
EIGHT: That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

| Name                                          | Nationality | Number of<br>Shares | Amount<br>Subscribed | Amount Paid<br>At Par |
|-----------------------------------------------|-------------|---------------------|----------------------|-----------------------|
| Aboitiz Power Corp.                           | Filipino    | 49,997              | Php4,999,700.00      | Php4,999,700.00       |
| Taiwan Cogeneration International Cooperation | Taiwanese   | 49,997              | Php4,999,700.00      | Php4,999,700.00       |
| Erramon                                       | Filipino    | 1                   | 100.00               | 100.00                |
| Aboitiz Luis Miguel                           | Filipino    | 1                   | 100.00               | 100.00                |
| Aboitiz Benjamin                              | Filipino    | 1                   | 100.00               | 100.00                |
| Cariaso                                       |             |                     |                      |                       |
| Hsu, Sung-Foy                                 | Taiwanese   | 1                   | 100.00               | 100.00                |
| Wu, Hong-Neng                                 | Taiwanese   | 1                   | 100.00               | 100.00                |
| Cheng, Tsahn-Rarn                             | Taiwanese   | 1                   | 100.00               | 100.00                |
| Total                                         |             | 100,000             | Php10,000,000.00     | Php10,000,000.00      |

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User Name: 5secexpressc

NINTH: That Luis Miguel Aboitiz has been elected by the subscribers as treasurer of the corporation to act as such until his successor is duly elected and qualified in accordance with the by-laws; and that as such



Treasurer, he has been authorized to received for and in the name and for the benefit of the corporation, ail subscriptions paid by the subscribers.

TENTH: No transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of the capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of the corporation and this restriction shall be indicated in the stock certificates issued by the corporation.

ELEVENTH: That the corporation manifests its willingness to change its corporate name in the event another person, firm or entity has acquired a prior right to use the said firm name or one deceptively or confusingly similar to it.

IN WITNESS WHEREOF, we have set our hands this 17<sup>th</sup> day of May 2007 at Makati City.

(SGD.) ERRAMON ABOITIZ

(SGD.) HSU, SUNG-IOU

(SGD.) LUIS MIGUEL ABOITIZ

(SGD.) WU, HONG-NENG

(SGD.) BENJAMIN CARIASO

(SGD.) CHENG, TSAHN-RARN

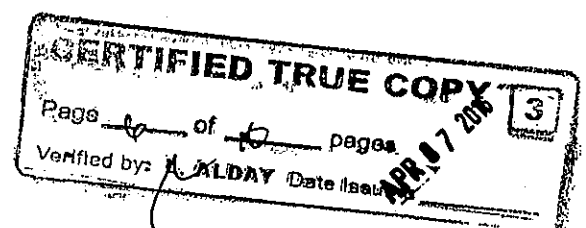
WITNESSES:

Date: 6-4-2016 Time: 2:11:50 PM

(SGD.) \_\_\_\_\_ (SGD.) \_\_\_\_\_

www.sec.gov.ph

User Name: 5secexpressc



**ACKNOWLEDGEMENT**

and for this

The seal of the Securities and Exchange Commission (SEC) of the Philippines is a circular emblem. It features a central shield with a sunburst at the top, a gear in the middle, and a wreath at the bottom. The shield is flanked by two stars. The outer ring of the seal contains the text "SECURITIES AND EXCHANGE COMMISSION" at the top and "REPUBLIC OF THE PHILIPPINES" at the bottom, separated by two stars. The year "1980" is inscribed at the bottom of the shield.

BEFORE ME, a Notary Public in and for \_\_\_\_\_ this \_\_\_\_\_ personally appeared:

| <u>Community Tax Certificate/</u> |                     |                              |
|-----------------------------------|---------------------|------------------------------|
| <u>Name</u>                       | <u>Passport No.</u> | <u>Date and Place Issued</u> |
| Erramon Aboitiz                   | 13823405            | 26 January 2006; Cebu City   |
| Luiz Miguel Aboitiz               | 08277564            | 27 January 2006; Cebu City   |
| Benjamin Cariaso                  | 14841368            | 27 January 2006; Las Piñas   |

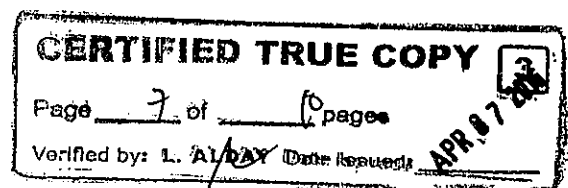
all known to me and to me known to be the same persons who executed the foregoing Articles of Incorporation and they acknowledged to me that the same is their free and voluntary act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

NOTARY PUBLIC

Date: 6-4-2016 Time: 2:11:51 PM

[Acknowledgement with respect to Messrs. Hsu, Wu and Cheng follows in a separate page]



REPUBLIC OF THE PHILIPPINES)  
CITY OF PASIG ) S.S.

REDONDO PENINSULA ENERGY, INC.  
SEC Reg. GS200708532

**DIRECTORS' CERTIFICATE**  
of  
**AMENDMENT OF ARTICLES OF INCORPORATION**

**WE**, the undersigned, being the Chairman, Corporate Secretary, and the majority of the Board of Directors of REDONDO PENINSULA ENERGY, INC. (the "Corporation"),

DO HEREBY CERTIFY THAT:

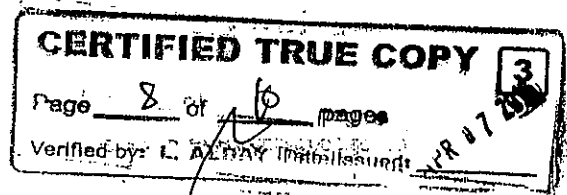
The Articles of Incorporation of the Corporation was amended by a majority of the directors and the vote of stockholders representing at least two-thirds (2/3) of the outstanding capital stock at their respective meetings held on **December 19, 2012**, at the 12<sup>th</sup> Floor Boardroom, Lopez Building, Ortigas Avenue, Pasig City, to reflect the (i) change in the principal office address of the Corporation from Administration Building, Argonaut Hi-Way corner Rizal Hi-way, Subic Bay Industrial Park Phase I, Subic Bay Freeport Zone, 222 Philippines to Unit 310, The Venue, Rizal Hi-way, Subic Bay Industrial Park Phase I, Subic Bay Freeport Zone, 222 Philippines and to amend Article Third of the Articles of Incorporation for this purpose; and (ii) increase in the authorized capital stock of the Corporation from Forty Million Pesos (P40,000,000.00) divided into Four Hundred Thousand (400,000) shares with a par value of One Hundred Pesos (P100.00) to Two Billion Pesos (P2,000,000,000.00) divided into Twenty Million (20,000,000) shares with a par value of One Hundred Pesos (P100.00) per share and to amend Article Seventh of the Articles of Incorporation for this purpose.

[SIGNATURE PAGE FOLLOWS]

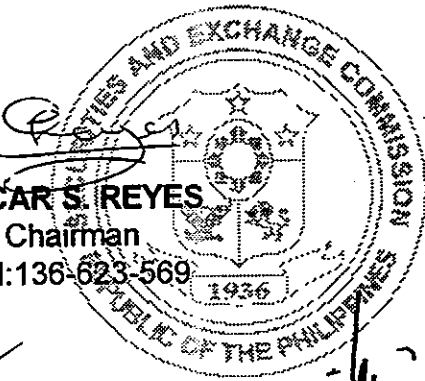
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User Name: 5secexpressc





  
**OSCAR S. REYES**  
Chairman  
TIN: 136-623-569

  
**AARON A. DOMINGO**  
Director  
TIN: 170-803-692

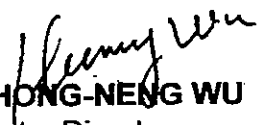
  
**ERRAMON I. ABOITIZ**  
Director  
TIN: 103-715-862

**ANTONIO R. MORAZA**  
Director  
TIN: 131-507-907

**BETTY C. SIY-YAP**  
Director  
TIN: 102-100-627

  
**SUNG-FOU HSU**  
Director  
Passport No.: 215052361  
TIN: 435-238-236

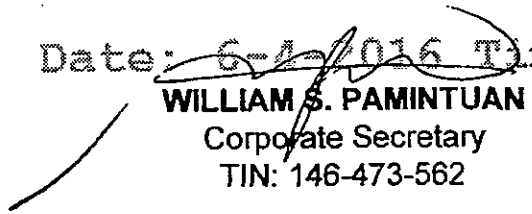
  
**JESUS P. FRANCISCO**  
Director  
TIN: 100-748-716

  
**HONG-NENG WU**  
Director  
Passport No. 102-100-627  
TIN: 435-238-573

**EMERLINDA R. ROMAN**  
Director  
TIN: 110-833-070 //

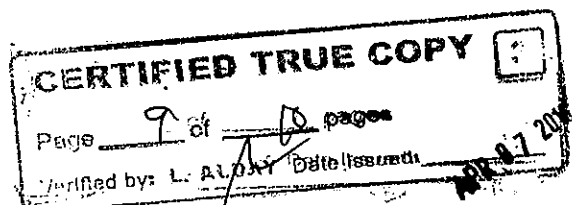
ATTESTED BY:

Date: 6-4-2016 Time: 2:11:55 PM

  
**WILLIAM S. PAMINTUAN**  
Corporate Secretary  
TIN: 146-473-562

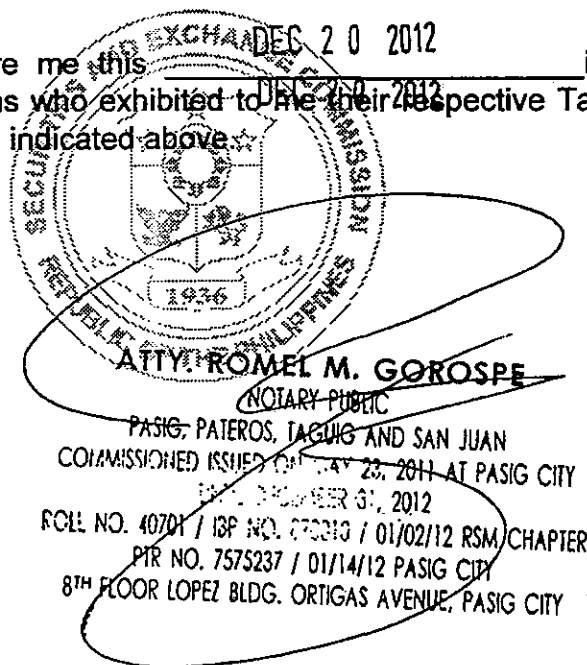
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User Name: 5secexpressc



**SUBSCRIBED AND SWORN** to before me this DEC 20 2012 in Pasig City, by the above-named persons who exhibited to me their respective Tax Identification Numbers and Passports as indicated above.

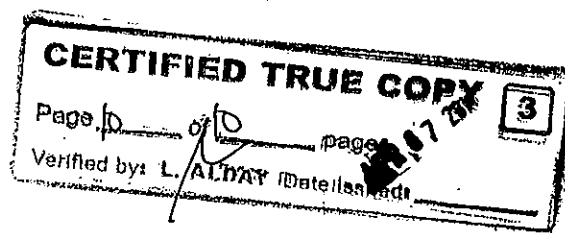
Doc. No. 92 ;  
Page No. 70 ;  
Book No. VI ;  
Series of 2012.



Date: 6-4-2016 Time: 2:11:56 PM

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# SEC Express System

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|                                 |                                                                                                                                                           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recipient                       | Maria Teresa Estrecho Ruiz                                                                                                                                |
| Company Name / Delivery Address | MERALCO POWERGEN CORPORATION<br>ORTIGAS AVE.<br>8F ROCKWELL BUSINESS CENTER I<br>PASIG CITY AND PATEROS, Metro Manila, Philippines<br>0 C<br><br>Loc: PAG |
| Contact Information             | 09399369665<br>6615700<br>truiz@meralcopowergen.com                                                                                                       |

FOR O.R. INFORMATION

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| Payors Name     | MERALCO POWERGEN CORPORATION                                            |
| Company Address | 8F ROCKWELL BUSINESS CENTER I, ORTIGAS AVE., BGY UGONG, PASIG CITY 1604 |
| TIN Number      | 214664682000                                                            |
| Business Style  | PRIVATE                                                                 |

## 5 Documents

|            | Type                              | SEC Number  | Company Name                   | Copies | Authenticated | Pouch    | Form Type                         |
|------------|-----------------------------------|-------------|--------------------------------|--------|---------------|----------|-----------------------------------|
|            | General Information Sheet (GIS)   | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 10 | GENERAL INFORMATION SHEET         |
|            | Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 12 | AMENDED ARTICLES OF INCORPORATION |
| 197363<br> | Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 22 | AMENDED ARTICLES OF INCORPORATION |
|            | Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 57 | AMENDED ARTICLES OF INCORPORATION |

|  |                                                         |             |                                         |        |     |             |                                             |
|--|---------------------------------------------------------|-------------|-----------------------------------------|--------|-----|-------------|---------------------------------------------|
|  | Combined<br>Articles of<br>Incorporation<br>and By-Laws | CS200708532 | REDONDO<br>PENINSULA<br>ENERGY,<br>INC. | 1 of 1 | Yes | LP1 -<br>35 | ARTICLES OF<br>INCORPORATION<br>AND BY-LAWS |
|--|---------------------------------------------------------|-------------|-----------------------------------------|--------|-----|-------------|---------------------------------------------|

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Printed By: M.Payao



REPUBLIC OF THE PHILIPPINES  
SECURITIES AND EXCHANGE COMMISSION

SEC Building, EDSA, Greenhills  
City of Mandaluyong, Metro Manila

COMPANY REG. NO.: CS200708532

CERTIFICATE OF FILING  
OF  
AMENDED ARTICLES OF INCORPORATION

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the amended articles of incorporation of the

**REDONDO PENINSULA ENERGY, INC.**  
(Amending Article II Primary Purpose thereof.)

copy annexed, adopted on September 19, 2012 by majority vote of the Board of Directors and by the vote of the stockholders owning or representing at least two-thirds of the outstanding capital stock, and certified under oath by the Corporate Secretary and a majority of the Board of Directors of the corporation was approved by the Commission on this date pursuant to the provision of Section 16 of the Corporation Code of the Philippines, Batas Pambansa Blg. 68, approved on May 1, 1980, and copies thereof are filed with the Commission.

Unless this corporation obtains or already has obtained the appropriate Secondary License from this Commission, this Certificate does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/broker/merchant, financing company and time shares/club shares/membership certificates issuers or selling agents thereof. Neither does this Certificate constitute as permit to undertake activities for which other government agencies require a license or permit.

IN WITNESS WHEREOF, I have set my hand and caused the seal of this Commission to be affixed to this Certificate at Mandaluyong City, Metro Manila, Philippines, this 15<sup>th</sup> day of November, Twenty Twelve.

Date: 6-4-2016 Time: 2:9:16 PM

GERARDO F. DEL ROSARIO  
Officer-In-Charge

Company Registration and Monitoring Department

www.sec.gov.ph

User Name: 5secexpres

RA/wheng

|                     |                                   |             |
|---------------------|-----------------------------------|-------------|
| CERTIFIED TRUE COPY |                                   | 3           |
| Page                | 1                                 | of 10 pages |
| Verified by:        | L. ALDAY Date Issued: APR 17 2016 |             |



**No. 11082012-440882**

|                                               |                                            |
|-----------------------------------------------|--------------------------------------------|
| DATE<br>11/08/2012                            | RESPONSIBILITY CENTER<br>(DEPARTMENT) GRMD |
| PAYOR: REDONDO PENINSULA ENERGY INC.<br>SUBIC |                                            |

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Php 510.00

АМИ

OR#0813345 Nov 8, 2012 10:22AM REC No: null

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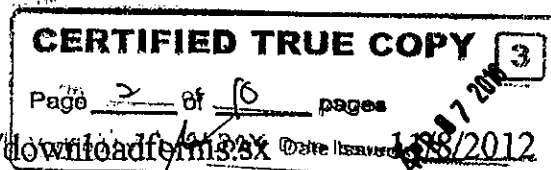
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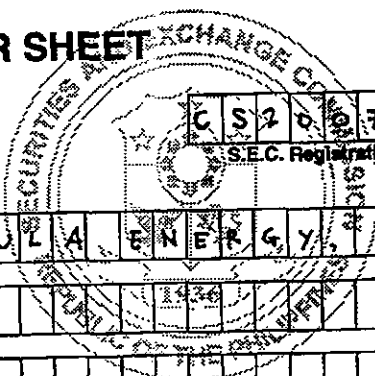
http://150.150.150.130:8686/secireport/epayment/downloadforms.aspx Date: 1/18/2012



Ms Cardante

11/8  
9/14/16

COVER SHEET



CS20078522  
S.E.C. Registration Number

REDONDO PENINSULA ENERGY, INC.

(Company's Full Name)

Administration Building, Subic

Bay Industrial Park Phase I

(Business address: No. Street City / Town / Province)

Alicia G. Brion

(047) 252-3230

Contact Person

Company Telephone Number

12

31

Month

Day

FORM TYPE

Month

Day

Fiscal Year

Annual Meeting

Secondary License Type, If Applicable

Dept. Requiring this Doc.

Amended Articles Number/Section

Total Amount of Borrowings

Total No. of Stockholders

Domestic

Foreign

Top be accomplished by SEC Personnel concerned

LCU

Date:

6-4-2016 Time: 2:9:18 PM

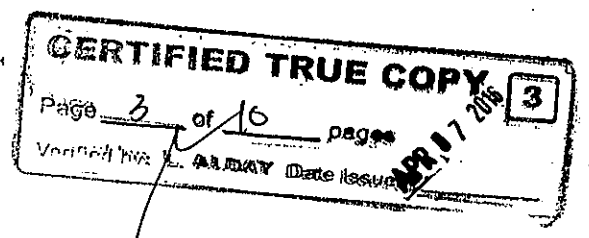
Cashier

STAMPS

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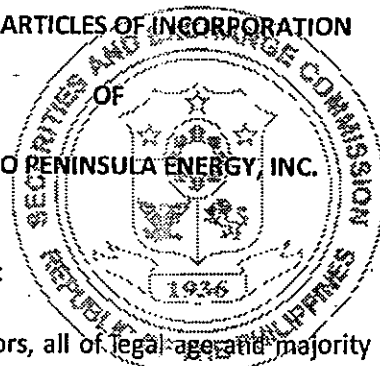
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User Name: 5secexpressd



AMENDED ARTICLES OF INCORPORATION

OF  
REDONDO PENINSULA ENERGY, INC.



KNOW ALL MEN BY THESE PRESENTS:

The undersigned incorporators, all of legal age and majority of whom are residents of the Philippines, have this day voluntarily agreed to form a stock corporation under the laws of the laws of the Republic of the Philippines.

THAT WE HEREBY CERTIFY:

FIRST: The name of this corporation shall be:

REDONDO PENINSULA ENERGY,  
INC.

SECOND: That the purpose for which said corporation is formed are:

PRIMARY PURPOSE

To build, own and operate power plants in the Philippines to provide electric energy, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose. (Amendment duly approved by the Board of Directors of the Corporation on 19 September 2012 and the Shareholders of the Corporation on 19 September 2012.)<sup>1</sup>

SECONDARY PURPOSES

That the corporation shall have all the express powers of a corporation as provided for under Section 36 of the Corporation Code of the Philippines.

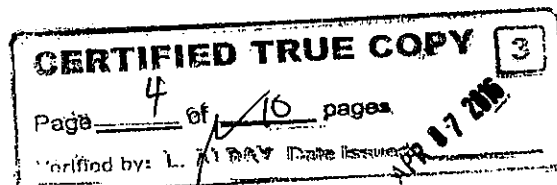
THIRD: That the place where the principal office of the corporation is to be established at:

Administration Building, Argonaut Hi-way corner Rizal Hi-way, Subic Bay Industrial Park Phase 1, Subic Bay Freeport Zone, 2222 Philippines.

FOURTH: That the term for which the corporation is to exist is fifty (50) years from and the after the date of issuance of the certificate of incorporation.

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FIFTH: That the names, nationalities, and residences of the incorporators, majority of whom are residents of the Philippines, are as follows:





| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                           |
|---------------------|--------------------|----------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | # 6 Lantana St. North Town Homes Subd.,<br>Nasipit, Talamban, Cebu City    |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes, 58 McKinley Road,<br>Makati City                 |
| Benjamin Cariaso    | Filipino           | BF Homes Las Pinas                                                         |
| Hsu, Sung-Fou       | Filipino           | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan,<br>114                       |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan,<br>114                       |
| Cheng, Tsahn, Rarn  | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street, Legaspi Village,<br>Makati City |

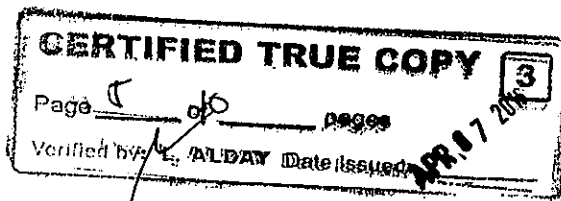
SIXTH: That the number of directors of the corporation shall be Nine (9) and that the names, nationalities and residences of the first directors who are to serve until their successors are elected and qualified as provided by the by-laws are as follows (Amendment duly approved by the Board of Directors and Shareholders of the Corporation on April 14, 2011):

| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                           |
|---------------------|--------------------|----------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | # 6 Lantana St. North Town Homes Subd.,<br>Nasipit, Talamban, Cebu City    |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes<br>58 McKinley Road, Makati City                  |
| Benjamin Cariaso    | Filipino           | 39 Phnom Penh BF Homes, Las Pinas                                          |
| Hsu, Sung-Fou       | Filipino           | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan,<br>114                       |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan,<br>114                       |
| Cheng, Tsahn, Ram   | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street, Legaspi Village,<br>Makati City |

SEVENTH: That the authorized capital stock of the corporation is Forty Million Pesos (Php 40,000,000.00) pesos in lawful money of the Philippines, divided into Four Hundred Thousand Shares (400,000) shares with the par value of One Hundred Pesos (Php100.00) pesos per share.

EIGHT: That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

| <u>Name</u>                                   | <u>Nationality</u> | <u>Number of<br/>Shares</u> | <u>Amount<br/>Subscribed</u> | <u>Amount Paid at<br/>Par</u> |
|-----------------------------------------------|--------------------|-----------------------------|------------------------------|-------------------------------|
| Aboitiz Power Corporation                     | Filipino           | 49,997                      | Php4,999,700.00              | Php4,999,700.00               |
| Taiwan Cogeneration International Cooperation | Taiwanese          | 49,997                      | Php4,999,700.00              | Php4,999,700.00               |
| Erramon Aboitiz                               | Filipino           | 1                           | 100.00                       | 100.00                        |



|                     |           |         |                  |                  |
|---------------------|-----------|---------|------------------|------------------|
| Luis Miguel Aboitiz | Filipino  | 1       | 100.00           | 100.00           |
| Benjamin Carias     | Filipino  | 1       | 100.00           | 100.00           |
| Hsu, Sung-Fou       | Taiwanese | 1       | 100.00           | 100.00           |
| Wu, Hong-Neng       | Taiwanese | 1       | 100.00           | 100.00           |
| Cheng, Tsahn-Rarn   | Taiwanese | 1       | 100.00           | 100.00           |
| Total:              |           | 100,000 | Php10,000,000.00 | Php10,000,000.00 |

NINTH: That Luis Miguel Aboitiz has been elected by the subscribers as treasurer of the corporation to act as such until his successor is duly elected and qualified in accordance with the by-laws; and that as such Treasurer, he has been authorized to received for and in the name and for the benefit of the corporation, all subscriptions paid by the subscribers.

TENTH: No transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of the capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of the corporation and this restriction shall be indicated in the stock certificates issued by the corporation.

ELEVENTH: That the corporation manifests its willingness to change its corporate name in the event another person, firm or entity has acquired a prior right to use the said firm name or one deceptively or confusingly similar to it.

IN WITNESS WHEREOF, we have set our hands this 17<sup>th</sup> day of May 2007 at Makati City.

(SGD.) ERRAMON ABOITZ

(SGD.) HSU, SUNG-FOU

(SGD.) LUIS MIGUEL ABOITIZ

(SGD.) WU, HONG-NENG

Date: 6-4-2016 Time: 2:9:22 PM

(SGD.) BENJAMIN CARIASO

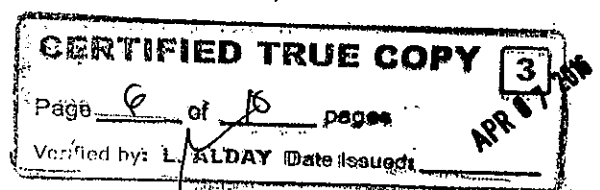
(SGD.) CHENG, TSAHN-RARN

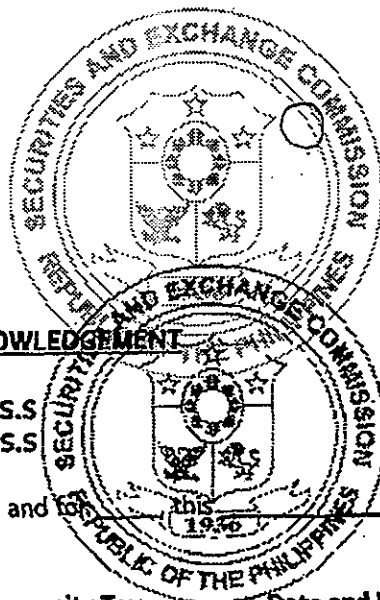
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WITNESSES: User Name: 5secexpressd

(SGD.) \_\_\_\_\_

(SGD.) \_\_\_\_\_





REPUBLIC OF THE PHILIPPINES ) S.S.  
 ) S.S.

BEFORE ME, a Notary Public in and for the Republic of the Philippines, personally appeared:

| <u>Name</u>         | <u>Community Tax Certificate/Passport No.</u> | <u>Date and Place Issued</u> |
|---------------------|-----------------------------------------------|------------------------------|
| Erramon Aboitiz     | 13823405                                      | 26 January 2006; Cebu City   |
| Luis Miguel Aboitiz | 08277564                                      | 27 January 2006; Cebu City   |
| Benjamin Cariaso    | 14841368                                      | 27 January 2006; Las Piñas   |

all known to me and to me known to be the same persons who executed the foregoing Articles of Incorporation and they acknowledged to me that the same is their free and voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

NOTARY PUBLIC

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Page No. \_\_\_\_\_;  
Book No. \_\_\_\_\_;  
Series of 2007.

Date: 6-4-2016 Time: 2:9:23 PM

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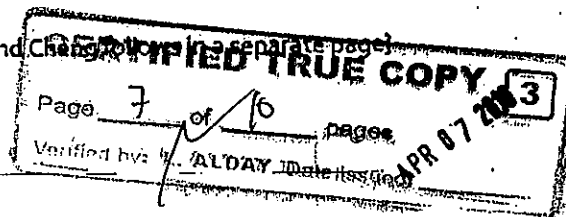
www.sec.gov.ph

User Name: 5secexpressd

www.sec.gov.ph

User Name: ANGELITOTUMA

[Acknowledgement with respect to Messrs. Hsu, Wu and Chang (to be on separate page)]



REDONDO PENINSULA ENERGY, INC.

(S.E.C. Reg. CS200708532)

DIRECTORS' CERTIFICATE  
OF  
AMENDMENT OF ARTICLES OF INCORPORATION

WE, the undersigned, being the members of the Board of Directors of REDONDO PENINSULA ENERGY, INC. (the "Corporation") and the Corporate Secretary,

DO HEREBY CERTIFY THAT:

1. At the meeting of the Board of Directors held on September 19, 2012, wherein a quorum was present and acting throughout, the Board of Directors of the Corporation approved the amendment of the Second Article (Primary Purpose) of the Corporation's Articles of Incorporation, to read as follows:

"SECOND: That the purpose for which said corporation is formed are:

PRIMARY PURPOSE

To build, own and operate power plants in the Philippines to provide electric energy and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coals, fly ash, water, heat steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose."

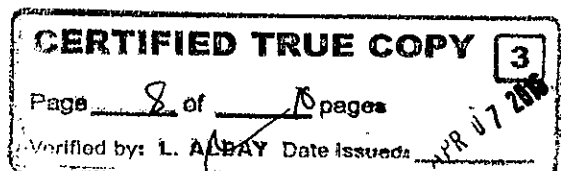
2. At the meeting of the stockholders held on September 19, 2012, wherein stockholders owning at least 2/3 of the outstanding capital stock were present in person or represented by proxy, the stockholders approved and ratified the amendment of the Second Article (Primary Purpose) of the Corporation's Articles of Incorporation and authorized the officers of the Corporation to sign, execute and file with the Securities and Exchange Commission, the appropriate applications/petitions, and such other papers and documents related thereto, necessary or required to carry out the foregoing amendment.

3. All the requirements of Section 16 of the Corporation Code have been complied with. Date: 6-4-2016 Time: 2:9:25 PM

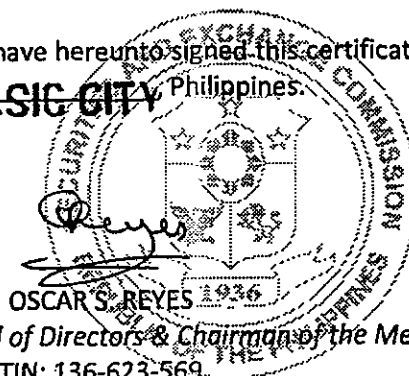
4. Attached herewith is a copy of the Corporation's Amended Articles of Incorporation, as herein amended.

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User Name: 5secexpressd



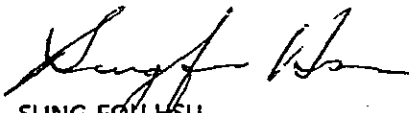
IN WITNESS WHEREOF, we have hereunto signed this certificate this \_\_\_\_<sup>th</sup> day  
of OCT 30 2012 2012, in PASIG CITY, Philippines.

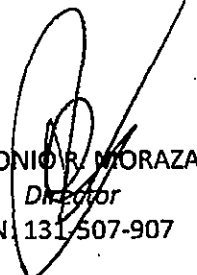


OSCAR S. REYES  
Chairman of the Board of Directors & Chairman of the Meeting  
TIN: 136-623-569

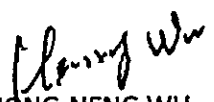
  
ERRAMON I. ABOITIZ  
Director  
TIN: 103-715-862

  
JESUS P. FRANCISCO  
Director  
TIN: 100-748-716

  
SUNG-FOU HSU  
Director  
PASSPORT NO.: 215052361

  
ANTONIO R. MORAZA  
Director  
TIN: 131-507-907

  
BETTY C. SIY YAP  
Director  
TIN: 102-100-627

  
HONG-NENG WU  
Director  
PASSPORT NO.: 215052361

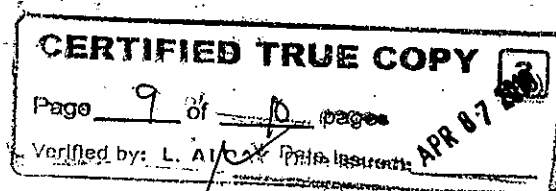
Attested by:

  
ANTHONY V. ROSETE  
Corporate Secretary & Secretary of the Meeting  
TIN: 113-026-308

Date: 6-4-2016 Time: 2:9:26 PM

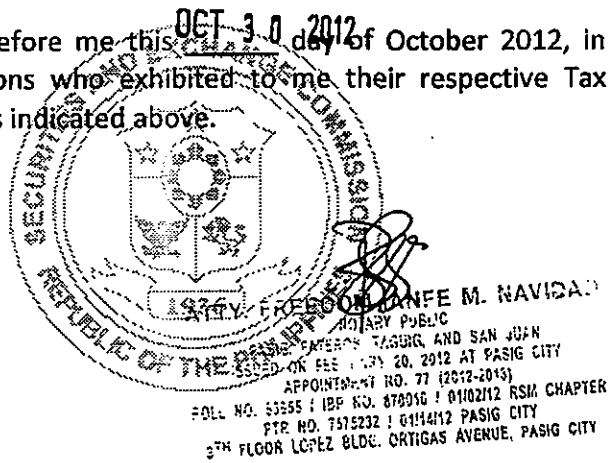
www.sec.gov.ph

User Name: 5secexpressd



SUBSCRIBED AND SWORN to before me this OCT 30 2012 day of October 2012, in Pasig City, by the above-named persons who exhibited to me their respective Tax Identification Numbers and Passports as indicated above.

Doc. No. 579 ;  
Page No. 78 ;  
Book No. III ;  
Series of 2012.

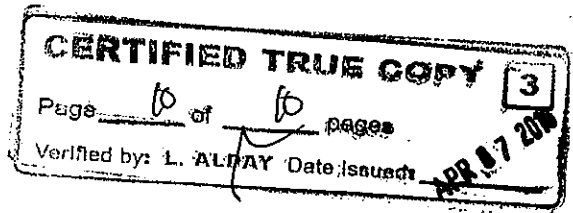


Date: 6-4-2016 Time: 2:9:27 PM

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User Name: 5secexpressd

1



SEC Express System

1604060190800166



Recipient

Maria Teresa Estrecho Ruiz

Company Name / Delivery Address MERALCO POWERGEN CORPORATION

ORTIGAS AVE.  
8F ROCKWELL BUSINESS CENTER I  
PASIG CITY AND PATEROS, Metro Manila, Philippines  
0 C

Loc: PAG

Contact Information 09399369665  
6615700  
truiz@meralcopowergen.com

FOR O.R. INFORMATION

Payors Name MERALCO POWERGEN CORPORATION

Company Address 8F ROCKWELL BUSINESS CENTER I, ORTIGAS AVE., BGY UGONG, PASIG CITY 1604

TIN Number 214664682000

Business Style PRIVATE

5 Documents

197361



| Type                              | SEC Number  | Company Name                   | Copies | Authenticated | Pouch    | Form Type                         |
|-----------------------------------|-------------|--------------------------------|--------|---------------|----------|-----------------------------------|
| General Information Sheet (GIS)   | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 10 | GENERAL INFORMATION SHEET         |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 12 | AMENDED ARTICLES OF INCORPORATION |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 22 | AMENDED ARTICLES OF INCORPORATION |
| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 57 | AMENDED ARTICLES OF INCORPORATION |

Combined  
Articles of  
Incorporation  
and By-Laws

CS200708532

REDONDO  
PENINSULA  
ENERGY,  
INC.

1 of 1

Yes

LP1 -  
35

ARTICLES OF  
INCORPORATION  
AND BY-LAWS

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REPUBLIC OF THE PHILIPPINES  
SECURITIES AND EXCHANGE COMMISSION  
SEC Building, EDSA, Greenhills  
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS200708532

**CERTIFICATE OF FILING  
OF  
AMENDED ARTICLES OF INCORPORATION**

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the amended articles of incorporation of the

**REDONDO PENINSULA ENERGY, INC.**  
(Amending Article VI thereof.)

copy annexed, adopted on April 14, 2011 by majority vote of the Board of Directors and by the vote of the stockholders owning or representing at least majority of the outstanding capital stock, and certified under oath by the Assistant Corporate Secretary and a majority of the Board of Directors of the corporation was approved by the Commission on this date pursuant to the provision of Section 16 of the Corporation Code of the Philippines, Batas Pambansa Blg. 68, approved on May 1, 1980, and copies thereof are filed with the Commission.

Unless this corporation obtains or already has obtained the appropriate Secondary License from this Commission, this Certificate does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/broker/merchant, financing company and time shares/club shares/membership certificates issuers or selling agents thereof. Neither does this Certificate constitute as permit to undertake activities for which other government agencies require a license or permit.

IN WITNESS WHEREOF, I have set my hand and caused the seal of this Commission to be affixed to this Certificate at Mandaluyong City, Metro Manila, Philippines, this 25th day of May, 2011. Time: 2:5:13 PM

BENITO A. CATARAN  
Director

www.sec.gov.ph Company Registration and Monitoring Department

BA/wheng

**CERTIFIED TRUE COPY**

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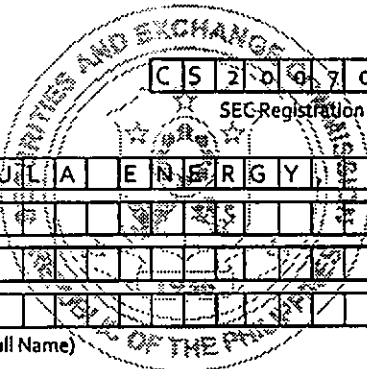
Page 1 of 10 pages

Verified by: L. ALDAY Date Issued: May 11 2011



COVER SHEET

Ma. Ana 5-16 11-702



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SEC Registration Number

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(Company's Full Name)

A D M I N I S T R A T I O N B L D G . , A R G O N A U T  
H I - W A Y C O R . R I Z A L H I - W A Y , S U B I C  
B A Y I N D I A N P A R K P H A S E 1 S U B I C  
B A Y F R E E P O R T Z O N E , 2 2 2 P H I L S .  
(Business Address: No. Street City / Town / Province)

Kathryn Leia S. Soriano-Posadas  
Contact Person

0 2 7 9 3 2 8 0 0  
(Company Telephone No.)

1 2 3 1  
Month Day  
Fiscal Year

AMENDED AOI  
FORM TYPE

[ ] [ ] [ ] [ ]  
Month Day  
Annual Meeting

[ ] [ ] [ ] [ ]  
Secondary License Type, If Applicable

[ ] [ ] [ ]  
Dept. Requiring this Doc.

[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
Amended Articles Number/Section

[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
Total No. of Stockholders

[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
Domestic Foreign

To be accomplished by SEC Personnel concerned

[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
File Number  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
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Date: 6-4-2016 Time: 2:5:16 PM

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Page 3 of 10 pages  
Verified by: [Signature] Date Issued: APR 07 2016

AMENDED ARTICLES OF INCORPORATION

OF

REDONDO PENINSULA ENERGY, INC.

KNOW ALL MEN BY THESE PRESENTS:

The undersigned incorporators, all of legal age and majority of whom are residents of the Philippines, have this day voluntarily agreed to form a stock corporation under the laws of the Republic of the Philippines.

THAT WE HEREBY CERTIFY:

FIRST: The name of this corporation shall be:

REDONDO PENINSULA ENERGY, INC.

SECOND: That the purpose for which said corporation is formed are:

PRIMARY PURPOSE

To build, own and operate power plants in the Philippines to provide electric energy locally, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat, steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose.

SECONDARY PURPOSES

That the corporation shall have all the express powers of a corporation as provided for under Section 36 of the Corporation Code of the Philippines.

THIRD: That the place where the principal office of the corporation is to be established at:

Administration Building, Argonaut Hi-way corner Rizal Hi-way, Subic Bay Industrial Park Phase I, Subic Bay Freeport Zone, 2222 Philippines.

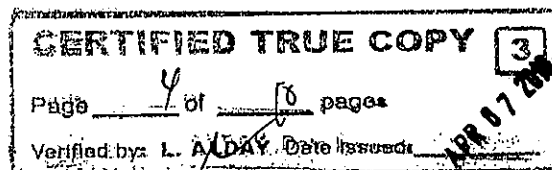
FOURTH: That the term for which the corporation is to exist is fifty (50) years from and after the date of issuance of the certificate of incorporation.

FIFTH: That the names, nationalities, and residences of the incorporators, majority of whom are residents of the Philippines, are as follows:

Date: 6-4-2016 Time: 2:5:17 PM

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| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                           |
|---------------------|--------------------|----------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | # 6 Lantana St. North Town Homes Subd.,<br>Nasipit Talamban, Cebu City     |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes, 58 McKinley Road,<br>Makati City                 |
| Benjamin Carias     | Filipino           | BF Homes, Las Pinas                                                        |
| Hsu, Sung-Fou       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan<br>114                        |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan<br>114                        |
| Cheng, Tsahn-Rarn   | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street, Legaspi Village,<br>Makati City |

**SIXTH:** That the number of directors of said corporation shall be Nine (9) and that the names, nationalities and residences of the first directors who are to serve until their successors are elected and qualified as provided by the by-laws are as follows (Amendment duly approved by the Board of Directors and Shareholders of the Corporation on April 14, 2011):

| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                           |
|---------------------|--------------------|----------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | # 6 Lantana St. North Town Homes Subd.,<br>Nasipit Talamban, Cebu City     |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes, 58 McKinley Road,<br>Makati City                 |
| Benjamin Carias     | Filipino           | 39 Phnom Penh BF Homes, Las Pinas                                          |
| Hsu, Sung-Fou       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan<br>114                        |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rul Guang Road, Neihu, Taipei, Taiwan<br>114                        |
| Cheng, Tsahn-Rarn   | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street, Legaspi Village,<br>Makati City |

**SEVENTH:** That the authorized capital stock of the corporation is Forty Million Pesos (Php 40,000,000.00) pesos in lawful money of the Philippines, divided into Four Hundred Thousand Shares (4000,000) shares with the par value of One Hundred Pesos (Php 100.00) pesos per share.

**EIGHT:** That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

| <u>Name</u>                                   | <u>Nationality</u> | <u>Number of Shares</u> | <u>Amount Subscribed</u> | <u>Amount Paid at Par</u> |
|-----------------------------------------------|--------------------|-------------------------|--------------------------|---------------------------|
| Aboitiz Power Corporation                     | Filipino           | 49,997                  | Php4,999,700.00          | Php4,999,700.00           |
| Taiwan Cogeneration International Corporation | Taiwanese          | 49,997                  | Php4,999,700.00          | Php4,999,700.00           |
| Erramon Aboitiz                               | Filipino           | 1                       | 100.00                   | 100.00                    |

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Page 5 of 10 pages

Verified by: L. ALDAY Date Issued: APR 07 2011

**3**

|                     |           |         |                  |                  |
|---------------------|-----------|---------|------------------|------------------|
| Luis Miguel Aboitiz | Filipino  | 1       | 100.00           | 100.00           |
| Benjamin Cariaso    | Filipino  | 1       | 100.00           | 100.00           |
| Hsu, Sung-Fou       | Taiwanese | 1       | 100.00           | 100.00           |
| Wu, Hong-Neng       | Taiwanese | 1       | 100.00           | 100.00           |
| Cheng, Tsahn-Rarn   | Taiwanese | 1       | 100.00           | 100.00           |
|                     | Total:    | 100,000 | Php10,000,000.00 | Php10,000,000.00 |

**NINTH:** That Luis Miguel Aboitiz has been elected by the subscribers as treasurer of the corporation to act as such until his successor is duly elected and qualified in accordance with the by-laws; and that as such Treasurer, he has been authorized to received for and in the name and for the benefit of the corporation, all subscriptions paid by the subscribers.

**TENTH:** No transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of the capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of the corporation and this restriction shall be indicated in the stock certificates issued by the corporation.

**ELEVENTH:** That the corporation manifests its willingness to change its corporate name in the event another person, firm or entity has acquired a prior right to use the said firm name or one deceptively or confusingly similar to it.

**IN WITNESS WHEREOF,** we have set our hands this 17<sup>th</sup> day of May 2007 at Makati City.

(SGD.) ERRAMON ABOITIZ

(SGD.) HSU, SUNG-FOU

(SGD.) LUIS MIGUEL ABOITIZ

(SGD.) WU, HONG-NENG

(SGD.) BENJAMIN CARIASO

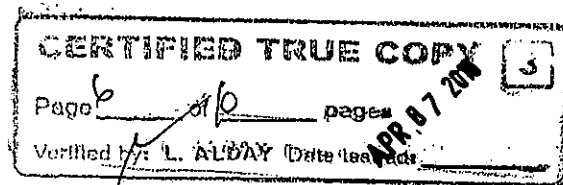
(SGD.) CHENG, TSAHN-RARN

Date: 6-4-2016 Time: 2:5:19 PM

WITNESSES:

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User Name: 5secexpressd



ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES

) S.S.

) S.S.

BEFORE ME, a Notary Public in and for this personally appeared:

| Name                | Community Tax<br>Certificate/Passport No. | Date and Place Issued      |
|---------------------|-------------------------------------------|----------------------------|
| Erramon Aboitiz     | 13823405                                  | 26 January 2006; Cebu City |
| Luis Miguel Aboitiz | 08277564                                  | 27 January 2006; Cebu City |
| Benjamin Carias     | 14841368                                  | 27 January 2006; Las Piñas |

all known to me and to me known to be the same persons who executed the forgoing Articles of Incorporation and they acknowledged to me that the same is their free and voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

NOTARY PUBLIC

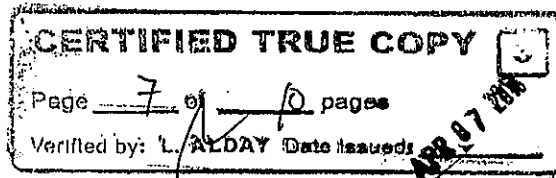
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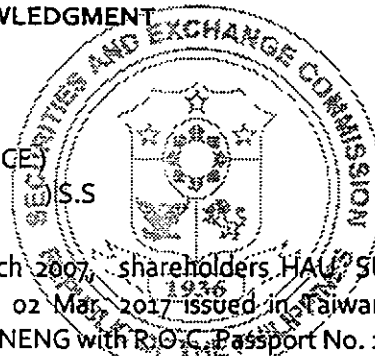
User Name: 5secexpressd

[Acknowledgement with respect to Messrs. Hsu, Wu and Cheng follows in a separate page]



ACKNOWLEDGMENT

MANILA ECONOMIC AND CULTURAL OFFICE  
TAIPEI, TAIWAN



BEFORE ME, this 23<sup>rd</sup> day of March 2007, shareholders HAU, SUNG-FOU with R.O.C. Passport No. 215052361 valid until 02 Mar. 2017 issued in Taiwan and National Identification No. A101683675; WU, HONG-NENG with R.O.C. Passport No. 200785572 valid until 25 Jun. 2013 issued in Taiwan and National Identification Number V120678218; HSU, SUNG-FOU with R.O.C. Passport No. 215052361 issued in Taiwan and National Identification No. A101683675 and CHENG, TSAHN-RARN with R.O.C. Passport No. 132704558 issued in Taiwan and National Identification No. U100130118, appeared before me presenting the aforesated Articles of Incorporation of Redondo Peninsula Energy, Inc., known to me and to me known as the same persons who executed the foregoing instrument consisting of five (5) pages including page on which this acknowledgment is written and acknowledged that the same is their free and voluntary will and deed.

WITNESS MY HAND AND NOTARIAL SEAL on the date and place above-mentioned.

Doc No. 001473  
Service No. \_\_\_\_\_  
Series of 2007

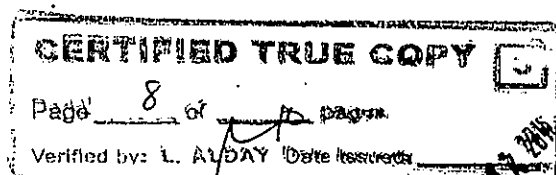
(SGD.) RESURRECION M. FERNANDO  
Head-Consular & Administrative

Upon request and authority of the Dept.  
of Foreign Affairs, Republic of Philippines.

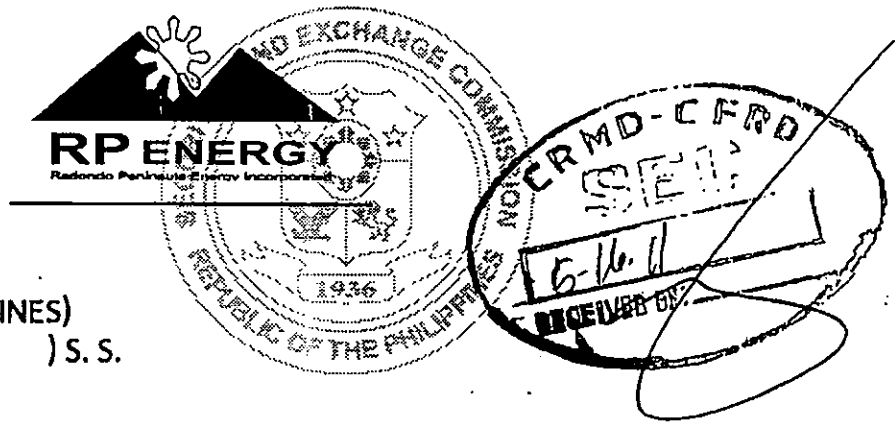
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REPUBLIC OF THE PHILIPPINES)  
CITY OF MAKATI ) S. S.

DIRECTOR'S CERTIFICATE

We, the undersigned, constituting at least a majority of the members of the Board of Directors of REDONDO PENINSULA ENERGY, INC., (the "Corporation"), the Chairman and the Corporate Secretary of the Corporation hereby certify that, at the special meeting of the board of directors and the special meeting of the stockholders of the Corporation held separately on April 14, 2011 at the principal office of the Corporation, the board and the stockholders approved the attached amended Articles of Incorporation (Annex "A" hereof) of the Corporation with amendments to Article VI, as follows:

"SIXTH: That the number of directors of said corporation shall be Nine (9) and that the names, nationalities and residences of the first directors who are to serve until their successors are elected and qualified as provided by the by-laws are as follows:"

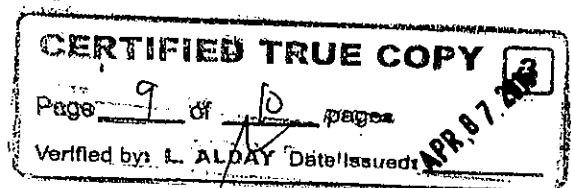
The attached Annex "A" is the true and correct copy of the Articles of Incorporation of the Corporation with the amendment incorporated thereto (as underscored) and that the aforesaid amendment was duly approved by (i) the vote of at least a majority of the members of the Board of Directors, and (ii) the vote of the stockholders present in person or by proxy, owning at least two thirds of the outstanding capital stock of the Corporation at the abovesated Board and special stockholders meeting.

Date: 6-4-2016 Time: 2:5:22 PM

IN WITNESS WHEREOF, we have hereunto signed these presents on this MAY 04 2011 at Makati City.

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User Name: 5secexpressd



HSU, SUNG-FOU  
Chairman of the Board of Directors  
Passport No. 215052361

ERRAMON I. ABOITIZ  
President and Director  
TIN: 131-507-907

ANTONIO R. MORAZA  
Director  
TIN: 131-507-907

LUIS MIGUEL O. ABOITIZ  
Director  
TIN: 133-378-470

WU, HONG-NENG  
Director  
Passport No. 200785572

KATHRYN LEIA S. SORIANO-POSADAS  
Assistant Corporate Secretary  
Secretary of the Stockholders' Meeting  
TIN No. 300-516-434

SUBSCRIBED AND SWORN TO before me this MAY 04 2011 at Makati City, Philippines. Affiants, who are personally known to me, presented their respective drivers license and/or passports with the details shown below as follows:

| Name                            | Passport Details                     | CTC Details                        |
|---------------------------------|--------------------------------------|------------------------------------|
| Hsu, Sung-Fou                   | 215052361, Mar. 2, 2007, Taipei City | -                                  |
| Erramon I. Aboitiz              | XX1560733, Jul. 7, 2008, Manila      | 19120355, Feb. 1, 2011, Cebu City  |
| Antonio R. Moraza               | XX2038215, Sept. 16, 2010, Cebu City | 27400349, Feb. 21, 2011, Cebu City |
| Luis Miguel O. Aboitiz          | EB0836113, Aug. 24, 2010, Manila     | 28961402, Feb. 2, 2011, Cebu City  |
| Wu, Hong-Neng                   | 200785572, Jun. 25, 2003, Taiwan     | -                                  |
| Kathryn Leia S. Soriano-Posadas | XX4819543, Oct. 22, 2009, Manila     | 02694525, Mar. 22, 2010, Manila    |

Doc. No. 2  
Page No. 2  
Book No. 1  
Series of 2011.

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ANTHONY RAYMOND AZARQUINGCO  
Notary Public  
110 Legaspi St., Legaspi Village, Makati City  
Until December 31, 2012  
PTR No. 2642504, January 3, 2011, Makati City  
Lifetime IBP No. 34551  
Roll No. 48052, IBP-Makati Chapter  
MCLE EXEMPTION NO. 11-0007075

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Page 10 of 10 pages

Verified by: L. A. DAY Date Issued:

# SEC Express System

1604060190800166



Recipient

Maria Teresa Estrecho Ruiz

Company Name / Delivery  
Address

MERALCO POWERGEN CORPORATION

ORTIGAS AVE.  
8F ROCKWELL BUSINESS CENTER I  
PASIG CITY AND PATEROS, Metro Manila, Philippines  
0 C

Loc: PAG

Contact Information

09399369665  
6615700  
truiz@meralcopowergen.com

## FOR O.R. INFORMATION

Payors Name MERALCO POWERGEN CORPORATION

Company Address 8F ROCKWELL BUSINESS CENTER I, ORTIGAS AVE., BGY UGONG, PASIG CITY 1604

TIN Number 214664682000

Business Style PRIVATE

## 5 Documents

| Type                              | SEC Number  | Company Name                   | Copies | Authenticated | Pouch    | Form Type                         |
|-----------------------------------|-------------|--------------------------------|--------|---------------|----------|-----------------------------------|
| General Information Sheet (GIS)   | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 10 | GENERAL INFORMATION SHEET         |
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| Amended Articles of Incorporation | CS200708532 | REDONDO PENINSULA ENERGY, INC. | 1 of 1 | Yes           | LP1 - 57 | AMENDED ARTICLES OF INCORPORATION |

197370



Combined  
Articles of  
Incorporation  
and By-Laws

CS200708532 : REDONDO 1 of 1 Yes  
PENINSULA  
ENERGY,  
INC.

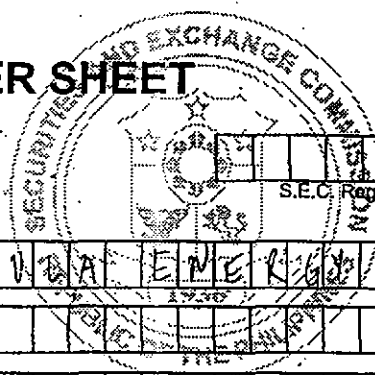
LP1 - ARTICLES OF  
35 INCORPORATION  
AND BY-LAWS

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Ms. Arco  
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530

# COVER SHEET



S.E.C. Registration Number

REDDO PENINSULAR ENERGY, INC.

(Company's Full Name)

SUBIC BAY FREEPORT ZONE

(Business Address: No. Street City / Town / Province)

JULIE TAN

Contact Person

047-252-3270

Company Telephone Number

12 31

Month Day  
Fiscal Year

FORM TYPE

06 ANY

Month Day  
Annual Meeting

Secondary License Type, If Applicable

Dept. Requiring this Doc.

Amended Articles Number/Section

Total Amount of Borrowings

6

Total No. of Stockholders

Domestic

Foreign

To be accomplished by SEC Personnel concerned

File Number

LCU

LCU

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Document I.D.

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ARTICLES OF INCORPORATION

REDONDO PENINSULA ENERGY, INC.

KNOW ALL MEN BY THESE PRESENTS:

The undersigned incorporators, all of legal age and majority of whom are residents of the Philippines, have this day voluntarily agreed to form a stock corporation under the laws of the Republic of the Philippines.

THAT WE HEREBY CERTIFY:

FIRST: The name of this corporation shall be:

REDONDO PENINSULA ENERGY, INC.

SECOND: That the purposes for which said corporation is formed are:

PRIMARY PURPOSE

To build, own and operate power plants in the Philippines to provide electric energy locally, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat, steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose.

SECONDARY PURPOSES

That the corporation shall have all the express powers of a corporation as provided for under Section 36 of the Corporation Code of the Philippines.

THIRD: That the place where the principal office of the corporation is to be established at:

Administration Building, Argonaut Hi-way corner Rizal Hi-way, Subic Bay Industrial Park Phase I, Subic Bay Freeport Zone, 2222 Philippines.

FOURTH: That the term for which the corporation is to exist is fifty (50) years from and after the date of issuance of the certificate of incorporation.

FIFTH: That the names, nationalities, and residences of the incorporators, majority of whom are residents of the Philippines, are as follows:

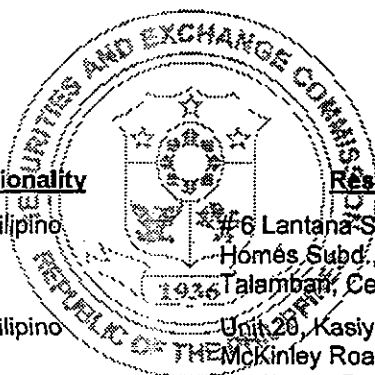
www.sec.gov.ph

CHENG, Tzahn Rens

SECURITIES AND EXCHANGE COMMISSION  
REPUBLIC OF THE PHILIPPINES

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CENTRAL RECEIVING AND RECORDS DIVISION

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Page 3 of 30 pages  
Verified by: L. ALDAY Date Issued: 07 2007



| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                             |
|---------------------|--------------------|------------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | #6 Lantana St. North Town<br>Homes Subd., Nasipit<br>Talamban, Cebu City ✓   |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes, 58<br>McKinley Road, Makati City ✓                 |
| Benjamin Cariaso    | Filipino           | 39 Phnom Penh<br>BF Homes, Las Pinas ✓                                       |
| Hsu, Sung-Fou       | Taiwanese          | 6F 392 Rui Guang Road,<br>Neihu, Taipei, Taiwan 114                          |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rui Guang Road,<br>Neihu, Taipei, Taiwan 114                          |
| Cheng, Tsahn-Rarn   | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street,<br>Legaspi Village, Makati City ✓ |

**SIXTH:** That the number of directors of said corporation shall be Six (6) and that the names, nationalities and residences of the first directors who are to serve until their successors are elected and qualified as provided by the by-laws are as follows:

| <u>Name</u>         | <u>Nationality</u> | <u>Residence</u>                                                           |
|---------------------|--------------------|----------------------------------------------------------------------------|
| Erramon Aboitiz     | Filipino           | # 6 Lantana St. North Town<br>Homes Subd., Nasipit<br>Talamban, Cebu City  |
| Luis Miguel Aboitiz | Filipino           | Unit 20, Kasiyahan Homes, 58<br>McKinley Road, Makati City                 |
| Benjamin Cariaso    | Filipino           | 39 Phnom Penh<br>BF Homes, Las Pinas                                       |
| Hsu, Sung-Fou       | Taiwanese          | 6F 392 Rui Guang Road,<br>Neihu, Taipei, Taiwan 114                        |
| Wu, Hong-Neng       | Taiwanese          | 6F 392 Rui Guang Road,<br>Neihu, Taipei, Taiwan 114                        |
| Cheng, Tsahn-Rarn   | Taiwanese          | 6 <sup>th</sup> Floor, 110 Legaspi Street,<br>Legaspi Village, Makati City |

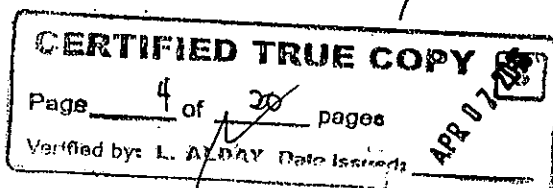
**SEVENTH:** That the authorized capital stock of the corporation is Forty Million Pesos (Php 40,000,000.00) pesos in lawful money of the Philippines, divided into Four Hundred Thousand Shares (400,000) shares with the par value of One Hundred Pesos (Php 100.00) pesos per share.

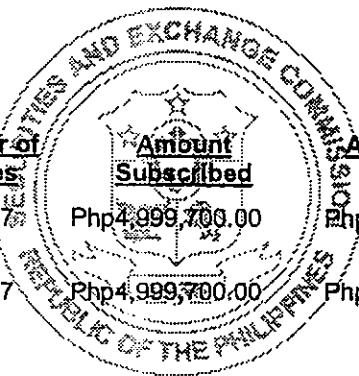
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**EIGHTH:** That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

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| <u>Name</u>                                   | <u>Nationality</u> | <u>Number of Shares</u> | <u>Amount Subscribed</u> | <u>Amount Paid at Par</u> |
|-----------------------------------------------|--------------------|-------------------------|--------------------------|---------------------------|
| Aboitiz Power Corporation                     | Filipino           | 49,997                  | Php4,999,700.00          | Php4,999,700.00           |
| Taiwan Cogeneration International Corporation | Taiwanese          | 49,997                  | Php4,999,700.00          | Php4,999,700.00           |
| Erramon Aboitiz                               | Filipino           | 1                       | 100.00                   | 100.00                    |
| Luis Miguel Aboitiz                           | Filipino           | 1                       | 100.00                   | 100.00                    |
| Benjamin Cariaso                              | Filipino           | 1                       | 100.00                   | 100.00                    |
| Hsu, Sung-Fou                                 | Taiwanese          | 1                       | 100.00                   | 100.00                    |
| Wu, Hong-Neng                                 | Taiwanese          | 1                       | 100.00                   | 100.00                    |
| Cheng, Tsahn-Rarn                             | Taiwanese          | 1                       | 100.00                   | 100.00                    |
| Total:                                        |                    | 100,000                 | Php10,000,000.00         | Php10,000,000.00          |

**NINTH:** That Luis Miguel Aboitiz has been elected by the subscribers as treasurer of the corporation to act as such until his successor is duly elected and qualified in accordance with the by-laws; and that as such Treasurer, he has been authorized to receive for and in the name and for the benefit of the corporation, all subscriptions paid by the subscribers.

**TENTH:** No transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of the capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of the corporation and this restriction shall be indicated in the stock certificates issued by the corporation.

**ELEVENTH:** That the corporation manifests its willingness to change its corporate name in the event another person, firm or entity has acquired a prior right to use the said firm-name or one deceptively or confusingly similar to it.

IN WITNESS WHEREOF, we have set our hands this 17th of May, 2007 at Makati City

Erramon Aboitiz

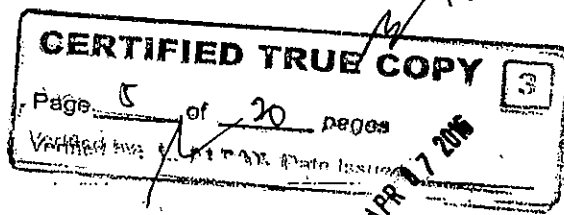
Luis Miguel Aboitiz

www.sec.gov.ph

Hsu, Sung-Fou 6-4-2016 TIME: 2:15:31 PM

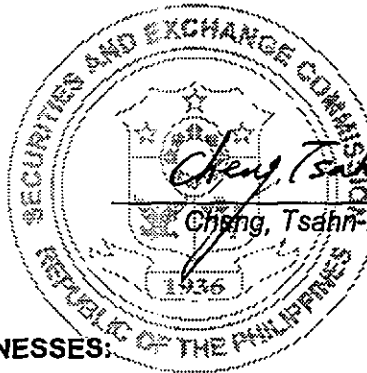
Wu, Hong-Neng

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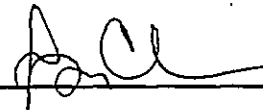




  
Benjamin Cariaso



WITNESSES:

  
\_\_\_\_\_

### ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES ) S.S.  
 )

BEFORE ME, a Notary Public in and for \_\_\_\_\_, this \_\_\_\_\_  
personally appeared:

| <u>Name</u>         | <u>Community Tax<br/>Certificate/Passport No.</u> | <u>Date and Place Issued</u> |
|---------------------|---------------------------------------------------|------------------------------|
| Erramon Aboitiz     | 13823405                                          | 26 January 2006; Cebu City   |
| Luis Miguel Aboitiz | 08277564                                          | 27 January 2006; Cebu City   |
| Benjamin Cariaso    | 14841368                                          | 27 January 2006 ; Las Piñas  |

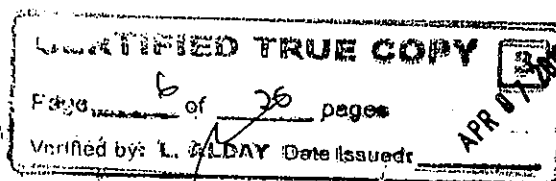
all known to me and to me known to be the same persons who executed the foregoing Articles of Incorporation and they acknowledged to me that the same is their free and voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

### NOTARY PUBLIC

Doc. No. \_\_\_\_\_;  
Page No. \_\_\_\_\_ Date: 6-4-2016 Time: 2:15:32 PM  
Book No. \_\_\_\_\_  
Series of 2007.

[Acknowledgment with respect to Messrs. Hsu, Wu and Cheng follows in a separate  
www.sea.gov.ph User Name: 5secexp155c



Sungfor Hsu Henry Wu

ACKNOWLEDGEMENT

MANILA ECONOMIC AND CULTURAL OFFICE  
TAIPEI, TAIWAN

BEFORE ME, this 23<sup>rd</sup> day of March 2007, shareholders HAU, SUNG-FOU with R.O.C. Passport No. 215052361 valid until 02 Mar. 2017 issued in Taiwan and National Identification No. A101683675; WU, HONG-NENG with R.O.C. Passport No. 200785572 valid until 25 Jun. 2013 issued in Taiwan and National Identification Number V120678218; HSEI, SUNG-FOU with R.O.C. Passport No. 215052361 issued in Taiwan and National Identification No. A101683675 and CHENG, TSAHN-RARN with R.O.C. Passport No. 132704558 Issued in Taiwan and National Identification No. U100130118, appeared before me presenting the aforestated Articles of Incorporation of Redondo Peninsula Energy, Inc., known to me and to me known as the same persons who executed the foregoing instrument consisting of five (5) pages including page on which this acknowledgement is written and acknowledged that the same is their free and voluntary will and deed.

WITNESS MY HAND AND NOTARIAL SEAL on the date and place above-mentioned.

Doc. No. **001473**  
Service No. \_\_\_\_\_  
Series of 2007

  
RESURRECION M. FERNANDO  
Head-Consular & Administrative

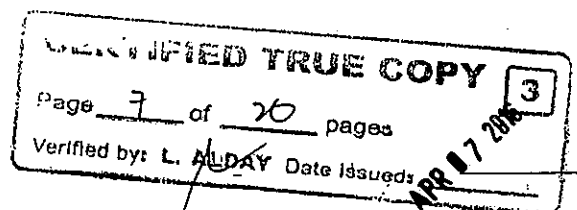
Upon request and authority of  
the Dept. of Foreign Affairs  
Republic of Philippines.



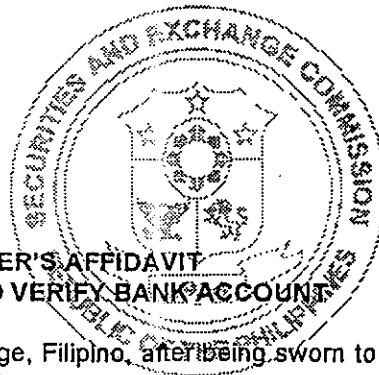
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User Name: 5secexpressc



Republic of the Philippines )  
Makati City ) S.S.



**TREASURER'S AFFIDAVIT  
AND AUTHORITY TO VERIFY BANK ACCOUNT**

I, **Luis Miguel Aboitiz**, of legal age, Filipino, after being sworn to in accordance with law, do hereby depose and state that:

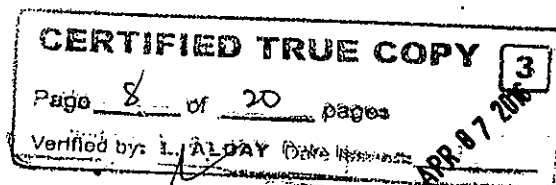
1. I have been elected by the subscribers of **REDONDO PENINSULA ENERGY, INC.** ("Corporation") as the Treasurer thereof, to act as such until my successor has been duly elected and qualified in accordance with the by-laws of the Corporation;
2. As the Treasurer of the Corporation I am authorized to receive for the Corporation all payments by the subscribers for their respective subscriptions to the capital stock of the Corporation;
3. That out of the **Forty Million Pesos (Php 40,000,000.00)** representing the authorized capital stock of the Corporation, the following amounts have been paid and subscribed to the Corporation;

| Name                                          | Nationality | Type of Share | Number of Shares | Amount Subscribed | Amount Paid at Par |
|-----------------------------------------------|-------------|---------------|------------------|-------------------|--------------------|
| Aboitiz Power Corporation                     | Filipino    | Common        | 49,997           | Php4,999,700.00   | Php4,999,700.00    |
| Taiwan Cogeneration International Corporation | Taiwanese   | Common        | 49,997           | Php4,999,700.00   | Php4,999,700.00    |
| Erramon Aboitiz                               | Filipino    | Common        | 1                | 100.00            | 100.00             |
| Luis Miguel Aboitiz                           | Filipino    | Common        | 1                | 100.00            | 100.00             |
| Benjamin Cariaso                              | Filipino    | Common        | 1                | 100.00            | 100.00             |
| Hsu, Sung-Fou                                 | Taiwanese   | Common        | 1                | 100.00            | 100.00             |
| Wu, Hong-Neng                                 | Taiwanese   | Common        | 1                | 100.00            | 100.00             |
| Cheng, Tsahn-Ram                              | Taiwanese   | Common        | 1                | 100.00            | 100.00             |
| Total:                                        |             |               | 100,000          | Php10,000,000.00  | Php10,000,000.00   |

4. That payment has been actually paid to the Treasurer for the benefit and to the credit of the Corporation and that at least twenty-five per centum (25%) of the authorized capital has been subscribed and that at least twenty-five per centum (25%) of such subscription has been actually paid for in cash to me for the benefit and to the credit of the Corporation.

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The Securities and Exchange Commission and the *Bangko Sentral ng Pilipinas* are hereby authorized to examine and verify the deposit in the *Unionbank of the Philippines, Greenbelt branch* in my name as Treasurer of the Corporation in excess of **Ten Million Pesos (Php 10,000,000.00)** representing the paid-up capital of the Corporation which is in the process of incorporation.

This authority is valid and inspection of said deposit may be made even after the issuance of the Certificate of Incorporation to the Corporation. Should the deposit be transferred to another bank prior to or after incorporation, this will also serve as authority to verify and examine the same. The representatives of the Securities and Exchange Commission and *Bangko Sentral ng Pilipinas* are also authorized to examine pertinent books and records of accounts of the Corporation as well as all supporting papers to determine utilization and disbursement of the said paid-up capital.

Luis Miguel Aboitiz  
Treasurer

SUBSCRIBED AND SWORN to before me this 17th day of May 2007 in Makati City, affiant exhibiting to me his Community Tax Certificate No. 08277564 issued in Cebu City on 27 January 2006.

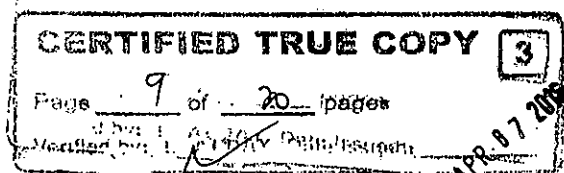
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Page No. 29  
Book No. 111  
Series of 2007.

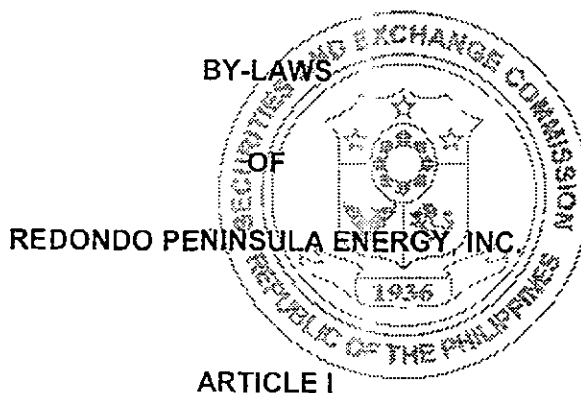
CYNTHIA MARISSA M. REYES  
Notary Public  
Until December 31, 2007  
PTR No. 0272855  
January 5, 2007, Makati City  
Lifetime IBP O.R. No. 578757  
January 27, 2003, Pasig City  
Roll No. 38560, IBP PPLM-Chapter

Date: 6-4-2016 Time: 2:15:35 PM.

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SUBSCRIPTION, ISSUANCE AND TRANSFER OF SHARES

**Section 1.** Subscriptions - Subscribers to the capital stock of the Corporation shall pay to the Corporation the subscription value or price of the shares in accordance with the terms and conditions prescribed by the Board of Directors.

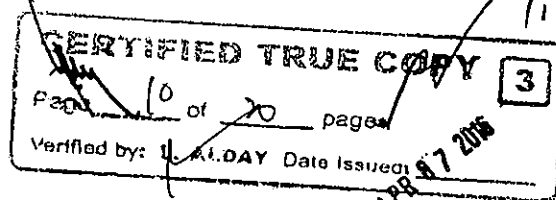
Upon the call for payment ("Capital Call") of a portion of or the entire amount of unpaid subscriptions, any shareholder who fails to comply with such Capital Call shall be charged an annual interest equivalent to the three (3) Month Treasury plus 8% of the unpaid amount of the Capital Call. The defaulting shareholder shall have a grace period of thirty (30) days within which he must pay the amount due on the Capital Call plus the interest charged.

The "3 Month Treasury" shall mean the bid yield for the relevant benchmark 3-month treasury bills as displayed on the MART 1 page of Bloomberg at 11:30am on the date of the Capital Call or most recent previous working day (MART) or if such reference is not available, then the board of directors shall determine an equivalent standard for this purpose.

If the defaulting shareholder is still unable to make the necessary payment after the lapse of the grace period, then the other non-defaulting shareholders, in proportion to their ownership of shares in the Corporation, shall have the right to purchase the shares associated with the unpaid Capital Call for an amount equivalent to the amount due on the unpaid Capital Call (without the charged interest), which shall be paid directly to the Corporation. For this purpose, the purchasing shareholder(s) shall:

- (1) send to the defaulting shareholder and the Corporation a written notice that he is exercising his option to purchase the shares associated with the unpaid Capital Call of the defaulting shareholder; and
- (2) pay directly to the Corporation the amount due on the unpaid Capital Call. Apart from paying this amount, the purchasing shareholder shall not be liable to pay any amount to the defaulting shareholder or the Corporation.

Upon receipt by the Corporation of the notice and the payment described above, the defaulting shareholder shall be deemed to have waived his right to subscribe to the shares associated with the unpaid Capital Call, and the Secretary



shall be authorized to record the purchase of the shares associated with the unpaid Capital Call from the defaulting shareholder by the purchasing shareholder without need of any other document from or payment to the defaulting shareholder. Fees and taxes due on the purchase of the defaulting shareholder's stock, if any, shall be for the account of the purchasing shareholder.

If no shareholder exercises the option to purchase the shares associated with the unpaid Capital Call, the Board of Directors may, by resolution, order the sale of those shares to any third party in accordance with law.

**Section 2. Certificate** - Each shareholder shall be entitled to one or more certificates for such fully paid stock subscription in his name in the books of the Corporation. The certificates shall contain the matters required by law and the Articles of Incorporation. They shall be in such form and design as may be determined by the Board of Directors and numbered consecutively. The certificates, which must be issued in consecutive order, shall bear the signature of the President, manually countersigned by the Secretary and Chairman of the Board, and sealed with the corporate seal.

**Section 3. Transfer of Shares** - Subject to the restrictions, terms and conditions contained in the Articles of Incorporation, shares may be transferred, sold, ceded, assigned or pledged by delivery of the certificates duly endorsed by the shareholder, his attorney-in-fact, or other legally authorized person. The transfer shall be valid and binding on the Corporation only upon record thereof in the books of the Corporation, the cancellation of the certificate surrendered to the Secretary, and issuance of a new certificate to the transferee.

No share of stock against which the Corporation holds unpaid claim shall be transferable in the books of the Corporation.

All certificates surrendered for transfer shall be stamped "Cancelled" on the face thereof, together with the date of cancellation, and attached to the corresponding stub with the certificate book.

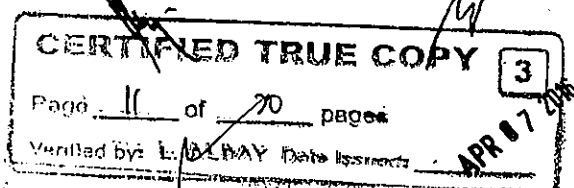
**Section 4. Lost Certificates** - In case any certificate for the capital stock of the Corporation is lost, stolen, or destroyed, a new certificate may be issued in lieu thereof in accordance with the procedure prescribed under Section 73 of the Corporation Code.

## ARTICLE II

### MEETINGS OF SHAREHOLDERS

**Section 1. Regular Meetings** - The regular meetings of shareholders, for the purpose of electing directors and for the transaction of such business as may properly come before the meeting, shall be held at the principal office or at a place designated by the Board of Directors on 20th day of June of each year.

**Section 2. Special Meeting** - The special meetings of shareholders, for any purpose or purposes, may at any time be called by the Board of Directors, at its own instance, or at the written request of shareholders representing at least thirty-five percent (35%) of the outstanding capital stock.



**Section 3. Place of Meeting** - Shareholders' meetings, whether regular or special, shall be held in the principal office of the Corporation or at any place designated by the Board of Directors.

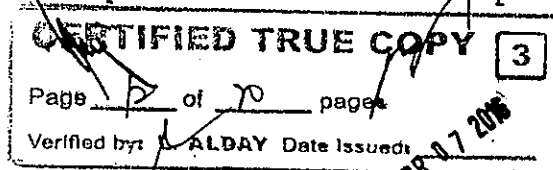
**Section 4. Notice of Meeting** - Notices for regular meetings of shareholders may be sent by the Secretary by personal delivery, electronic mail, facsimile or by mail at least one (1) week prior to the date of the meeting to each shareholder of record at his last known post office address or by publication in a newspaper of general circulation. Notices for special meetings of shareholders may, at any time, be communicated by the Secretary to each shareholder personally, or by telephone, telex, telegram, or by written or oral message, or by publication in a newspaper of general circulation. The notice shall state the place, date and hour of the meeting, and the purpose or purposes for which the meeting is called. When the meeting of shareholders is adjourned to another time or place, it shall not be necessary to give any notice of the subsequent meeting if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken.

**Section 5. Quorum** - Unless otherwise provided by law, in all regular or special meeting of shareholders, a majority of the outstanding capital stock must be present or represented in order to constitute a quorum. If no quorum is constituted, the meeting shall be adjourned until the requisite amount of stock shall be present or represented.

**Section 6. Conduct of Meeting** - Meeting of the shareholders shall be presided over by the Chairman of the Board or, in his absence, a Director appointed by the Chairman of the Board or, if none of the foregoing is in office and present and acting, by a chairman to be chosen by and from the present Directors. The Secretary shall act as secretary of every meeting; if the Secretary is not present, the chairman of the meeting shall appoint a secretary of the meeting. The chairman of the meeting may adjourn the meeting from time to time, but with due notice unless (a) the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken or (b) the requirement of notice is waived by all shareholders

**Section 7. Manner of Voting** - At all meetings of shareholders, a shareholder may vote in person or by proxy executed in writing by the shareholders or his duly authorized attorney-in-fact. Unless otherwise provided in the proxy, it shall be valid only for the meeting at which it has been presented to the Secretary. All proxies must be in the hands of the Secretary before the time set for the meeting. Such proxies filed with the Secretary may be revoked by the appointing or issuing shareholder/s either in an instrument in writing duly presented and recorded with the Secretary, prior to a scheduled meeting or by his/their personal presence at the meeting.

**Section 8. Closing of Transfer Books of Fixing of Record Date** - For the purpose of determining the shareholders entitled to notice of, or to vote at, any meeting of shareholders or any adjournment thereof or to receive payment of any dividend or in making a determination of shareholders for any other proper purpose, the Board of Directors may provide that the stock and transfer books be closed at the time the notice for the meeting is served and for a stated period, not to exceed, in any case, twenty (20) days. If the stock and transfer books are to be closed for the purpose of determining shareholders entitled to notice of, or to vote at, a meeting of shareholders, such books shall be closed at the time when the notice for the meeting is served. In lieu of closing the stock and transfer books, the Board of Directors may fix in advance a date as the record date which shall in no case be more than twenty

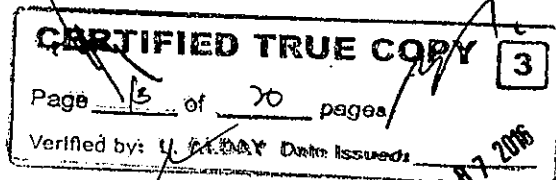


(20) days prior to the date on which the particular action requiring such determination of shareholders is to be taken, except in instance where applicable rules and regulations provided otherwise.

ARTICLE III  
BOARD OF DIRECTORS

**Section 1.** Powers of the Board - Unless otherwise provided by law, the corporate powers of the Corporation shall be exercised, all business conducted and all property of the Corporation controlled and held by the Board of Directors to be elected, by and from among the shareholders. Without prejudice to such general powers and such other powers as may be granted by law, the Board of Directors shall have the following express powers:

- a) From time to time, to make and change rules and regulations not inconsistent with these by-laws for the management of the Corporation's business and affairs;
- b) To purchase, receive, take or otherwise acquire in any lawful manner, for and in the name of the Corporation, any and all properties, rights, interest or privileges, including securities and bonds of other Corporations, as the transaction of the business of the Corporation may reasonably or necessarily require, for such consideration and upon such terms and conditions as the Board may deem proper or convenient.
- c) To invest the funds of the Corporation in another corporation or business or for any other purposes other than those for which the Corporation was organized, whenever in the judgment of the Board of Directors the interests of the Corporation would thereby be promoted, subject to such shareholders' approval as may be required by law;
- d) To incur such indebtedness as the Board may deem necessary and, for such purpose, to make and issue evidence of such indebtedness including, without limitation, notes, deeds of trust, instruments, bonds, debentures, or securities, subject to such shareholder approval as may be required by law, and/or pledge, mortgage, or otherwise encumber all or part of the properties and rights of the Corporation;
- e) To guarantee, for and in behalf of the Corporation obligations of, other corporations or entities in which it has lawful interest;
- f) To make provisions of the discharge of the obligations of the Corporation as they mature, including payment for any property or in stocks, bonds, debentures, or other securities of the Corporation lawfully issued for the purpose;
- g) To sell, lease, exchange, assign, transfer or otherwise, dispose of any property, real or personal, belonging to the Corporation whenever, in the Board's judgment, the Corporation's interest would thereby be promoted;





- h) To establish pension, retirement, bonus, profit-sharing, or other types of incentives or compensation plans for the employees, including officers and directors of the Corporation and to determine the persons to participate in any such plans and the amount of their respective participations;
- i) To prosecute, maintain, defend, compromise or abandon any lawsuit in which the Corporation or its officers are either plaintiffs or defendants in connection with the business of the Corporation and, likewise, to grant installments for the payments or settlement of whatsoever debts as payment to the Corporation;
- j) To delegate, from time to time, any of the powers of the Board which may lawfully be delegated in the course of the current business or businesses of the Corporation to any standing or special committee or to any officer or agent and to appoint any persons to be agents of the Corporation with such powers (including the power to sub-delegate), and upon such terms, as may be deemed fit;
- k) To review, determine, and authorize the extent of delegation, of the exercise or performance of any of the powers, duties and functions for the corporate operation, conferred onto each corporate officer and personnel;
- l) To transfer the principal place of business of the Corporation within the same city where the principal place of business reflected in the articles of incorporation is located; and
- m) To implement these by-laws and to act on any matter not covered by these by-laws, provided such matter does not require the approval or consent of the shareholders under any existing law, rules or regulation.

**Section 2. Election and Term** - The Board of Directors shall be elected during each regular meeting of shareholders and shall hold office for one (1) year and until their successors are elected and qualified.

**Section 3. Vacancies** - Any vacancy occurring in the Board of Directors other than by removal by the shareholders or by expiration of term must be filled by the shareholders at a regular or at any special meeting of shareholders called for the purpose, when filling of the vacancy is deemed necessary by the Board of Directors. A director so elected to fill a vacancy shall be elected only for the unexpired term of his predecessor in office.

Any directorship to be filled by reason of an increase in the number of directors shall be filled only by an election at a regular or at a special meeting of shareholders duly called for the purpose or in the same meeting authorizing the increase of directors if so stated in the notice of the meeting.

The vacancy resulting from the removal of a director by the shareholders in the manner provided by law may be filled by election, if filling of the said vacancy is deemed necessary by the Board of Directors, at the same meeting of shareholders without further notice, or at any regular or at any special meeting of shareholders called for the purpose, after giving notice as prescribed in this by-laws.

**CERTIFIED TRUE COPY**

Page 14 of 70 pages

Verified by: ALDAY Date Issued: APR 07 '08

**Section 4. Meetings** - Regular meetings of the Board of Directors shall be held on such dates and at such times and places as the Chairman of the Board, or in his absence, a director appointed by him, designates or upon the request of directors representing at least thirty-five percent (35%) of the outstanding shares of the Corporation and shall be held at such places as may be designated in the notice. The Board of Directors may, at its discretion, conduct meetings by conference call or similar technology, with the meeting minutes thereof duly recorded.

**Section 5. Notice** - Notice of the regular or special meeting of the Board, specifying the date, time and place of the meeting, shall be communicated by the Secretary to each director personally, or by telephone, telex, telegram, or by written or oral message. A director may waive this requirement, either expressly or impliedly.

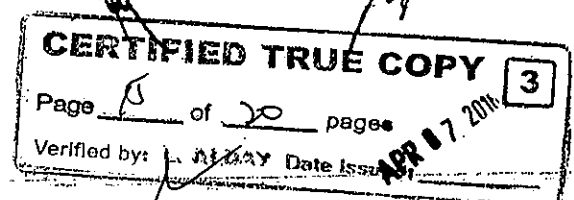
**Section 6. Quorum** - A majority of the number of directors as fixed in the Articles of Incorporation shall constitute a quorum for the transaction of corporate business, and every decision of at least a majority of the directors present at a meeting at which there is a quorum shall be valid as a corporate act.

**Section 7. Conduct of the Meetings** - Meetings of the Board of Directors shall be presided over by the Chairman of the Board, or in his absence, a director appointed by him, or if none of the foregoing is in office and present and acting, by any other director chosen by the Board. The Secretary shall act as secretary of every meeting; if the Secretary is not present, the Chairman of the meeting shall appoint a secretary of the meeting. Notwithstanding any provision to the contrary, resolutions pertaining to the following matters shall be submitted by the Board of Directors to the shareholders for approval by the affirmative vote of the shareholders representing a majority of the outstanding shares of the Corporation:

- a) Distribution and issuance of dividends;
- b) Extension and shortening of corporate term;
- c) Increasing and decreasing capital stock;
- d) Incurring, creation or increasing bonded indebtedness;
- e) Sale, lease, exchange, mortgage, pledge or otherwise disposing all or substantially all of the Corporation's property and assets, including goodwill;
- f) Investing corporate funds in another corporation or business or for any purpose other than the primary purpose for which it was organized;
- g) Entering into management contract with another corporation;
- h) Approval of merger or consolidation;
- i) Amending the Articles of Incorporation to deny shareholders their pre-emptive right; and
- j) Amending or repealing the by-laws or adopting new by-laws.

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**Section 8. Compensation** - By resolution of the Board, each director shall receive a reasonable per diem allowance for his attendance at each meeting of the Board. In addition, one percent of net income after tax of the preceding year shall be allocated as compensation for the members of the Board for the immediately succeeding year and distributed amongst them based on the relative proportion of shares that each one represents. Such compensation shall be determined and apportioned among the directors in such manner as the Board may deem proper, subject to the approval of shareholders representing at least a majority of the outstanding capital stock at a regular or special meeting of the shareholders. The shareholders shall determine if special compensation shall be given to independent directors.

#### ARTICLE IV

#### OFFICERS

**Section 1. Election/Appointment** - Immediately after their election, the Board of Directors shall formally organize by electing the Chairman, the President, one or more Vice-President, the Treasurer, and the Secretary at said meeting.

The Board may, from time to time, appoint such other officers as it may determine to be necessary or proper.

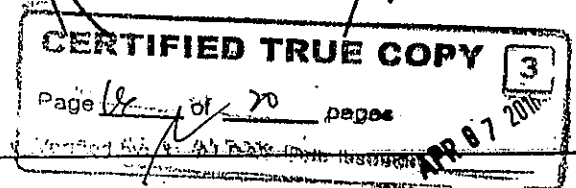
Any two (2) or more positions may be held concurrently by the same person, except that no one shall act as President and Treasurer or Secretary at the same time.

**Section 2. Chairman of the Board** - The Chairman of the Board of Directors shall preside at the meetings of the directors and the shareholders. He shall also exercise such powers and perform such duties as the Board of Directors may assign to him.

**Section 3. President** - The President, who shall be a director, shall be the Chief Executive Officer of the Corporation and shall also have administration and direction of the day-to-day business affairs of the Corporation. He shall exercise the following functions:

- a) To preside at the meetings of the Board of Directors and of the shareholders in the absence of the Chairman of the Board of Directors, when appointed by the latter or elected by the other directors present at the meeting;
- b) To initiate and develop corporate objectives and policies and formulate long range projects, plans and programs for the approval of the Board of Directors, including those for executive training, development and compensation;
- c) To have general supervision and management of the business affairs and property of the Corporation;
- d) To ensure that the administrative and operational policies of the Corporation are carried out under his supervision and control;

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- e) Subject to guidelines prescribed by law, to appoint, remove, suspend or discipline employees of the Corporation, prescribe their duties, and determine their salaries;
- f) To oversee the preparation of the budgets and the statements of accounts of the Corporation;
- g) To prepare such statements and reports of the Corporation as may be required of him by law;
- h) To represent the Corporation at all functions and proceedings;
- i) To execute on behalf of the Corporation all contracts, agreements and other instruments affecting the interests of the Corporation which require the approval of the Board of Directors, except as otherwise directed by the Board of Directors;
- j) To make reports to the Board of Directors and shareholders;
- k) To sign certificates of stock;
- l) To perform such other duties as are incidental to his office or are entrusted to him by the Board of Directors.

The President may assign the exercise or performance of any of the foregoing powers, duties and functions to any other officer(s), subject always to his supervision and control.

**Section 4.** The Vice-President(s) - If one or more vice-presidents are appointed, he/they shall have such powers and shall perform such duties as may, from time to time, be assigned to him/them by the Board of Directors or by the President.

**Section 5.** The Secretary - The Secretary must be a resident and a citizen of the Philippines. He shall be the custodian of and shall maintain the corporate books and record and shall be the recorder of the Corporation's formal actions and transactions. He shall have the following specific powers and duties:

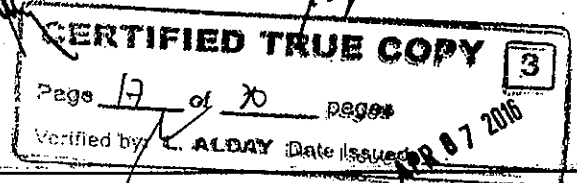
a) To record or see to the proper recording of the minutes and transactions of all meetings of the directors and the shareholders and to maintain minute books of such meetings in the form and manner required by law;

b) To keep or cause to be kept record books showing the details required by law with respect to the stock certificates of the Corporation, including ledgers and transfer books showing all shares of the Corporation subscribed, issued and transferred;

c) To keep the corporate seal and affix it to all papers and documents requiring a seal, and to attest by his signature all corporate documents requiring the same;

d) To attend to the giving and serving of all notices of the Corporation required by law or these by-laws to be given;

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e) To certify to such corporate acts, countersign corporate documents or certificates, and make reports or statements as may be required of him by law or by government rules and regulations.

f) To act as the inspector at the election of directors and, as such; to determine the number of shares of stock outstanding and entitled to vote, the shares of stock represented at the meeting, the existence of a quorum, the validity and effect of proxies, and to receive votes, ballots or consents; hear, and determine all challenges and questions arising in connection with the right to vote, count and tabulate all votes, ballots or consents, determine the result, and do such acts as are proper to conduct the election or vote. The Secretary may assign the exercise or performance of any or all of the foregoing duties, powers and functions to any other person or persons, subject always to his supervision and control.

g) To perform such other duties as are incidental to his office or as may be assigned to him by the Board of Directors or the President.

**Section 6.** The Treasurer - The Treasurer of the Corporation shall be its chief fiscal officer and the custodian of its funds, securities and property. The Treasurer shall have the following duties:

a) To keep full and accurate accounts of receipts and disbursements in the books of the Corporation.

b) To have custody of, and be responsible for, all the funds, securities and bonds of the Corporation;

c) To deposit in the name and, to the credit of the Corporation, in such bank as may be designated from time to time by the Board of Directors, all the moneys, funds, securities, bonds, and similar valuable effects belonging to the Corporation which may come under his control;

d) To render annual statements showing the financial condition of the Corporation and such other financial reports as the Board of Directors, the Chairman, or the President may, from time to time require;

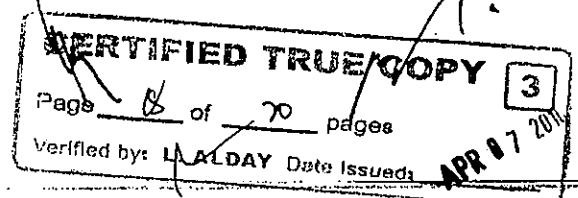
e) To prepare such financial reports, statements, certifications and other documents which may, from time to time, be required by government rules and regulations and to submit the same to the proper government agencies;

f) To exercise such powers and perform such duties and functions as may be assigned to him by the President.

**Section 7.** Term of Office - The term of office of all officers shall be for a period of one (1) year and until their successors are duly elected and qualified. Such officers may however be sooner removed for cause or for reasons as may be determined by the Board.

**Section 8.** Vacancies - If any position of the officers becomes vacant by reason of death, resignation, disqualification or for any other cause, the Board of Directors, by majority vote may elect a successor who shall hold office for the unexpired term.

**Section 9.** Compensation - The officers enumerated in this by-laws shall receive such remuneration as the Board of Directors may determine. All other officers shall



receive such remuneration as the Board of Directors may determine upon recommendation of the President. A director shall not be precluded from serving the Corporation in any other capacity as an officer, agent or otherwise, and from receiving compensation therefor.

## ARTICLE V

### OFFICES

**Section 1.** The principal office of the Corporation shall be located at the place stated in Article III of the Articles of Incorporation. The Corporation may have such other branch offices, either within or outside the Philippines as the Board of Directors may designate or as the business of the Corporation may, from time to time, require.

## ARTICLE VI

### AUDIT OF BOOKS, FISCAL YEAR AND DIVIDENDS

**Section 1.** External Auditors - At the regular shareholders' meeting, the external auditor or auditors of the Corporation for the ensuing year shall be appointed. The external auditor or auditors shall examine, verify, report and certify on the earnings and expenses of the Corporation. The external auditor or auditors of the Corporation shall not at the same time provide the services of an internal auditor to the Corporation. The Corporation shall ensure that other non-audit work shall not be in conflict with the functions of the external auditor. The Corporation's external auditor or auditors shall be rotated or the handling partner shall be changed every five (5) years or earlier.

**Section 2.** Fiscal Year-- The fiscal year of the Corporation shall begin on the first day of January and end on the last day of December of each year. Shareholders may approve the change in the fiscal year in the same manner that amendments to these By-Laws are hereby approved and put in effect.

**Section 3.** Dividends - Dividends shall be declared and paid out of the unrestricted retained earnings which shall be payable in cash, property, or stock to all shareholders on the basis of outstanding stock held by them, as often and at such times as the Board of Directors may determine and in accordance with law and applicable rules and regulations.

## ARTICLE VII

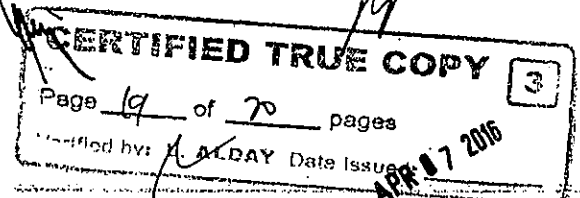
### AMENDMENTS

Date: 6-4-2016 Time: 2:15:45 PM

**Section 1.** This By-Laws may be amended or repealed by the affirmative vote of at least a majority of the Board of Directors and the shareholders representing a majority of the outstanding capital stock at any shareholders' meeting called for that purpose.

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ARTICLE VIII

SEAL

Section 1. Form and Inscriptions - The corporate seal shall be determined by the Board of Directors.

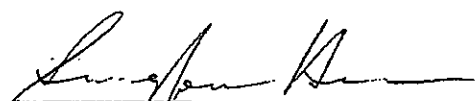
ARTICLE IX

ADOPTION CLAUSE

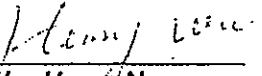
The foregoing by-laws was adopted by all the shareholders of the Corporation on May 17, 2007 at the principal office of the Corporation.

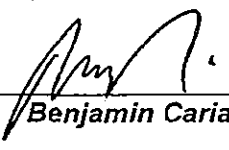
IN WITNESS WHEREOF, we, the undersigned shareholder present at said meeting and voting thereat in favor of the adoption of said by-laws, have hereunto subscribed our names this May 17, 2007 at Makati city.

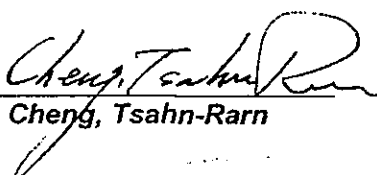
  
Erramon Aboitiz

  
Hsu, Sung-Fou

  
Luis Miguel Aboitiz

  
Wu, Hong-Neng

  
Benjamin Cariaso

  
Cheng, Tsahn-Rarn

Date: 6-4-2016 Time: 2:15:46 PM

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3

Page 20 of 20 pages

Verified by: L. ALDAY Date Issued: 6-4-2016

Republic of the Philippines

**SECURITIES and EXCHANGE COMMISSION**

I hereby certify that (a) this is a true copy of the document stored in the SEC i-View facility to which proper security measures were employed to ensure data integrity, consisting of twenty [ 20 ] page(s); and (b) at all material times the SEC i-View Facility was operating in a manner that did not affect the integrity of the electronic document.

REXONA PENINSULA ENERGY INC

Verified by: LEONORA ALDAY Fee: Php 700 paid under  
160 788 APR 07 2016



Romeo B. Camano  
**ROMEO B. CAMANO**  
SEC PSRU Specialist II

**ELECTRONIC RECORDS MANAGEMENT DIVISION**  
Information and Communications Technology Department





REPUBLIC OF THE PHILIPPINES  
**SECURITIES AND EXCHANGE COMMISSION**  
SEC Building, EDSA, Greenhills  
City of Mandaluyong, Metro Manila

ANNEX " D "

COMPANY REG. NO. CS200708532  
COMPANY TIN: 006-741-637

### CERTIFICATE OF INCORPORATION

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the Articles of Incorporation and By-Laws of

**REDONDO PENINSULA ENERGY, INC.**

were duly approved by the Commission on this date upon the issuance of this Certificate of Incorporation in accordance with the Corporation Code of the Philippines (Batas Pambansa Blg. 68), Republic Act 7227 and copies of said Articles and By-Laws are hereto attached.

This Certificate grants juridical personality to the corporation but does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/broker/merchant, financing company, pre-need plan issuer, general agent in pre-need plans and time shares/club shares/membership certificates issuers or selling agents thereof. Neither does this Certificate constitute as permit to undertake activities for which other government agencies require a license or permit.

As a registered corporation, it shall submit annually to this Commission the reports indicated at the back of this certificate.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of this Commission to be affixed at Mandaluyong City, Metro Manila, Philippines, this 30<sup>th</sup> day of May, Two Thousand Seven.

Date: 6-4-2016 Time: 2:15:27 PM

BENITO A. CATARAN  
Director

Company Registration and Monitoring Department

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**CERTIFIED TRUE COPY**  
Page 1 of 20 pages  
Verified by: L. ALDAY Date Issued: APR 07 2016 **3**

## List of Shareholders

The partners of Redondo Peninsula Energy, Inc. (RPE) are as follows:

1. MERALCO POWERGEN CORPORATION, a corporation duly incorporated under the laws of the Republic of the Philippines, having its registered office at 8/F Rockwell Business Center, Tower 1, Ortigas Avenue, Pasig City, Philippines, and represented herein by its President, Oscar S. Reyes and Executive Vice-President and Chief Operating Officer, Aaron A. Domingo;
2. THERMA POWER, INC., a corporation duly incorporated under the laws of the Republic of the Philippines, having its registered office at Aboitiz Corporate Center, Gov. Manuel A. Cuenco Avenue, Cebu City 6000, Philippines, and represented herein by its President, Antonio R. Moraza;
3. TAIWAN COGENERATION INTERNATIONAL CORPORATION PHILIPPINES BRANCH OFFICE, a limited liability company incorporated under the laws of the British Virgin Islands, acting through its duly registered Philippine branch office, with registered address at 110 Legazpi Street, Legaspi Village, Makati City, Philippines, and represented herein by its Director, Sung-Fou Hsu;

**List of Shareholders**

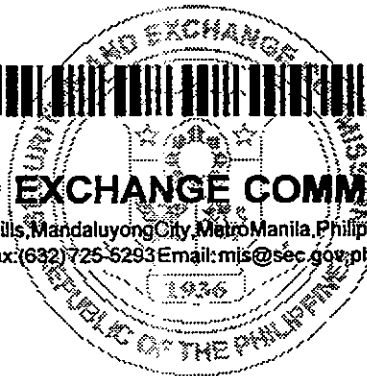
**ANNEX " E "**

The partners of Redondo Peninsula Energy, Inc. (RPE) are as follows:

1. MERALCO POWERGEN CORPORATION: 47%
2. THERMA POWER, INC.: 25%
3. TAIWAN COGENERATION INTERNATIONAL CORPORATION (PHILIPPINE BRANCH OFFICE): 25%
4. MERALCO PENSION FUND: 3%



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**SECURITIES AND EXCHANGE COMMISSION**SEC Building, EDSA, Greenhills, Mandaluyong City, Metro Manila, Philippines  
Tel: (632) 726-0931 to 39 Fax: (632) 725-5293 Email: mis@sec.gov.ph**Barcode Page**

The following document has been received:

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Receiving Branch : SEC Head Office  
Receipt Date and Time : July 10, 2015 10:31:06 AM  
Received From : Head Office

**Company Representative**

Doc Source

**Company Information**

SEC Registration No. CS200708532  
Company Name REDONDO PENINSULA ENERGY, INC.  
Industry Classification Extra-Territorial Organizations & Bodies  
Company Type Stock Corporation

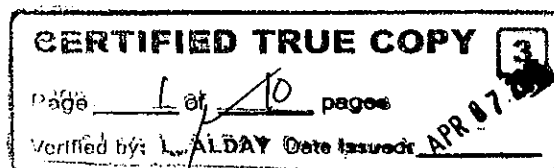
**Document Information**

Document ID 107102015000867  
Document Type GENERAL INFORMATION SHEET  
Document Code GIS  
Period Covered July 07, 2015  
No. of Days Late 0  
Department CED/CFD/CRMD/MRD  
Remarks

Date: 6-4-2016 Time: 2:1:47 PM

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**GENERAL INFORMATION SHEET  
FOR THE YEAR 2015  
STOCK CORPORATION**

**GENERAL INSTRUCTIONS:**

1. FOR USER CORPORATION: THIS GIS SHOULD BE SUBMITTED WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THE ANNUAL STOCKHOLDERS' MEETING. DO NOT LEAVE ANY ITEM BLANK. WRITE "N.A." IF INFORMATION REQUIRED IS NOT APPLICABLE TO THE CORPORATION OR "NONE" IF THE INFORMATION IS NON-EXISTENT. IF THE ANNUAL STOCKHOLDERS' MEETING IS HELD ON A DATE OTHER THAN THAT STATED IN THE BY-LAWS, THE GIS SHALL BE SUBMITTED WITHIN THIRTY (30) CALENDAR DAYS FROM THE ACTUAL DATE OF THE ANNUAL STOCKHOLDERS' MEETING.
2. IF NO MEETING IS HELD, THE CORPORATION SHALL SUBMIT THE GIS NOT LATER THAN JANUARY 30 OF THE FOLLOWING YEAR. HOWEVER, SHOULD AN ANNUAL STOCKHOLDERS' MEETING BE HELD THEREAFTER, A NEW GIS SHALL BE SUBMITTED/FILED.
3. THIS GIS SHALL BE ACCOMPLISHED IN ENGLISH AND CERTIFIED AND SWORN TO BY THE CORPORATE SECRETARY OF THE CORPORATION.
4. THE SEC SHOULD BE TIMELY APPRISED OF RELEVANT CHANGES IN THE SUBMITTED INFORMATION AS THEY ARISE. FOR CHANGES RESULTING FROM ACTIONS THAT AROSE BETWEEN THE ANNUAL MEETINGS, THE CORPORATION SHALL SUBMIT ONLY THE AFFECTED PAGE OF THE GIS THAT RELATES TO THE NEW INFORMATION TOGETHER WITH A COVER LETTER SIGNED BY THE CORPORATE SECRETARY OF THE CORPORATION. THE PAGE OF THE GIS AND COVER LETTER SHALL BE SUBMITTED WITHIN SEVEN (7) DAYS AFTER SUCH CHANGE OCCURRED OR BECAME EFFECTIVE.
5. SUBMIT FOUR (4) COPIES OF THE GIS TO THE CENTRAL RECEIVING SECTION, GROUND FLOOR, SEC BLDG., EDSA, MANDALUYONG CITY. ALL COPIES SHALL BE UNIFORMLY ON A4 OR LETTER-SIZED PAPER WITH A STANDARD COVER PAGE. THE PAGES OF ALL COPIES SHALL USE ONLY ONE SIDE. CORPORATIONS SUBMITTING A COPY OF THEIR GIS ONLINE OR VIA INTERNET SHALL SUBMIT ONE (1) HARD COPY OF THE GIS TOGETHER WITH A CERTIFICATION UNDER OATH BY ITS CORPORATE SECRETARY THAT THE COPY SUBMITTED ONLINE CONTAINS THE EXACT DATA IN THE HARD COPY.
6. ONLY THE GIS ACCOMPLISHED WIT THESE INSTRUCTIONS SHALL BE CONSIDERED AS HAVING BEEN FILED.
7. THIS GIS MAY BE USED AS EVIDENCE AGAINST THE CORPORATION AND ITS RESPONSIBLE DIRECTORS/OFFICERS FOR ANY VIOLATION OF THE EXISTING LAWS, RULES AND REGULATIONS.

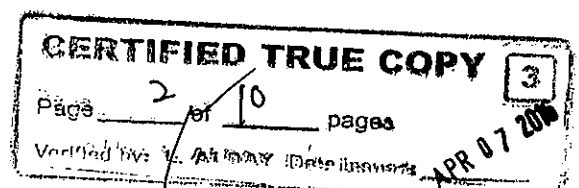
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|                                                                                                                                                               |                                                               |                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------|
| <b>CORPORATE NAME:</b><br>REDONDO PENINSULA ENERGY, INC.                                                                                                      |                                                               | <b>DATE REGISTERED:</b><br>MAY 30, 2007                    |
| <b>BUSINESS/TRADE NAME:</b> REDONDO PENINSULA ENERGY, INC.                                                                                                    |                                                               | <b>FISCAL YEAR END:</b> DECEMBER 31                        |
| <b>SEC REGISTRATION NUMBER:</b> CS200708532                                                                                                                   |                                                               | <b>CORPORATE TAX IDENTIFICATION NO. (TIN):</b> 006-741-637 |
| <b>DATE OF ANNUAL MEETING PER BY-LAWS:</b><br>30 <sup>th</sup> DAY OF JUNE                                                                                    |                                                               | <b>WEBSITE/URL ADDRESS:</b><br>www.rpenergy.ph             |
| <b>ACTUAL DATE OF ANNUAL MEETING:</b> JULY 7, 2015                                                                                                            |                                                               | <b>E-MAIL ADDRESS:</b><br>N.A.                             |
| <b>COMPLETE PRINCIPAL OFFICE ADDRESS:</b><br>UNIT 310, THE VENUE, RIZAL HI-WAY, SUBIC BAY INDUSTRIAL PARK PHASE I, SUBIC BAY FREE PORT ZONE, 2222 PHILIPPINES |                                                               | <b>FAX NO. (047) 250-2664</b>                              |
| <b>COMPLETE BUSINESS ADDRESS:</b><br>UNIT 310, THE VENUE, RIZAL HI-WAY, SUBIC BAY INDUSTRIAL PARK PHASE I, SUBIC BAY FREE PORT ZONE, 2222 PHILIPPINES         |                                                               | <b>TEL. NO. (047) 252-3230</b>                             |
| <b>EXTERNAL AUDITOR &amp; ITS SIGNING PARTNER:</b><br>SGV & CO./ MARTIN C. GUANTES                                                                            | <b>SEC ACCREDITATION (If Applicable):</b> 0325-AR-2 (GROUP A) | <b>GEOGRAPHICAL CODE:</b><br>N.A.                          |
| <b>PRIMARY PURPOSE/ACTIVITY/INDUSTRY PRESENTLY ENGAGED IN:</b> REFER TO ANNEX "A"                                                                             | <b>INDUSTRY CLASSIFICATION:</b><br>POWER                      |                                                            |
| <b>INTERCOMPANY AFFILIATIONS</b>                                                                                                                              |                                                               |                                                            |
| <b>PARENT COMPANY</b>                                                                                                                                         | <b>SEC REGISTRATION NO.</b>                                   | <b>ADDRESS</b>                                             |
| N.A.                                                                                                                                                          | N.A.                                                          | N.A.                                                       |
| <b>SUBSIDIARY/AFFILIATE</b>                                                                                                                                   | <b>SEC REGISTRATION NO.</b>                                   | <b>ADDRESS</b>                                             |
| N.A.                                                                                                                                                          | N.A.                                                          | N.A.                                                       |

NOTE: USE ADDITIONAL SHEET IF NECESSARY

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# GENERAL INFORMATION SHEET

STOCK CORPORATION  
PLEASE PRINT LEGIBLY

Corporate Name: REDONDO PENINSULA ENERGY INC.

A. Is the Corporation a covered person under the Anti Money Laundering Act (AMLA), as amended? (Rep. Acts. 9160/9164/10167/10365)

Yes ☐ No ☒

Please check the appropriate box:

1.

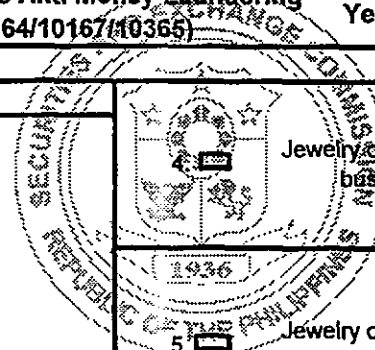
- ☐ a. Banks
- ☐ b. Offshore Banking Units
- ☐ c. Quasi-Banks
- ☐ d. Trust Entities
- ☐ e. Non-Stock Savings and Loan Associations
- ☐ f. Pawnshops
- ☐ g. Foreign Exchange Dealers
- ☐ h. Money Changers
- ☐ i. Remittance Agents
- ☐ j. Electronic Money Issuers
- ☐ k. Financial Institutions which Under Special Laws are subject to Bangko Sentral ng Pilipinas' (BSP) supervision and/or regulation, including their subsidiaries and affiliates.

2.

- ☐ a. Insurance Companies
- ☐ b. Insurance Agents
- ☐ c. Insurance Brokers
- ☐ d. Professional Reinsurers
- ☐ e. Reinsurance Brokers
- ☐ f. Holding Companies
- ☐ g. Holding Company Systems
- ☐ h. Pre-need Companies
- ☐ i. Mutual Benefit Association
- ☐ j. All Other Persons and entities supervised and/or regulated by the Insurance Commission (IC)

3.

- ☐ a. Securities Dealers
- ☐ b. Securities Brokers
- ☐ c. Securities Salesman
- ☐ d. Investment Houses
- ☐ e. Investment Agents and Consultants
- ☐ f. Trading Advisors
- ☐ g. Other entities managing Securities or rendering similar services
- ☐ h. Mutual Funds or Open-end Investment Companies
- ☐ i. Close-end Investment Companies
- ☐ j. Common Trust Funds or Issuers and other similar entities
- ☐ k. Transfer Companies and other similar entities
- ☐ l. Other entities administering or otherwise dealing in currency, commodities or financial derivatives based there on
- ☐ m. Entities administering or otherwise dealing in valuable objects
- ☐ n. Entities administering or otherwise dealing in cash Substitutes and other similar monetary instruments or property supervised and/or regulated by the Securities and Exchange Commission (SEC)



Jewelry dealers in precious metals, who, as a business, trade in precious metals

Jewelry dealers in precious stones, who, as a business, trade in precious stone

6. Company service providers which, as a business, provide any of the following services to third parties:

- ☐ a. acting as a formation agent of juridical persons
- ☐ b. acting as (or arranging for another person to act as a director or corporate secretary of a company, a partner of a partnership, or a similar position in relation to other juridical persons
- ☐ c. providing a registered office, business address or accommodation, correspondence or administrative address for a company, a partnership or any other legal person or arrangement

☐ d. acting as (or arranging for another person to act as a nominee shareholder for another person

7. Persons who provide any of the following services

- ☐ a. managing of client money, securities or other assets
- ☐ b. management of bank, savings or securities accounts
- ☐ c. organization of contributions for the creation, operation or management of companies
- ☐ d. creation, operation or management of juridical persons or arrangements, and buying and selling business entities

8. ☐ None of the above

Describe nature of business:

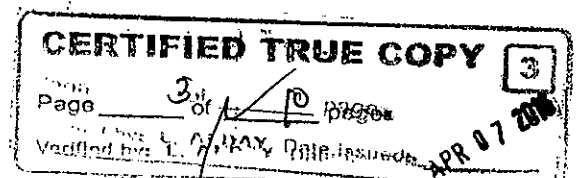
Time: 2:14:48 PM  
REFER TO ANNEX A

B. Has the Corporation complied with the requirements on Customer Due Diligence (CDD) or Know Your Customer (KYC), record-keeping, and submission of reports under the AMLA, as amended, since the last filing of its

Yes ☐ No ☒

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User Name: 5secexpress

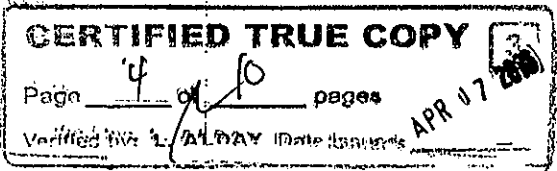


GENERAL INFORMATION SHEET  
STOCK CORPORATION  
PLEASE PRINT LEGIBLY

|                                                                                   |                      |                  |                        |                                                    |                        |                  |                 |
|-----------------------------------------------------------------------------------|----------------------|------------------|------------------------|----------------------------------------------------|------------------------|------------------|-----------------|
| CORPORATE NAME: REDONDO PENINSULA ENERGY, INC.                                    |                      |                  |                        |                                                    |                        |                  |                 |
| CAPITAL STRUCTURE                                                                 |                      |                  |                        |                                                    |                        |                  |                 |
| AUTHORIZED CAPITAL STOCK:                                                         |                      |                  |                        |                                                    |                        |                  |                 |
|                                                                                   | TYPE OF SHARES*      | NUMBER OF SHARES | PAR/STATED VALUE (PhP) | AMOUNT (PhP)<br>(No. of Shares x Par/Stated Value) |                        |                  |                 |
|                                                                                   | COMMON               | 20,000,000       | 100.00                 | 2,000,000,000.00                                   |                        |                  |                 |
| TOTAL                                                                             |                      | 20,000,000       | TOTAL                  | 2,000,000,000.00                                   |                        |                  |                 |
| SUBSCRIBED CAPITAL                                                                |                      |                  |                        |                                                    |                        |                  |                 |
| FILIPINO                                                                          | NO. OF STOCK-HOLDERS | TYPE OF SHARES*  | NUMBER OF SHARES       | NUMBER OF SHARES IN THE HANDS OF THE PUBLIC**      | PAR/STATED VALUE (PhP) | AMOUNT (PhP)     | % OF OWNER-SHIP |
|                                                                                   | 10                   | COMMON           | 12,934,461             | N.A.                                               | 100.00                 | 1,293,446,100.00 | 75%             |
| TOTAL                                                                             |                      |                  | 12,934,461             |                                                    | 100.00                 | 1,293,446,100.00 | 75%             |
| FOREIGN<br>(INDICATE BY NATIONALITY)                                              | NO. OF STOCK-HOLDERS | TYPE OF SHARES*  | NUMBER OF SHARES       | NUMBER OF SHARES IN THE HANDS OF THE PUBLIC**      | PAR/STATED VALUE (PhP) | AMOUNT (PhP)     | % OF OWNER-SHIP |
| BVI                                                                               | 1                    | COMMON           | 4,311,484              | N.A.                                               | 100.00                 | 431,148,400.00   | 25%             |
| TAIWANESE                                                                         | 2                    | COMMON           | 2                      | N.A.                                               | 100.00                 | 200.00           | 0%              |
| TOTAL                                                                             |                      |                  | 4,311,486              |                                                    | 100.00                 | 431,148,600.00   | 25%             |
| TOTAL SUBSCRIBED                                                                  |                      |                  |                        |                                                    |                        | 1,724,594,700.00 | 100%            |
| PAID-UP CAPITAL                                                                   |                      |                  |                        |                                                    |                        |                  |                 |
| FILIPINO                                                                          | NO. OF STOCK-HOLDERS | TYPE OF SHARES*  | NUMBER OF SHARES       | PAR/STATED VALUE (PhP)                             | AMOUNT (PhP)           |                  | % OF OWNER-SHIP |
|                                                                                   | 10                   | COMMON           | 12,934,461             | 100.00                                             | 1,293,446,100.00       |                  | 75%             |
| TOTAL                                                                             |                      |                  | 12,934,461             | 100.00                                             | 1,293,446,100.00       |                  | 75%             |
| FOREIGN<br>(INDICATE BY NATIONALITY)                                              | NO. OF STOCK-HOLDERS | TYPE OF SHARES*  | NUMBER OF SHARES       | PAR/STATED VALUE (PhP)                             | AMOUNT (PhP)           |                  | % OF OWNER-SHIP |
| BVI                                                                               | 1                    | COMMON           | 4,311,484              | 100.00                                             | 431,148,400.00         |                  | 25%             |
| TAIWANESE                                                                         | 2                    | COMMON           | 2                      | 100.00                                             | 200.00                 |                  | 0%              |
| TOTAL                                                                             |                      |                  | 4,311,486              | 100.00                                             | 431,148,600.00         |                  | 25%             |
| TOTAL PAID-UP                                                                     |                      |                  |                        |                                                    | 1,724,594,700.00       |                  | 100%            |
| Date: 6-4-2016 Time: 2:1:49 PM                                                    |                      |                  |                        |                                                    |                        |                  |                 |
| NOTE: USE ADDITIONAL SHEET IF NECESSARY                                           |                      |                  |                        |                                                    |                        |                  |                 |
| * Common, Preferred or other classification                                       |                      |                  |                        |                                                    |                        |                  |                 |
| ** Other than Directors, Officers, Shareholders owning 10% of outstanding shares. |                      |                  |                        |                                                    |                        |                  |                 |

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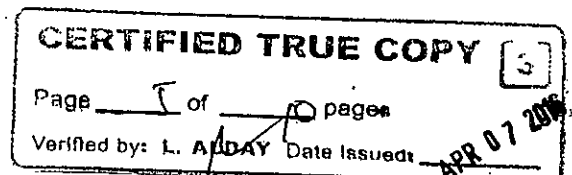


**GENERAL INFORMATION SHEET  
STOCK CORPORATION  
PLEASE PRINT LEGIBLY**

| <b>CORPORATE NAME:</b> REDONDO PENINSULA ENERGY, INC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |       |       |     |              |                     |             |                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-----|--------------|---------------------|-------------|-----------------------------------------------------------|
| <b>DIRECTORS/OFFICERS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |       |       |     |              |                     |             |                                                           |
| NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | INC'R | BOARD | SEX | STOCK HOLDER | OFFICER             | EXEC. COMM. | TAX IDENTIFICATION NO. (TIN) FOR FILIPINOS AND FOREIGNERS |
| 1. OSCAR S. REYES<br><i>Filipino</i><br>Unit 6 Kasiyahan Homes, 58 McKinley Road, Forbes Park, Makati City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N     | C     | M   |              | Chairman            | N.A.        | 136-623-569                                               |
| 2. AARON A. DOMINGO<br><i>Filipino</i><br>501 Regent Parkway Condominium Bonifacio Global City, Taguig City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N     | M     | M   | Y            | President           | N.A.        | 170-803-692                                               |
| 3. ANGELITO U. LANTIN<br><i>Filipino</i><br>#1 Venezuela St. Loyola Grand Villas, Marikina City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N     | M     | M   | Y            | N.A.                | N.A.        | 106-447-777                                               |
| 4. BETTY C. SIY-YAP<br><i>Filipino</i><br>No. 7 Caroline St., Parkway Village Quezon City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N     | M     | F   | Y            | N.A.                | N.A.        | 102-100-627                                               |
| 5. ERRAMON I. ABOITIZ<br><i>Filipino</i><br>6 Lantana St., North Town Homes Subd., Nasipit, Talamban, Cebu City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Y     | M     | M   | Y            | N.A.                | N.A.        | 103-715-862                                               |
| 6. ANTONIO R. MORAZA<br><i>Filipino</i><br>23 Paseo Emilio St., Ma. Luisa Park, Banilad, Cebu City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N     | M     | M   | Y            | N.A.                | N.A.        | 131-507-907                                               |
| 7. HSI - LUNG CHEN<br><i>Taiwanese</i><br>6/F, 392 Rui Guang Road, Neihu, Taipei, Taiwan, ROC 11492                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N     | M     | M   | Y            | N.A.                | N.A.        | 193-165-528                                               |
| 8. SHUH-SEN LIN<br><i>Taiwanese</i><br>6/F, 392 Rui Guang Road, Neihu, Taipei, Taiwan, ROC 11492                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | N     | M     | M   | Y            | N.A.                | N.A.        | 461-463-667                                               |
| 9. EMERLINDA R. ROMAN<br><i>Filipino</i><br>47 Kalaw St., Marikina Homes, Tandang Sora, Quezon City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N     | I     | F   | Y            | N.A.                | N.A.        | 110-833-070                                               |
| 10. RAFAEL L. ANDRADA<br><i>Filipino</i><br>7 Dona Ines cor. Legaspi Streets Alabang Hills, Muntinlupa City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N     | N     | M   | N            | Treasurer           | N.A.        | 127-415-866                                               |
| 11. WILLIAM S. PAMINTUAN<br><i>Filipino</i><br>9 Argentina St., Loyola Grand Villas Quezon City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N     | N     | M   | N            | Corporate Secretary | N.A.        | 146-473-562                                               |
| <b>-NOTHING FOLLOWS-</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |       |     |              |                     |             |                                                           |
| <b>INSTRUCTIONS:</b><br>FOR SEX COLUMN, PUT "F" FOR FEMALE, "M" FOR MALE.<br>FOR BOARD COLUMN, PUT "C" FOR CHAIRMAN, "M" FOR MEMBER, "I" FOR INDEPENDENT DIRECTOR.<br>FOR INC'R COLUMN, PUT "Y" AN INCORPORATOR, "N" IF NOT.<br>FOR STOCKHOLDER COLUMN, PUT "Y" IF A STOCKHOLDER, "N" IF NOT.<br>FOR OFFICER COLUMN, INDICATE PARTICULAR POSITION IF AN OFFICER, FROM VP UP INCLUDING THE POSITION OF A TREASURER, SECRETARY, COMPLIANCE OFFICER AND/OR ASSOCIATED PERSON.<br>FOR EXECUTIVE COMMITTEE, INDICATE "C" IF MEMBER OF A COMPENSATION COMMITTEE, "A" FOR AUDIT COMMITTEE, "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER. |       |       |     |              |                     |             |                                                           |

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GENERAL INFORMATION SHEET  
STOCK CORPORATION  
PLEASE PRINT LEGIBLY

| CORPORATE NAME: REDONDO PENINSULA ENERGY, INC.                                                                                                                                                                |                   |           |                                                     |                |                   |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------|-----------------------------------------------------|----------------|-------------------|-----------------------------------------------------------|
| TOTAL NUMBER OF STOCKHOLDERS: 13                                                                                                                                                                              |                   |           | NO. OF STOCKHOLDERS WITH 100 OR MORE SHARES EACH: 4 |                |                   |                                                           |
| TOTAL ASSETS BASED ON LATEST AUDITED FS:                                                                                                                                                                      |                   |           | Php 1,322,821,727                                   |                |                   |                                                           |
| STOCKHOLDER'S INFORMATION                                                                                                                                                                                     |                   |           |                                                     |                |                   |                                                           |
| NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS                                                                                                                                                             | SHARES SUBSCRIBED |           |                                                     | % OF OWNERSHIP | AMOUNT PAID (Php) | TAX IDENTIFICATION NO. (TIN) FOR FILIPINOS AND FOREIGNERS |
|                                                                                                                                                                                                               | TYPE              | NUMBER    | AMOUNT (Php)                                        |                |                   |                                                           |
| 1. MERALCO POWERGEN CORPORATION<br><i>Filipino</i><br>8 <sup>th</sup> Floor, Rockwell Business Center<br>1, Ortigas Avenue, Pasig City                                                                        | COMMON            | 8,105,592 | 810,559,200.00                                      | 47%            | 810,559,200.00    | 214-664-682                                               |
| 2. THERMA POWER, INC.<br><i>Filipino</i><br>Abotiz Corp. Center, Gov. Cuenco<br>Avenue, Kasambagan, Cebu City                                                                                                 | COMMON            | 4,311,484 | 431,148,400.00                                      | 25%            | 431,148,400.00    | 006-909-985                                               |
| 3. TAIWAN COGENERATION INTERNATIONAL CORPORATION (PHILIPPINE BRANCH OFFICE)<br><i>British Virgin Islands (BVI)</i><br>Penthouse, Two Cities Condominium<br>110 Legazpi Street, Legazpi Village<br>Makati City | COMMON            | 4,311,484 | 431,148,400.00                                      | 25%            | 431,148,400.00    | 266-850-050-000                                           |
| 4. MERALCO PENSION FUND<br><i>Filipino</i><br>Lopez Building, Meralco Complex<br>Ortigas Avenue, Pasig City                                                                                                   | COMMON            | 517,378   | 51,737,800.00                                       | 3%             | 51,737,800.00     | 001-045-086-000                                           |
| 5. OSCAR S. REYES<br><i>Filipino</i><br>Unit 6 Kasiyahan Homes<br>58 McKinley Road<br>Forbes Park, Makati City                                                                                                | COMMON            | 1         | 100.00                                              | NIL            | 100.00            | 136-623-569                                               |
| 6. AARON A. DOMINGO<br><i>Filipino</i><br>501 Regent Parkway<br>Condominium<br>Bonifacio Global City, Taguig City                                                                                             | COMMON            | 1         | 100.00                                              | NIL            | 100.00            | 170-803-692                                               |
| 7. ANGELITO U. LANTIN<br><i>Filipino</i><br>#1 Venezuela St. Loyola Grand Villas,<br>Marikina City                                                                                                            | COMMON            | 1         | 100.00                                              | NIL            | 100.00            | 106-447-777                                               |
| 8. BETTY C. SIY-YAP<br><i>Filipino</i><br>No. 7 Caroline St., Parkway Village<br>Quezon City                                                                                                                  | COMMON            | 1         | 100.00                                              | NIL            | 100.00            | 102-100-627                                               |
| 9. ERRAMON I. ABOITIZ<br><i>Filipino</i><br>6 Lantana St., North Town Homes<br>Subd., Nasipit, Talamban, Cebu City                                                                                            | COMMON            | 1         | 100.00                                              | NIL            | 100.00            | 103-715-862                                               |
| SEE NEXT PAGE.                                                                                                                                                                                                |                   |           |                                                     |                |                   |                                                           |
| TOTAL                                                                                                                                                                                                         |                   |           |                                                     |                |                   |                                                           |
| TOTAL AMOUNT OF SUBSCRIBED CAPITAL                                                                                                                                                                            |                   |           |                                                     |                |                   |                                                           |
| TOTAL AMOUNT OF PAID-UP CAPITAL                                                                                                                                                                               |                   |           |                                                     |                |                   |                                                           |
| INSTRUCTION: SPECIFY TOP 20 STOCKHOLDERS AND INDICATE THE REST AS OTHERS                                                                                                                                      |                   |           |                                                     |                |                   |                                                           |
| Note: For PDIC Nominee included in the list, please indicate further the beneficial owners owning more than 5% of any class of the company's voting securities. Attach separate sheet if necessary.           |                   |           |                                                     |                |                   |                                                           |

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Page 6 of 10 pages  
Verified by: L. ALDAY Date Issued: APR 07 2016

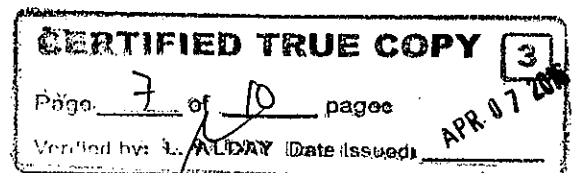
GENERAL INFORMATION SHEET  
STOCK CORPORATION  
PLEASE PRINT LEGIBLY

| CORPORATE NAME: REDONDO PENINSULA ENERGY, INC.                                                                                                                                                      |                   |        |                                                     |                 |                   |                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------|-----------------------------------------------------|-----------------|-------------------|-----------------------------------------------------------|
| TOTAL NUMBER OF STOCKHOLDERS: 13                                                                                                                                                                    |                   |        | NO. OF STOCKHOLDERS WITH 100 OR MORE SHARES EACH: 4 |                 |                   |                                                           |
| TOTAL ASSETS BASED ON LATEST AUDITED FS:                                                                                                                                                            |                   |        |                                                     |                 |                   | Php 1,322,821,727                                         |
| STOCKHOLDER'S INFORMATION                                                                                                                                                                           |                   |        |                                                     |                 |                   |                                                           |
| NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS                                                                                                                                                   | SHARES SUBSCRIBED |        |                                                     | % OF OWNER-SHIP | AMOUNT PAID (Php) | TAX IDENTIFICATION NO. (TIN) FOR FILIPINOS AND FOREIGNERS |
|                                                                                                                                                                                                     | TYPE              | NUMBER | AMOUNT (Php)                                        |                 |                   |                                                           |
| 10. ANTONIO R. MORAZA<br><i>Filipino</i><br>23 Paseo Emilio St., Ma. Luisa Park, Banilad, Cebu City                                                                                                 | COMMON            | 1      | 100.00                                              | NIL             | 100.00            | 131-507-907                                               |
| 11. HSI-LUNG CHEN<br><i>Taiwanese</i><br>6/F, 392 Rui Guang Road, Neihu, Taipei, Taiwan, ROC 11492                                                                                                  | COMMON            | 1      | 100.00                                              | NIL             | 100.00            | 193-185-528                                               |
| 12. SHUH-SEN LIN<br><i>Taiwanese</i><br>6/F, 392 Rui Guang Road, Neihu, Taipei, Taiwan, ROC 11492                                                                                                   | COMMON            | 1      | 100.00                                              | NIL             | 100.00            | 461-463-667                                               |
| 13. EMERLINDA R. ROMAN<br><i>Filipino</i><br>47 Kalaw St., Mira Nila Homes, Tandang Sora, Quezon City                                                                                               | COMMON            | 1      | 100.00                                              | NIL             | 100.00            | 110-833-070                                               |
| -NOTHING FOLLOWS-                                                                                                                                                                                   |                   |        |                                                     |                 |                   |                                                           |
| TOTAL                                                                                                                                                                                               |                   |        | 17,245,947                                          | 100%            |                   |                                                           |
| TOTAL AMOUNT OF SUBSCRIBED CAPITAL (in Php)                                                                                                                                                         |                   |        | 1,724,594,700.00                                    |                 |                   |                                                           |
| TOTAL AMOUNT OF PAID-UP CAPITAL (in Php)                                                                                                                                                            |                   |        |                                                     |                 | 1,724,594,700.00  |                                                           |
| INSTRUCTION: SPECIFY TOP 20 STOCKHOLDERS AND INDICATE THE REST AS OTHERS                                                                                                                            |                   |        |                                                     |                 |                   |                                                           |
| Note: For PDTC Nominee included in the list, please indicate further the beneficial owners owning more than 5% of any class of the company's voting securities. Attach separate sheet if necessary. |                   |        |                                                     |                 |                   |                                                           |

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**GENERAL INFORMATION SHEET  
STOCK CORPORATION  
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|                                                                                                     |                                    |                                                     |                                               |
|-----------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------|-----------------------------------------------|
| <b>CORPORATE NAME: REDONDO PENINSULA ENERGY, INC.</b>                                               |                                    |                                                     |                                               |
| <b>1. INVESTMENT OF CORPORATE FUNDS IN ANOTHER CORPORATION</b>                                      |                                    | <b>AMOUNT (PHP)</b>                                 | <b>DATE OF BOARD RESOLUTION</b>               |
| 1.1 STOCKS                                                                                          |                                    | N.A.                                                | N.A.                                          |
| 1.2 BONDS/COMMERCIAL PAPER (Issued by Private Corporations)                                         |                                    | N.A.                                                | N.A.                                          |
| 1.3 LOANS/ CREDITS/ADVANCES                                                                         |                                    | N.A.                                                | N.A.                                          |
| 1.4 GOVERNMENT TREASURY BILLS                                                                       |                                    | N.A.                                                | N.A.                                          |
| 1.5 OTHERS                                                                                          |                                    | N.A.                                                | N.A.                                          |
| <b>2. INVESTMENT OF CORPORATE FUNDS IN ACTIVITIES UNDER ITS SECONDARY PURPOSES (PLEASE SPECIFY)</b> |                                    | <b>DATE OF BOARD RESOLUTION</b>                     | <b>DATE OF STOCKHOLDERS RATIFICATION</b>      |
| N.A.                                                                                                |                                    | N.A.                                                | N.A.                                          |
| <b>3. TREASURY SHARES</b>                                                                           |                                    | <b>NO. OF SHARES</b>                                | <b>% AS TO THE TOTAL NO. OF SHARES ISSUED</b> |
|                                                                                                     |                                    | N.A.                                                | N.A.                                          |
| <b>4. DEFICIT AS OF END OF THE LAST FISCAL YEAR:</b>                                                |                                    |                                                     | (PhP 404,520,393)                             |
| <b>5. DIVIDENDS DECLARED DURING THE IMMEDIATELY PRECEDING YEAR</b>                                  |                                    |                                                     |                                               |
| <b>TYPE OF DIVIDEND</b>                                                                             |                                    | <b>AMOUNT (PhP)</b>                                 | <b>DATE DECLARED</b>                          |
| 5.1 CASH                                                                                            |                                    | N.A.                                                | N.A.                                          |
| 5.2 STOCK                                                                                           |                                    | N.A.                                                | N.A.                                          |
| 5.3 PROPERTY                                                                                        |                                    | N.A.                                                | N.A.                                          |
| <b>TOTAL</b>                                                                                        |                                    | N.A.                                                | N.A.                                          |
| <b>6. ADDITIONAL SHARES ISSUED DURING THE PERIOD:</b>                                               |                                    |                                                     |                                               |
| <b>DATE</b>                                                                                         | <b>NO. OF SHARES</b>               |                                                     | <b>AMOUNT</b>                                 |
| N.A.                                                                                                | N.A.                               |                                                     | N.A.                                          |
| <b>SECONDARY LICENSE/REGISTRATION WITH SEC AND OTHER GOV'T AGENCY:</b>                              |                                    |                                                     |                                               |
| <b>NAME OF AGENCY:</b>                                                                              | <b>SEC</b>                         | <b>B S P</b>                                        | <b>I C</b>                                    |
| <b>TYPE OF LICENSE/REGN.</b>                                                                        | N.A.                               | N.A.                                                | N.A.                                          |
| <b>DATE ISSUED</b>                                                                                  | N.A.                               | N.A.                                                | N.A.                                          |
| <b>DATE STARTED OPERATIONS:</b>                                                                     | N.A.                               | N.A.                                                | N.A.                                          |
| <b>TOTAL ANNUAL COMPENSATION OF DIRECTORS DURING THE PRECEDING FISCAL YEAR (in PhP) NONE</b>        | <b>TOTAL NO. OF OFFICERS:</b><br>4 | <b>TOTAL NO. OF RANK &amp; FILE EMPLOYEES:</b><br>8 | <b>TOTAL MANPOWER COMPLEMENT:</b><br>13       |

NOTE: USE ADDITIONAL SHEET IF NECESSARY

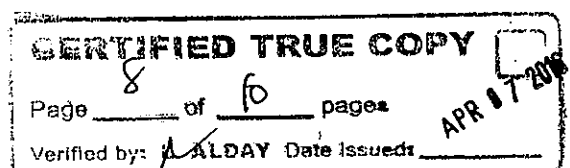
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GIS\_STOCK (V.2013)

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I, WILLIAM S. PAMINTUAN, CORPORATE SECRETARY OF THE ABOVE-MENTIONED CORPORATION DECLARE UNDER THE PENALTY OF PERJURY, THAT ALL THE MATTERS SET FORTH IN THIS GENERAL INFORMATION SHEET WHICH CONSISTS OF NINE PAGES HAVE BEEN MADE IN GOOD FAITH, DULY VERIFIED BY ME AND TO THE BEST OF MY KNOWLEDGE AND BELIEF ARE TRUE AND CORRECT.

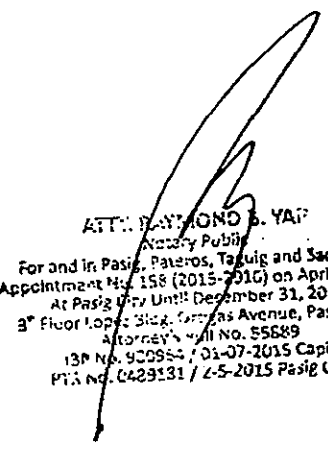
I UNDERSTAND THAT THE FAILURE OF THE CORPORATION TO FILE THIS GIS FOR FIVE (5) CONSECUTIVE YEARS SHALL BE CONSTRUED AS NON-OPERATION OF THE CORPORATION AND A GROUND FOR THE REVOCATION OF THE CORPORATIONS CERTIFICATE OF INCORPORATION. IN THIS EVENTUALITY, THE CORPORATION HEREBY WAIVES ITS RIGHT TO A HEARING FOR THE SAID REVOCATION.

DONE THIS \_\_\_\_\_ DAY OF JUL 10 2015 IN PASIG CITY.

  
WILLIAM S. PAMINTUAN  
Corporate Secretary

SUBSCRIBED AND SWORN TO BEFORE ME ON JUL 10 2015 IN PASIG CITY, AFFIANT PERSONALLY APPEARED BEFORE ME AND EXHIBITED TO ME HIS PASSPORT NO. EC2114124 ISSUED ON 16 SEPTEMBER 2014 VALID UNTIL 15 SEPTEMBER 2019 AT DFA NCR CENTRAL, AND WHO TOOK AN OATH BEFORE ME AS TO SUCH INSTRUMENT.

DOC. NO. 70  
PAGE NO. 15  
BOOK NO. I  
SERIES OF 2015

  
ATTY. RAYMOND B. YAP  
Notary Public  
For and in Pasig, Pateros, Taguig and San Juan  
Appointment No. 158 (2015-2016) on April 6, 2015  
At Pasig City Until December 31, 2016  
3<sup>rd</sup> Floor Lopez Bldg. Tomas Avenue, Pasig City  
Attorney's Mail No. 55689  
13P No. 920954 / 01-07-2015 Capiz  
PTA No. C429131 / 4-5-2015 Pasig City

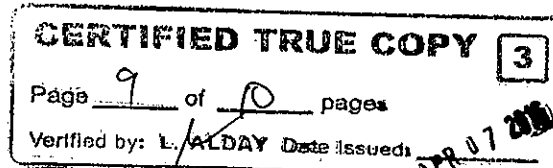
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REDONDO PENINSULA ENERGY, INC.

PRIMARY PURPOSE

To build, own and operate power plants in the Philippines to provide electric energy, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose.

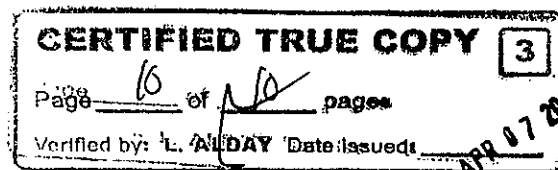
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Republic of the Philippines

**SECURITIES and EXCHANGE COMMISSION**

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**RECORDS PENINSULA ENERGY INC**

Verified by: **LEONORA ALDAY**

Fees Ppd 50 paid under

O.R.No.: 1407653

Date: APR 07 2016



**ROMEO B. CAMANO**

SEC PSRU Specialist II

**ELECTRONIC RECORDS MANAGEMENT DIVISION**  
**Information and Communications Technology Department**

Board of Investment (BOI) Certificate of Registration

ANNEX " F "

The BOI approved Redondo Peninsula Energy, Inc. (RPE)'s application for registration as *New Operator of 2x300 MW Coal Fired Power Plant on a Non-Pioneer Status* under Book I of E.O. 226 on 22 January 2013. An amendment to the application was approved by the BOI on 31 March 2016. RPE's Certificate of Registration has not yet been issued, pending submission of requirements as stipulated in their approval letter. RPE intends to submit the requirements within two (2) months.

04 April 2016

**MR. AARON A. DOMINGO**  
President  
**REDONDO PENINSULA ENERGY, INC.**  
8<sup>th</sup> Floor, Rockwell Business Center Tower I  
Ortigas Avenue, Pasig City 1604  
Tel. No.: 422-1910/ Fax No.: 661-4978

Dear Mr. Domingo,

This refers to your letter dated 08 March 2015, requesting for amendment of the Specific Terms and Conditions relative to the firm's application for registration as **New Operator of 2 X 300 MW Coal-Fired Power Plant on a Non-Pioneer Status** under Book I of E.O. 226 previously approved by the Board on **22 January 2013**.

We are pleased to inform you that the Board, in its meeting of **31 March 2016**, has **APPROVED** your request.

Your project's Certificate of Registration shall be issued upon the submission of the following:

1. Resolution of your Board of Directors accepting all the Specific Terms and Conditions and the General Terms and Conditions listed in Items "D" and "E", respectively, of the attached Project Approval Sheet;
2. Sworn Statement of your Board of Directors adopting and/or affirming all representations and commitments made to the Board, whether in the pre and post registration, and stating that all information and data submitted to the Board are true and correct;
3. Certification, under oath, that your company is not in arrears in the payment of outstanding obligations, including loans, to the government or any government instrumentality;
4. Official contact details, i.e. name and position of officer, address, telephone and fax numbers, and e-mail address, to whom all BOI registration matters shall be sent; and,
5. Proof of payment of registration fee equivalent to 1/10 of 1% of the total project cost (not lower than P3, 000 or not more than P15, 000).

Please be advised that failure to submit the above-mentioned requirements within sixty (60) calendar days from the date you receive this letter and finding of any material discrepancies in the information provided in the application shall cause the ineligibility for registration of your project.

Very truly yours,

BY AUTHORITY OF THE BOARD:



**RAFAELITO H. TARUC**  
OIC – Executive Director  
Industry Development Services

*Received  
Vivek Parmar  
April 07, 2016*  
**(VIVEK PARMAR)**





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ANA MARIA V. BERNARDO

Division Chief

RESOURCE-BASED INDUSTRIES SERVICE

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Control No: CTC 2016-016 Date: April 14, 2016

Verified by: M. B. Sinding

**Project Approval Sheet**

| <b>IMPORTANT PLEASE READ</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                    |                                                                             |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------|
| <p>Before we could issue your Certificate of Registration and be officially listed in our roster of registered firms, we encourage you to submit the items that are indicated in "B" below within sixty (60) calendar days from the date you receive this letter or we would be constrained to withdraw this approval. We also invite your attention to the basic obligations of a BOI-registered firm.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                    |                                                                             |                 |
| <b>A. BASIC INFORMATION ON THE APPROVED PROJECT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                    |                                                                             |                 |
| <b>Applicant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | REDONDO PENINSULA ENERGY, INC.                                                                     |                                                                             |                 |
| <b>Office Address</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Unit 310, The Venue, Rizal Hi-way, Subic Bay Industrial Park Phase 1, Subic Bay Freeport Zone 2222 |                                                                             |                 |
| <b>Project Location</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Redondo Peninsula, Subic Bay Freeport Zone                                                         |                                                                             |                 |
| <b>Law</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Book I of E.O. 226                                                                                 | <b>Application No.</b>                                                      | 2012-134        |
| <b>Category</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | New Operator of Coal-Fired Power Plant                                                             | <b>Date Filed</b>                                                           | 28 May 2012     |
| <b>Project/Activity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | I. Preferred Activities –<br>5. Energy                                                             | <b>Date Application was Approved by the Board</b>                           | 22 January 2013 |
| <b>Product/Annual capacity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Energy<br>2 X 300 MW                                                                               | <b>Date Revised Post Registration Conditions were Approved by the Board</b> | 31 March 2016   |
| <b>Status</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Non-Pioneer                                                                                        |                                                                             |                 |
| <b>B. ITEMS TO COMPLY WITH BEFORE ISSUANCE OF CERTIFICATE OF REGISTRATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                    |                                                                             |                 |
| <ol style="list-style-type: none"> <li>1. Resolution of the Applicant's Board of Directors accepting all the <b>REVISED</b> terms and conditions listed in "D" or "Specific Terms and Conditions" and "E" or General Terms and Conditions of this Project Approval Sheet;</li> <li>2. Sworn Statement of the applicant's Board of Directors adopting and/or affirming all representations and commitments made to the Board, whether in the pre and post registration, and stating that all information and data submitted to the Board are true and correct;</li> <li>3. Certification, under oath, that the applicant is not in arrears in the payment of outstanding obligations, including loans, to the government or any government instrumentality;</li> <li>4. Official contact details, i.e. name and position of officer, address, telephone and fax numbers, and e-mail address, to whom all BOI registration matters shall be sent; and,</li> <li>5. Proof of payment of registration fee equivalent to 1/10 of 1% of the total project cost (not lower than P3, 000 or not more than P15, 000.</li> </ol> |                                                                                                    |                                                                             |                 |
| <p><i>Please proceed to the Resource Based Industries Service (RBIS) for the issuance of the Order of Payment.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                    |                                                                             |                 |
| <b>C. BASIC OBLIGATIONS AS A BOI-REGISTERED ENTERPRISE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                    |                                                                             |                 |
| <ol style="list-style-type: none"> <li>1. The enterprise shall observe and abide by the provisions of the Omnibus Investments Code of 1987 and other related laws and their implementing rules and regulations, as well as its commitments and representations made in the application of registration and take adequate measures to ensure that its obligation there under as well as those of its officers, employees and stockholders are faithfully discharged; provided it is understood that any misrepresentation or falsification in the documents or other supporting papers submitted to the Board shall constitute as ground for automatic cancellation of its registration.</li> <li>2. The enterprise shall comply with the terms and conditions of this registration, particularly the date of commercial operation, to avoid penalties or cancellation of the registration as provided under Art. 7 (8) of E.O. 226 and its implementing rules and regulations, in particular, Rules XXVII and XXIV.</li> </ol>                                                                                         |                                                                                                    |                                                                             |                 |

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ANA MARIA V. BERNARDO

Division Chief

RESOURCE-BASED INDUSTRIES SERVICE

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Verified by:

D. SPECIFIC TERMS AND CONDITIONS

1. The enterprise shall start commercial operations in **December 2020**. Request for amendment of timetable should be filed before the scheduled start of commercial operations. However, movement of Income Tax Holiday (ITH) period is subject to Art. 7 of E.O. 226.

The enterprise shall submit proof of the financial closing for the project within one year from date of registration; otherwise the registration shall be automatically cancelled. As evidence of financial closing, the enterprise shall submit a certification, in a form and substance satisfactory to BOI, issued and addressed by the lenders to BOI confirming the financial agreements are in full force and in effect.

2. The enterprise shall secure a Certificate of Compliance (COC) from the Energy Regulatory Commission (ERC) prior to the start of commercial operations subject to the condition that in the event that ERC denies the said COC, registration shall be subject to automatic cancellation procedure.
3. The enterprise shall increase its stockholders equity to at least **PhP 15,715,890,759** equivalent to 25% of the total project cost and shall submit proof of compliance before availment of Income Tax Holiday (ITH). Equity shall include paid-up capital stock, additional paid-in capital and unrestricted retained earnings, and restricted retained earnings provided that such is intended for the project. Appraisal surplus and treasury stock should not be included as part of stockholders' equity for this purpose.

The 25% equity requirement shall be based on the annual capital requirement of the project; Provided that the total equity requirement of 25% is complied with on the first year of ITH availment.

4. In the grant of incentives, the extent of the project's ITH entitlement shall be based on the project's ability to contribute to the economy's development based on the following parameters: (1) net value added; (2) job generation; (3) multiplier effect; and (4) measured capacity. The Board may reduce the ITH if the project does not realize the extent of economic benefits represented by the proponent at the time of its application. The enterprise shall comply with the following representations:
5. The enterprise should endeavor to undertake meaningful and sustainable Corporate Social Responsibility (CSR) activities in the locality where the project is implemented.

a) **Net Value Added (NVA) should be at least 25%**

| Year | Y1  | Y2  | Y3  | Y4  | Y5  |
|------|-----|-----|-----|-----|-----|
| NVA  | 32% | 32% | 32% | 34% | 32% |

b) **Employment Generation**

| Year                | Y1  | Y2  | Y3  | Y4  | Y5  |
|---------------------|-----|-----|-----|-----|-----|
| Number of Employees | 215 | 215 | 215 | 215 | 215 |

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ANA MARIA V. BERNARDO

Division Chief  
RESOURCE-BASED INDUSTRIES SERVICE

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Verified by: *M. B. Berninger*

**c) Investments and Timetable**

| Activity                                                                                                                                                                                                                                                                                         | Schedule                                                                                        | Related Expenses                                                                        | Cost (PhP'000)    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------|
| Secure necessary license / permit / registration from the government                                                                                                                                                                                                                             | On-going until March 2017                                                                       | Pre-operating expense                                                                   | 1,074,692         |
| Financial Close                                                                                                                                                                                                                                                                                  | One year from the date of registration                                                          |                                                                                         |                   |
|                                                                                                                                                                                                                                                                                                  | From Financial Close up to COD of Unit 2                                                        | Financing costs and fees                                                                | 11,164,923        |
| Site acquisition through lease of contract of land                                                                                                                                                                                                                                               | Completed upon the signing of the Lease and Development Agreement with the SBMA last June 2010. | Land (total lease payments up to 2018):                                                 | 8,178             |
| Other charges and expenses prior to operations                                                                                                                                                                                                                                                   | December 2020                                                                                   | Project Contingency Allowance                                                           | 2,203,027         |
| Site preparation and development <ul style="list-style-type: none"> <li>Hiring of Contractors</li> <li>Civil Works</li> </ul>                                                                                                                                                                    | Ongoing until November 2020                                                                     | Building                                                                                | 570,960           |
|                                                                                                                                                                                                                                                                                                  |                                                                                                 | Leasehold improvements                                                                  | 2,381,553         |
|                                                                                                                                                                                                                                                                                                  |                                                                                                 | Other expenses (i.e. Initial personnel costs, personnel equipment and company vehicles) | 305,527           |
| Acquisition of machinery and equipment, construction and installation <ul style="list-style-type: none"> <li>Placing of Purchase Order or opening of letters of credit</li> <li>Construction</li> <li>Arrival of equipment</li> <li>-Installation of equipment</li> <li>Commissioning</li> </ul> | Unit 1 March 2017 to December 2020                                                              | Machinery and equipment:                                                                | 38,887,387        |
|                                                                                                                                                                                                                                                                                                  | Unit 2 – March 2017 to June 2021                                                                | Installation cost                                                                       | 5,173,148         |
| Acquisition of initial working capital for Unit 1*                                                                                                                                                                                                                                               | July 2020 to December 2020                                                                      | Working capital                                                                         | 1,094,168         |
| Start of commercial operation of Unit 1                                                                                                                                                                                                                                                          | December 2020                                                                                   |                                                                                         |                   |
| Unit 2                                                                                                                                                                                                                                                                                           | June 2021                                                                                       |                                                                                         |                   |
|                                                                                                                                                                                                                                                                                                  |                                                                                                 | <b>Total</b>                                                                            | <b>62,863,563</b> |

**Yearly Schedule of Infusion of Investments:**  
Values in PhP'000

| Prior to 2016 | 2016   | 2017   | 2018       | 2019       | 2020       | 2021      | Total      |
|---------------|--------|--------|------------|------------|------------|-----------|------------|
| 1,724,595     | 51,235 | 73,194 | 11,990,895 | 26,119,099 | 18,452,084 | 4,452,461 | 62,863,563 |

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**ANA MARIA V. BERNARDO**

Division Chief  
**RESOURCE-BASED INDUSTRIES SERVICE**

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**d) Sales Revenues**

| Year | No. Turbines | Capacity (MW) | Total Rated Capacity (MW) | Operating Hours | Production/ Sales Volume (MWH) | Average Selling Price (PhP per KWH) | Revenues (PhP'000) |
|------|--------------|---------------|---------------------------|-----------------|--------------------------------|-------------------------------------|--------------------|
| 1    | 2            | 600           | 680                       | 7,704           | 3,162,240                      | 4.81                                | 15,199,532         |
| 2    | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.82                                | 20,272,272         |
| 3    | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.83                                | 20,306,402         |
| 4    | 2            | 600           | 680                       | 7,056           | 4,204,800                      | 4.83                                | 20,322,764         |
| 5    | 2            | 600           | 680                       | 7,704           | 4,216,320                      | 4.82                                | 20,304,544         |
| 6    | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.83                                | 20,310,668         |
| 7    | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.84                                | 20,344,798         |
| 8    | 2            | 600           | 680                       | 7,056           | 4,204,800                      | 4.84                                | 20,361,091         |
| 9    | 2            | 600           | 680                       | 7,704           | 4,216,320                      | 4.82                                | 20,318,982         |
| 10   | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.83                                | 20,325,067         |
| 11   | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.84                                | 20,359,197         |
| 12   | 2            | 600           | 680                       | 7,056           | 4,204,800                      | 4.85                                | 20,375,464         |
| 13   | 2            | 600           | 680                       | 7,704           | 4,216,320                      | 4.82                                | 20,324,396         |
| 14   | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.84                                | 20,330,466         |
| 15   | 2            | 600           | 680                       | 7,680           | 4,204,800                      | 4.84                                | 20,364,597         |

Income qualified for ITH availment shall not exceed by more than 10% the projected income represented by the enterprise in its application provided the project's actual investments and employment match the enterprise's representations in its application. In cases where the project's actual revenues exceed the projections in its application by more than 10%, the Board may increase the project's ITH availment proportionately for reasons such as but not limited to (a) additional investments; (b) new markets/orders; (c) additional employment and/or increase in number of working shifts. Request/s for adjustment of projected income may be submitted to the Board within the ITH entitlement period.

**6. The enterprise shall be entitled to the following incentives:**

- a) ITH for **four (4) years** from **December 2020** or actual start of commercial operations, whichever is earlier but in no case earlier than the date of registration.

- a.i) The entitlement to ITH incentive is subject to the condition that the approved generation rate of the Energy Regulatory Commission (ERC) assumes that the project will be given ITH

For this purpose, the enterprise shall submit a sworn statement to the effect that the ITH incentive has been taken into consideration in deriving its ERC approved generation rate.

- a.ii) The ITH shall be limited only to the revenues generated from the sales of electricity of the **(2 X 300 MW Coal-Fired Power Plant)**. Only revenues derived from power generated and sold to the grid, other entities and/or communities shall be entitled to ITH. For this purpose, the enterprise shall submit audited segregated income statements for this registered project. Net income from operation of the registered activity shall be certified under oath by the Chief Executive Officer (CEO) or Chief Financial Officer (CFO).

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Verified by: *MB Bernado*

a.iii) The enterprise shall submit the list of cost items common to all its projects/activities (whether BOI or non-BOI registered) and the methodology adopted in allocating common cost between the registered and non-registered activity/ies.

a.iv) Interest Expense on the enterprise's liabilities shall be appropriately allocated between the registered and non-registered activity/ies.

*Date of filing: An application should be filed with the BOI Incentives Administration Service within one (1) month from filing of the final Income Tax Return (ITR) with the Bureau of Internal Revenue (BIR) in order to validate the claim for income tax exemption.*

The application shall be accompanied by a certification by SSS that the enterprise is in good standing in the remittances of SSS contributions of its employees. Further, any request for extension of the reckoning date of ITH availment should be filed prior to the scheduled date or within ninety (90) days from the occurrence of fortuitous events and/or government delays.

The enterprise must secure a Certificate of ITH Entitlement (CoE) from the BOI Legal and Compliance Service prior to the filing of ITR with the BIR; otherwise ITH for that particular taxable year without CoE shall be forfeited.

Notwithstanding the provisions of the preceding paragraphs, the Board as a matter of national interest and for reasonable causes, reserves the right to suspend the availment of ITH.

The enterprise can avail of bonus year in each of the following cases but the aggregate ITH availment (regular and bonus years) shall not exceed eight (8) years:

- The ratio of the total imported and domestic capital equipment to the number of workers for the project does not exceed the ratio set by the Board; or,
- The net foreign exchange savings or earnings amount to at least US\$500,000 annually during the first three (3) years of operation; or,
- The average cost of indigenous raw materials used in the manufacture of the registered product must at least be fifty percent (50%) of the total cost of raw materials for the preceding years prior to the extension unless the Board prescribes a higher percentage.

*Date of filing: An application for entitlement to ITH bonus year/s should be filed with the BOI Incentives Administration Service prior to the filing with the BIR of the enterprise's final ITR, for which the bonus year will be applied.*

- b) Importation of capital equipment, spare parts and accessories at zero (0) duty from the date of effectivity of Executive Order No. 70 (EO 70) and its Implementing Rules and Regulations (IRR) for a period of five (5) years reckoned from the date of its registration or until the expiration of EO 70, whichever is earlier.

*Date of filing: An application for availment of capital equipment incentive shall be filed with the BOI Incentives Administration Service prior to the ordering of equipment.*

- c) Additional deduction from taxable income of fifty percent (50%) of the wages corresponding to the increment in number of direct labor for skilled and unskilled workers in the year of availment as against the previous year if the project meets the prescribed ratio of capital equipment to the number of workers set by the Board. This may be availed of for the first five (5) years from date of registration but not simultaneously with the ITH.

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Division Chief  
RESOURCE-BASED INDUSTRIES SERVICE

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Control No: CTC 2016-016 Date: April 14, 2016  
Verified by: *M. S. S. S.*

*Date of filing: An application should be filed with the BOI Incentives Administration Service within one (1) month from filing of the final ITR with the BIR.*

- d) Importation of consigned equipment for a period of ten (10) years from date of registration, subject to posting of re-export bond.

*Date of filing: Application should be filed with BOI Incentives Administration Service for endorsement to the Department of Finance (DOF).*

- e) Employment of foreign nationals. This may be allowed in supervisory, technical or advisory positions for five (5) years from date of registration. The president, general manager and treasurer of foreign-owned registered enterprises or their equivalent shall not be subject to the foregoing limitations.

*Date of filing: Application should be filed with the BOI Incentives Administration Service before assumption to duty of newly hired foreign national and at least one (1) month before expiration of existing employment authority for renewal of visa.*

- f) Simplification of Customs procedures for the importation of equipment, spare parts, raw materials and supplies.

7. The enterprise is prohibited from simultaneous availment of incentives under RA 7227 otherwise known as "The Bases Conversion and Development Act of 1992", as amended by RA 9400.

In the event that the enterprise intends to register and avail of incentives under RA 7227, as amended, EO 226 incentives provided under this Certificate of Registration shall automatically be revoked.

The enterprise, if qualified, may be allowed to register with Subic Bay Metropolitan authority (SBMA) under RA 7227, as amended, for sequential availment of incentives, subject to its registration and compliance of requirements and revocation of EO 226 incentives.

8. The enterprise shall submit to the Legal and Compliance Service, on a semestral basis within fifteen (15) days from end of each semester, a report on actual investments, employment, sales, production costs, actual ITH availed of for each year and other information that the Board may require at any given time with respect to the registered project.

9. The enterprise must commit to the tenets of Good Corporate Governance.

10. The enterprise shall adopt measures intended to reduce climate change risks in support of the National Framework Strategy on Climate Change.

11. The enterprise is encouraged to secure environmental certifications based on internationally-recognized standards.

12. The enterprise shall obtain applicable certifications based on internationally-recognized standards such as ISO certification, or other similar certifications.

13. In the event of transfer to another Investment Promotion Agency, the enterprise shall undertake publication of its cancellation of BOI registration in a newspaper of general circulation.

14. The enterprise shall visit the BOI website (<http://www.boi.gov.ph>) on a regular basis, for updates on BOI rules, policies and guidelines.

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Division Chief  
RESOURCE-BASED INDUSTRIES SERVICE

Control No: CTC 2016-016 Date: April 14, 2016

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15. The enterprise shall abide by all the rules, policies, guidelines and regulations set forth by the Department of Energy (DOE) pertinent to the registered project.

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#### **E. GENERAL TERMS AND CONDITIONS**

1. The enterprise shall observe and abide by the provisions of the Omnibus Investments Code of 1987 and other related laws and their implementing rules and regulations as well as its commitments and representations made in the application for registration and take adequate measures to ensure that its obligation there under as well as those of its officers, employees and stockholders are faithfully discharged; provided it is understood that any misrepresentation or falsification in the documents or other supporting papers submitted to the Board shall constitute as ground for automatic cancellation of its registration.

2. The enterprise's Address of Record shall be **Unit 310, The Venue, Rizal Hi-way, Subic Bay Industrial Park Phase 1, Subic Bay Freeport Zone 2222**. All BOI notices/communications to the firm shall be sent to this address. The firm shall be responsible for notifying BOI, in writing, of any changes in its Address of Record, within ten (10) calendar days after such change, and therefore, should it fail to do so, service of all BOI communications, notices or processes in its Address of Record shall be considered valid, complete and binding to this enterprise.

In case the enterprise has an authorized representative, designated as such by virtue of a Board Resolution of the firm, duly certified by its Board Secretary, and as appearing in the records of the BOI, it shall be so indicated that notices, communications and/or processes of the latter shall be sent to said representative. The authorized representative shall be responsible for notifying BOI, in writing, of any changes in its Address of Record within ten (10) calendar days after such change, and therefore, should it fail to do so, service of all BOI communications, notices or processes in the Address of Record of such authorized representative shall be considered valid, complete and binding to this enterprise.

3. The enterprise shall notify the BOI before doing any of the following acts:  
(Per Board Res. No. 38-16 S'2005 dated November 22, 2005)

- a. Invest in, extend loans, or buy bonds, in substantial amount, from any properties either in the Philippines or abroad. This does not apply to bonds issued by the Philippine Government;
- b. Issue stock convertible into voting stocks;
- c. Buy its own stocks.

4. The enterprise shall secure prior permission of the BOI before doing any of the following acts:

- a. Transfer ownership and /or control of the enterprises;
- b. Engage in an undertaking other than the preferred project covered by its registration;
- c. Expand its capacity, with or without incentives.

5. The enterprise shall maintain separate books of accounts for each activity, registered and unregistered with the Board. Moreover, the firm shall submit a list of direct costs attributable to each type of activity for purposes of determining the taxable income of each activity.

6. The enterprise shall submit to the Board an annual report of its actual investments, taxes paid and employment in the project within one (1) month following the end of the firm's calendar/fiscal year.

7. The enterprise shall comply with environmental laws and regulations.

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ANA MARIA V. BERNARDO

Division Chief

RESOURCE-BASED INDUSTRIES SERVICE

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Verified by: *M. B. B. B. B.*

8. The enterprise shall comply with the Tree-Planting Program of the BOI requiring a minimum of one hundred (100) forest trees to be planted pursuant to Memorandum Circular No. 01, not later than one (1) year from date of registration. Proof of compliance must be submitted within (1) year from the first anniversary date of the firm's registration; otherwise, applications for availment of any incentive by the firm shall not be accepted by the Board.
9. The enterprise shall comply with the other conditions and representations made and accepted by the firm as embodied in its project feasibility study and confirmation letter, among others, and shall form part of this registration.
10. All the fiscal and non-fiscal incentives which do not contain specific period for their enjoyment shall terminate after a period of not more than ten (10) years from date of registration.
11. Failure of the enterprise to file an incentive application within the prescribed date will mean imposition of fines and penalty including possible forfeiture or suspension of incentives or non-acceptance of the said application.
12. The enterprise shall submit the following reporting requirements to the BOI Legal and Compliance Service on or before their respective due dates:

|                                    |                                                                                 |
|------------------------------------|---------------------------------------------------------------------------------|
| S1 (Annual Report of Performance)  | Calendar year - May 15<br>Fiscal year - 4 ½ months after the end of fiscal year |
| Annual Audited Financial Statement | One (1) month from date of filing with BIR                                      |
| Annual Income Tax Return           | Thirty (30) days from the filing thereof.                                       |

The enterprise may submit the above report on-line to [SMD@boi.gov.ph](mailto:SMD@boi.gov.ph)  
For late filing and/or non-submission of reports and other requirements, the Board shall impose such fines in accordance with the schedules as set forth in the rules.

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*Ans*





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ANA MARIA V. BERNARDO

Page 9 of 9 pages

Division Chief  
RESOURCE-BASED INDUSTRIES SERVICE

Control No: CTC 2016-016 Date: April 14, 2016

Verified by: A handwritten signature in black ink, appearing to read 'M. S. Sison'.



Republic of the Philippines  
Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**  
DENR Compound, Visayas Avenue, Diliman, Quezon City 1116  
Telephone Nos.: 927-15-17, 928-20-96  
Email : emb@emb.gov.ph  
Visit us at <http://www.emb.gov.ph>

**ANNEX " 6 "**

15 NOV 2012

**MR. AARON DOMINGO**

President

**Redondo Peninsula Energy Incorporated**

Unit 304 The Venue, Rizal Hi-way

Subic Bay Industrial Park, Phase 1

Subic Bay Freeport Zone

Subject: ECC Amendment to include additional 300 Mega Watt  
Circulating Fluidized Bed (MW CFB) Coal Fired Power Plant  
(ECC Reference No. 0804-011-4021)

**Dear Mr. Domingo:**

We would like to inform you that after review and evaluation of the submitted Environmental Performance Report and Management Plan (EPRMP), this Office granted the approval of your CFB Coal Fired Power Plant expansion from 300 MW to 600 MW in Sitio Naglatore, Barangay Cawag, Subic, Zambales. In this regard, ECC Reference No. 0804-011-4021 shall be amended to include the following:

- 1 x 300 MW Circulating Fluidized Bed (CFB) boiler with steamflow at maximum continuous rating at final super-heater outlet of 900,000 to 950,000 kg/hr;
- 1 unit hydrogen - cooled synchronous generator with rated output of 440 MVA
- 1 set of steam turbines with rated gross output of 340,000 kW
- Other auxiliary equipment and support facilities specified in the EPRMP

Likewise, the following are additional conditions of this amendment which shall form part of the ECC Reference No. 0804-011-4021.

1. Continuous conduct of intensive and comprehensive information, education and communication (IEC) program to inform and educate all stakeholders, especially its stakeholders as identified in the EPRMP, business operators, concerned non-government entities about the potential project impacts including mitigating measures embodied in the EPRMP.
2. Conduct regular risk/safety assessment to ensure that hazards and risks are kept at the minimum. Said risk/safety study shall be updated every five (5) years.
3. Condition no. 7 of the ECC issued on December 22, 2008 is amended as follows:



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES



1

*Protect the environment.. Protect life.*



Republic of the Philippines  
Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**

Environmental Impact Assessment  
and Management Division

**CERTIFIED TRUE COPY**

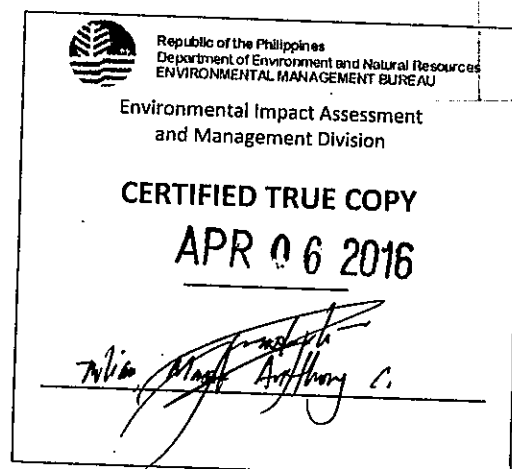
**APR 06 2016**

*Julius Mark Anthony C.*

- a. Installation of Weather Station in the project plant site with the following parameters: Temperature, Wind Speed, Wind Direction, Pressure.
  - b. Conduct ambient air monitoring and noise measurement for twenty four(24) hour averaging period once a month for one (1) year. Parameters to be measured are TSP, PM10, SO2, NO2, CO, and Heavy Metals (As, Pb, Hg, Cr+6, Cd). Sampling stations shall be the same station used in the study. Please note that during the conduct of sampling, weather station must be established on each sampling station. Plot the windrose diagram, prepare and explain/translate the same to be incorporated in the compliance monitoring report.
  - c. Conduct air dispersion modelling following TIER 4 of Memorandum Circular No. 2008-03 and submit the following to EMB Central Office after eighteen (18) months from the issuance of the Final Notice to Proceed to the project contractor. The modelling input meteorological data will come from the weather station installed in the project site and run the model using the generated one (1) year data. Other modelling input data will come from the power plant design prepared by said contractor. The ambient air sampling conducted on a monthly basis for one (1) year will be used to describe the full impact analysis in the modelling report. Parameters to be modelled are TSP, PM10, SO2, NO2, and CO."
  - d. Submit thermal plume validation report to the EMB Central Office one (1) year from the start of project operation.
  - e. Inclusion of effluent Monitoring in the Environmental Monitoring Plan from surge bin (in connection with ash pond leachate going to settling basin and discharging to surge bin prior to wastewater discharge canal) and from other similar plant structures, as applicable.
4. Conduct pH monitoring of ambient air during dry and wet seasons.
  5. The proponent shall support the National Greening Program of the government by actively participating in forest rehabilitation programs.
  6. Undertake annual HAB (harmful algal bloom) survey and conduct monitoring at the onset of plant operation.
  7. Conduct annual coral reef monitoring and fish visual census employing participation of the multi-sectoral monitoring team and employing community based monitoring methods to support Integrated Coastal Resource Management (ICRM) initiatives in Subic Bay.



2



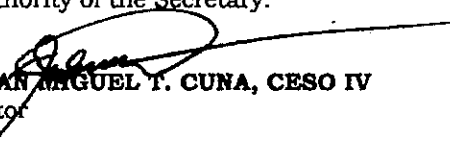
8. Ensure that the height of smoke stacks shall conform with the aviation standards of Civil Aviation Authority of the Philippines (CAAP).
9. The existing Memorandum of Agreement (MOA) on the Environmental Guarantee Fund (EGF), Environmental Monitoring Fund (EMF) and Multipartite Monitoring Team (MMT) shall be amended to include the expansion subject to approval of the EMB Central Office. Amendment of MOA shall be completed within a period of sixty (60) days to be reckoned from receipt hereof.
10. The proponent shall ensure that its contractors and subcontractors strictly comply with the relevant conditions/provisions of the ECC (ECC Reference No. 0804-11-4021) as well as its amendments.

All conditions set-forth under ECC Reference No. 0804-011-4021 issued on December 22, 2008 and its amendments on July 8, 2010 and May 26, 2011 shall be complied with and shall remain in force including the measures and management procedures stipulated in the Environmental Management Plan.

Non-compliance with any of the provisions of this Amendment shall be sufficient ground for the suspension or cancellation of the Environmental Compliance Certificate (ECC Reference No. 0804-011-4021) and/or imposition of fine in an amount not to exceed Fifty Thousand Pesos (PhP 50,000.00) for every violation thereof, without prejudice to imposition of fines and penalties under other existing environmental laws.

Very truly yours,

By the Authority of the Secretary:

  
**ATTY. JUAN MIGUEL T. CUNA, CESO IV**  
OIC-Director



OR No. 9724731  
Amount PhP 4,040.00  
Date August 28, 2012

cc: EMB Region III  
SBMA  
DOE  
LGU - Zambales Province  
LGU - Municipality of Subic  
LGU - Barangay Cawag

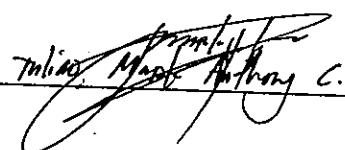


Republic of the Philippines  
Department of Environment and Natural Resources  
ENVIRONMENTAL MANAGEMENT BUREAU

Environmental Impact Assessment  
and Management Division

CERTIFIED TRUE COPY

APR 06 2016

  
Tuling, *Anthony C.*



Republic of the Philippines  
Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**

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**MAY 26 2011**

Mr. Luis Miguel Aboitiz  
Director  
REDONDO PENINSULA ENERGY, INC.  
110 Legaspi St., Legaspi Village  
Makati City

**Subject:** Amendment of Environmental Compliance Certificate (ECC)  
Ref. No. 0804-011-4021

Dear Mr. Aboitiz:

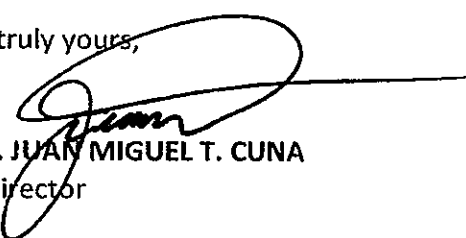
This refers to your letter dated March 21, 2011 requesting for approval of the changes of project configuration for the proposed coal fired power plant project of RPE to be located in Sitio, Naglatore, Brgy. Cawag, Subic, Zambales with ECC Ref. No. 0804-011-4021.

After review and evaluation of the document submitted, this Office finds the proposed changes do not constitute significant impacts as originally approved. Hence, we are pleased to inform you that your request to change from two (2) units to single unit configuration is hereby granted. As such, ECC Reference No. 0804-011-4021 shall cover the following:

- 1 x 300 MW (instead of 2 x 150 MW) of Circulating Fluidized Bed (CFB) boiler with steam flow at maximum continuous rating at final superheater outlet of 900,000-950,000 kg/hr;
- 1 unit hydrogen – cooled synchronous generator with rated output of 410 MVA; and,
- 1 set of steam turbines with rated gross output of 346,000 kW.

All conditions set-forth under ECC Reference No. 0804-011-4021 and its amendment issued on July 8, 2010 shall remain and will be complied with including the measures and management procedures stipulated in the Environmental Management Plan.

Very truly yours,

  
ATTY. JUAN MIGUEL T. CUNA  
OIC Director

OR No. 6185209  
Amount PhP 1,210.00  
Date 05/25/11

cc: EMB Region III



Republic of the Philippines  
Department of Environment and Natural Resources  
**ENVIRONMENTAL MANAGEMENT BUREAU**  
DENR Compound, Visayas Avenue, Diliman, Quezon City 1116  
Telephone Nos.: 925-47-93 to 97  
Email : emb@emb.gov.ph  
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**JUL 08 2010**

**Mr. Sung-Fou Hsu**

Chairman

**Redondo Peninsula Energy Incorporated**

Penthouse 110 Legaspi St.,

Legaspi Village, Makati City

Subject : **ECC Amendment (ECC Reference No. 0804-011-4021)**  
**2 x 150 MW Coal Fired Thermal Power Plant**

Dear Hsu:

This has reference to your request for Environmental Compliance Certificate (ECC) amendment for your 2 x 150 MW Coal Fired Thermal Power Plant in Sitio Naglatore, Barangay Cawag, Subic, Zambales.

After review and evaluation of the submitted Environmental Performance Report and Management Plan (EPRMP), this Office decided to amend the above-mentioned ECC previously issued to your firm to include the following components:

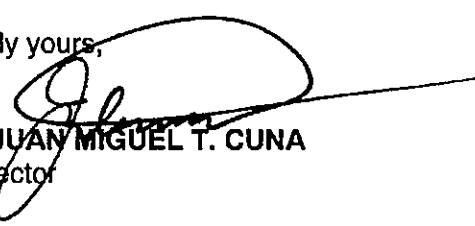
1. Barge Wharf
2. Seawater Intake Breakwater
3. Sub-sea Discharge Pipeline
4. Raw Water Collection System and Drainage Channel Improvement
5. 230 – kV Double Circuit Transmission Line

In view hereof, you are required to strictly comply with the following conditions:

1. Continuous implementation of an Information, Education and Communication (IEC) Program to explain to all stakeholders, especially to its local residents, mitigating measures embodied in its EPRMP, the conditions stipulated in this amendment and the environmental and safety measures for greater awareness, understanding and sustained acceptance of the project. An annual detailed IEC program in coordination with the EMB Region III Office should be prepared and submitted;
2. The proponent shall submit detailed reports on the revised Socio-Economic Perception (SEP) Survey and the Resettlement Action Plan following detailed survey and documentation of its implementation prior to construction;
3. Insure that the Memorandum of Agreement (MOA) on the Environmental Guarantee Fund (EGF), Environmental Monitoring Fund (EMF) and Multipartite Monitoring Team (MMT) shall include the additional components. The MOA shall be submitted to EMB for approval within sixty (60) days upon receipt of this Certificate;
4. The proponent shall ensure that effective silt protectors and other silt mitigating measures are adequately in place prior to barge wharf construction;
5. The proponent shall ensure that its contractors and subcontractors properly comply with the relevant conditions of this ECC;
6. All conditions set-forth under ECC Reference No. 0804-011-4021 shall be complied with and will remain in force.

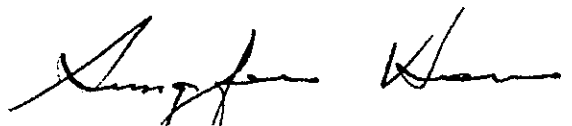
Non-compliance with any of the provisions of this ECC Amendment shall be sufficient cause for the imposition of a fine in an amount not to exceed Fifty Thousand Pesos (PhP 50,000.00) for every violation thereof as provided in PD 1586.

Very truly yours,

  
**ATTY. JUAN MIGUEL T. CUNA**  
OIC Director

|        |              |
|--------|--------------|
| OR No. | 9723306      |
| Amount | PhP 4,000.00 |
| Date   | July 5, 2010 |

cc: **EMB – Region III**  
**LGU – Province of Zambales**  
**LGU – Subic**  
**LGU – Barangay Cawag, Subic**  
**DOH**  
**SBMA**  
**DOE**





Republic of the Philippines  
Department of Environment and Natural Resources  
Visayas Avenue, Diliman, Quezon City 1110  
Tel. Nos.: (632) 929-66-26 to 29 • (632) 929-65-52  
929-66-20 • 929-66-33 to 35  
929-70:41 to 43

DEC 22 2008

ECC Ref. No. 0804-011-4021

Mr. Luis Miguel Aboitiz  
Director  
REDONDO PENINSULA ENERGY  
110 Legaspi St., Legaspi Village  
Makati City

**SUBJECT: ENVIRONMENTAL COMPLIANCE CERTIFICATE**

Dear Dir. Aboitiz:

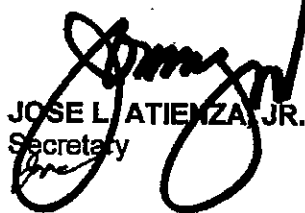
This refers to the ECC application for the proposed 2x150 MW Coal Fired Thermal Power Plant Project to be located at Sitio Naglatore, Barangay Cawag, Subic, Zambales.

After satisfying the requirements in the said application and upon recommendation of the Environmental Management Bureau (EMB), this Department has decided to grant an ECC to the above-mentioned project.

With the issuance of this ECC, you are expected to implement the measures presented in the Environmental Impact Statement (EIS) and the Environmental Management and Monitoring Plan (EMMoP), intended to protect and mitigate the project's adverse impacts on community health, welfare and the environment. Environmental considerations shall be incorporated in all phases and aspects of the project. You may proceed with the project implementation after securing all the necessary permits from other pertinent Government agencies. This Office will be monitoring the project periodically to ensure your compliance with stipulations cited in the attached ECC.

Please be guided accordingly.

Very truly yours,

  
JOSE L. ATIENZA JR.  
Secretary



cc: EMB – Region III  
LGU – Province of Zambales  
LGU – Subic  
LGU – Barangay Cawag, Subic  
DOH  
SBMA  
DOE

*Let's Go Green!*





Republic of the Philippines  
Department of Environment and Natural Resources  
Visayas Avenue, Diliman, Quezon City 1110  
Tel. Nos.: (632) 929-66-26 to 29 • (632) 929-65-52  
929-66-20 • 929-66-33 to 35  
929-70-41 to 43

**ENVIRONMENTAL COMPLIANCE CERTIFICATE**  
(Issued under Presidential Decree No. 1586)  
**ECC Ref. Code: 0804-011-4021**

THIS IS TO CERTIFY THAT THE PROPONENT, **REDONDO PENINSULA ENERGY (RPE)**, as represented by its Director, **Luis Miguel Aboitiz**, is granted this Environmental Compliance Certificate (ECC) for the proposed **2x150 MW Coal-Fired Thermal Power Plant Project** located in **Sitio Naglatore, Barangay Cawag, Subic, Zambales** by the Department of Environment and Natural Resources (DENR) through the Environmental Management Bureau (EMB).

SUBJECT ONLY to the conditions and restrictions set in this ECC and in the attached document labeled as Annex A and B.

This Certificate is issued with the following details:

**PROJECT DESCRIPTION**

The ECC covers 2x150 MW Coal Fired Thermal Power Plant Project with an area of 40 hectares located in Sitio Naglatore, Barangay Cawag, Subic, Zambales.

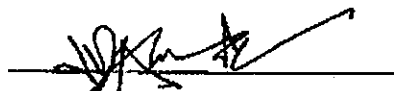
The proposed 2x150 MW Coal-Fired Power Plant shall use the Circulating Fluidized Bed (CFB) Coal Technology with the following facilities:

- 2 sets of CFB boilers with 520 ton/hr steam capacity;
- 2 sets of Generators with rated capacity of 150 MW each;
- 2 Steam Turbines of 165 MW each;
- Digital Control system
- Electrostatic Precipitators
- Auxiliary System for turbines and generators
- Auxiliaries
  - Feedwater System and Condensate System;
  - Circulating Water System and Closed Circulation Cooling Water System;
  - Compressed Air System;
  - Main and Auxiliary Transformers;
  - Switchyard;
  - Plant Auxiliary Power
  - Fuel Oil System;
  - Coal Handling System;
  - Ash Handling and Disposal System (ie. Bottom Ash Handling, Fly Ash Handling System, Ash Pond, Limestone Handling System); and
  - Water Supply and Treatment System.

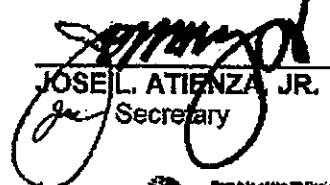
This Certificate is issued pursuant to the provisions of Presidential Decree No. 1586 and in accordance to DENR Administrative Order (D.A.O.) No. 2003-30. Non-compliance with any of the provisions of this Certificate shall be a sufficient cause for the cancellation of this Certificate and/or imposition of a fine in an amount not to exceed Fifty Thousand Pesos (P50,000.00) for every violation thereof. The EMB, however, is not precluded from reevaluating, adding, removing, and correcting any deficiencies or errors that may be found after issuance of this Certificate.

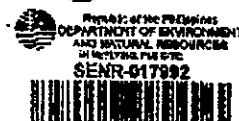
Issued at DENR, Quezon City, Philippines, this DEC 22 2008

Recommending Approval:

  
**JULIAN D. AMADOR**  
Director

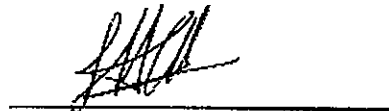
Approved by:

  
**JOSE L. ATIENZA JR.**  
Secretary



**STATEMENT OF ACCOUNTABILITY**

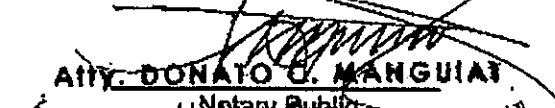
I, Mr. Luis Miguel Aboitiz, Director, representing Redondo Peninsula Energy with office address located in 110 Legaspi Street, Legaspi Village, Makati City takes full responsibility in complying with all conditions in this Environmental Compliance Certificate (ECC).

  
Signature

TIN 133-378-470-0000

Subscribed and sworn to before me this 24 day of DEC, 2007, the above-named affiant taking oath presenting Community Tax Certificate (CTC) No. 18457672 issued on 2-13-08 at Cebu City.

Doc. No. 031  
Page No. 07  
Book No. LXXXVI  
Date of 200 8

  
**ATTY. DONATO C. MANGUIAT**  
Notary Public  
Commission No. NP-006 (2008-2009)  
IBP No. 486042/11-13-07/QC  
PTR No. 9764075/1-2-08/QC  
Roll No. 34845

**I. CONDITIONS****ENVIRONMENTAL MANAGEMENT**

All commitments, mitigating measures and monitoring requirements, contained in the Environmental Impact Statement (EIS) for the proposed 2x150 MW Coal Fired Thermal Power Plant Project, particularly in the Environmental Management and Monitoring Plan (EMMoP), including the modifications and additional information as approved by the EMB, shall be instituted to minimize any adverse impact of the project to the environment throughout its implementation, including the following:

1. Conduct an effective Information, Education and Communication (IEC) Program to inform and educate all stakeholders, especially its contractors, workers, and local residents about the mitigating measures embodied in its EIS, the conditions stipulated in this Certificate and the environmental and human safety features of the project for greater awareness, understanding and sustained acceptance of the project;
2. Implement a Comprehensive Social Development Program (SDP) and submit a report to the EMB Central Office and EMB Region III on a regular quarterly basis;
3. Establish an appropriate measures and buffer zones along the entire periphery of the project site with appropriate species/dense vegetation cover to enhance the condition of the ecosystems and to serve as noise, vibration and dust buffers;
4. Install an automatic sensor for monitoring temperature and other relevant parameters prior to the discharge of cooling water from coal fired power plant operation and ensure that the area of the mixing zone shall not encroach on the existing coral reefs;
5. Set up automatic floating buoys equipped with measuring devices for water temperature within the mixing zone area and boundary areas of the coal fired power plant;
6. Conduct verification survey of the distribution of corals along the stretch from Shark's Point to McMany's Point prior to construction;
7. Conduct validation of air dispersion and thermal plume modeling within one year from the start of project operation. The proponent may opt to design and implement its own air and water quality monitoring program in a manner that can be used for validating said models to be used in determining accuracy of impacts and impact areas and to ensure that actual levels of pollutants are protective of the environment. Activities and programs for validation of impacts shall be jointly discussed with DENR and concerned stakeholders and duly approved prior to its implementation. This will serve as the basis of the TOR of the independent party that will conduct the validation.
8. Submit to EMB within sixty (60) days from receipt of this Certificate the company's Green House Gas Emission Reduction Program (e.g. tree planting, methane capture, energy efficiency and conservation, etc.) which shall be implemented immediately to address climate change and global warming problems. Further, a mini-forest to serve as carbon sink shall be established and maintained.

**GENERAL CONDITIONS**

9. The plant operations shall conform with the provisions of RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990), RA 8749 (Philippine Clean Air Act of 1999), RA 9003 (Act providing for an Ecological Solid Waste Management Program), and RA 9275 (Philippine Clean Water Act of 2004);

10. The proponent shall set-up the following:

- 10.1 A readily available and replenishable Environmental Guarantee Fund (EGF) to cover the following expenses for further environmental assessments, compensations/indemnification for whatever damages to life and property that may be caused by the project; rehabilitation and /or restoration of areas affected by the project's implementation; and abandonment/decommissioning of the project facilities related to the prevention of possible negative impacts and as a source of fund for contingency and clean up activities;
- 10.2 A Multipartite Monitoring Team (MMT) composed of representative(s) from the proponent, EMB Region III, a local environmental Non-Government Organization (NGO), SBMA Ecology Center, and the LGUs shall be organized. The MMT should primarily oversee the compliance of the proponent with the Environmental Management and Monitoring Plan (EMMoP) and the ECC conditions;
- 10.3 A replenishable Environmental Monitoring Fund (EMF) to cover all costs attendant to the operation of the MMT such as training, sampling and analysis, the hiring of technical experts, accommodations and transportation.

The amount and mechanics of the EGF, EMF and the establishment of the MMT shall be determined by the DENR and the proponent in consultation with EMB Region III through a Memorandum of Agreement (MOA) which shall be submitted within sixty (60) days upon receipt of this Certificate.

11. Creation of an Environmental Unit (EU) within sixty days from issuance of this Certificate that competently handle the environment-related aspects of the project. In addition to the monitoring requirements as specified in the Environmental Management and Monitoring Plan (EMMoP), EU shall have the following responsibilities:

- a. Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the EIS;
- b. Regularly analyze the leachate / effluents for heavy metals, in particular mercury, lead and others;
- c. Formulate suggestions on the revision of the EMMoP, whenever necessary, subject to the approval of EMB Central Office and EMB Region III; and
- d. Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated and reported in accordance to the standard formats;

12. Abandonment/Decommissioning Plan shall be submitted to the EMB for approval one (1) year prior to project's abandonment as required per Section 9.4 of DAO 2003-30.

## II. RESTRICTIONS

13. No activities shall be undertaken other than what was stipulated in the final EIS. Should there be any expansion of the project beyond the project description or any change in the activity or transfer of location shall be subject to a new Environmental Impact Assessment; and

14. In case of transfer of ownership of this project, these same conditions and restrictions shall apply and the transferee shall be required to notify the EMB Regional Office within fifteen (15) days as regards the transfer of ownership.

O.R. No : 6831914  
Date : April 14, 2008  
Processing Fee : PhP 6,000.00

Environmental Compliance Certificate  
2x150 MW Coal Fired Thermal Power Plant  
REDONDO PENINSULA ENERGY

**PROJECT ASSESSMENT PLANNING TOOL**

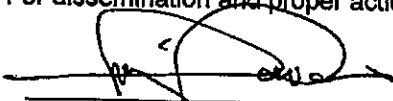
Annex B

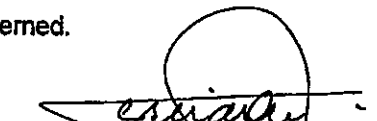
For the assistance of the Proponent and Government agencies concerned in the management of the project and for better coordination in mitigation on the impact of the project on its surrounding areas and to the environment.

By way of recommendation, the following have been taken notice of by the undersigned and are forwarding these recommendations to the parties and authorities concerned for proper action.

| <b>RECOMMENDATIONS TO CONCERNED GOVERNMENT AGENCIES</b>                                                                                                                                                                                                          | <b>RESPONSIBLE AGENCY</b>                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1. Consider Project's coordination with the LGU / SBMA on its Ecological Solid Waste Management Program particularly disposal of its solid wastes                                                                                                                | Proponent<br>LGU, SBMA Ecology Center                  |
| 2. Consider Project's coordination with the LGU / SBMA on its Coastal Management Program.                                                                                                                                                                        | Proponent, SBMA Ecology Center, LGU, MMT, Stakeholders |
| 3. Consider Project's occupational health, sanitary facilities and safety concerns in the EHIA, including the need of workers to wear Personnel Protective Equipment due to possibility of respiratory and toxic metal chronic exposure from coal (e.g. Hg, As). | DOH<br>DOLE<br>Barangay and City Health Offices        |
| 4. Consider Project's need to Revised and Enhanced Emergency Preparedness Plans and Programs (EPPP) in coordination with the LGU and appropriate agencies. Involvement of the community is recommended through the MMT.                                          | LGU, DOLE                                              |
| <b>ENVIRONMENTAL PLANNING RECOMMENDATIONS FOR THE PROPONENT</b>                                                                                                                                                                                                  |                                                        |
| 5. Quarterly reporting of the CEMS performance and RATA (Relative Accuracy Test Audit) evaluation test annually.                                                                                                                                                 |                                                        |
| 6. Give priority for the employment of local residents and provide adequate public information for jobs available to local residents in the affected areas.                                                                                                      |                                                        |

For dissemination and proper action of the parties concerned.

  
\_\_\_\_\_  
**Bienvenido S. Saniano**  
Chairman, EIARC

  
\_\_\_\_\_  
**Cesar S. Slador Jr.**  
OIC Chief, EIAMD

  
\_\_\_\_\_  
**Julian D. Amador**  
Director

**MANILA ELECTRIC COMPANY – REDONDO PENINSULA ENERGY, INC.  
POWER SUPPLY AGREEMENT**

**EXECUTIVE SUMMARY**

**Brief Background**

Redondo Peninsula Energy, Inc. (RPE) intends to construct, own, operate, manage and maintain a 300 MW (net) Circulating Fluidized Bed (CFB) coal-fired power generating facility in Sitio Naglatore, Subic Bay Freeport Zone (the "Plant").

Manila Electric Company (Meralco) and RPE executed a Power Supply Agreement (PSA) on April 20, 2016 for the sale and purchase of 225 MW of contract capacity and associated energy from the Plant.

**Technical and Economic Characteristics of the Plant**

The Plant will comprise a single 300 MW (net) coal fired power plant to be constructed within the greenfield site of Sitio Naglatore, Barangay Cawag in the municipality of Subic in the province of Zambales and within the Redondo Peninsula district of the Subic Bay Freeport Zone. RPE will oversee the financing, design, procurement, construction, testing, commissioning, operation, and maintenance of the Plant. It will run as a base-load power generation unit.

It shall adopt a sub-critical pressure, reheating Circulating Fluidized-Bed ("CFB") boiler, steam turbine generator ("STG") complete with electric generator and associated accessories with a total Net electrical output of 300 MW. The Plant is designed based on a state-of-the-art-technology Steam Generator and Steam Turbine Generator (STG) complete with associated equipment, balance of plant facilities, coal supply infrastructure, waste water treatment, ash disposal, and grid connection facilities. CFB has the advantage of fuel flexibility, high combustion and boiler efficiency, high recycle ratio of unburned carbon and ash, low furnace operating temperature and eliminates the need for post-combustion flue gas treatment facilities. RPE is committed to build a more efficient, optimal power output and environmental friendly plant which will produce power at affordable tariff rates.

The final power transmission interconnection for the project will be through the National Grid Corporation of the Philippines (NGCP)'s proposed Castillejos-Hermosa 33 km 500 kV designed (but initially operated at 230 kV) transmission line. The Company will have to construct an approximately 23 km long 230 kV connecting line (connection asset) from the power plant to Castillejos to connect to the 500 kV line of NGCP.

However, the Company has an agreed interim connection with NGCP while the Castillejos-Hermosa transmission line is under development and construction by NGCP. Such an interim connection scheme entails the construction of the first 8.5 km portion of the 23 km connection asset starting from the power plant. At the other end of the 8.5 km, the line will temporarily connect to the existing Hanjin-Olongapo transmission line using a cut-in connection until such time that the Castillejos-Hermosa transmission line of NGCP is completed.

A Connection agreement with NGCP has already been signed. ERC approval for NGCP's application to build the transmission line from Castillejos to Hermosa has been granted on 11 May 2015. ERC approval for

RPE's application to build the transmission line from the power plant to Castillejos has been granted on 21 May 2015.

### **Salient Features of the PSA**

❖ **Term**

The obligation of RPE to provide and deliver, and the obligation of Meralco to purchase the Contract Capacity and Associated Energy shall commence on the Operations Effective Date which shall occur on the date that is 44 months from the Commencement Date, and shall expire on the date falling twenty (20) years thereafter.

❖ **Contract Capacity**

The Contract Capacity shall, upon Operations Effective Date is 225 MW, subject to Assignment or Transfer of Contract Capacity.

❖ **Outage Allowances**

RPE shall be allowed Scheduled Outages of thirty (30) Days and Forced Outages of fifteen (15) Days each Contract Year; provided that no more than four (4) times during the Term, RPE shall be entitled to an additional twenty (20) Days to undertake major repair, overhaul and maintenance of the Plant not more frequent than every four (4) years; provided further, that the first Major Maintenance Outage shall occur no earlier than the fourth (4<sup>th</sup>) year after Commercial Operations Date.

❖ **Replacement Power**

For force majeure or outages within allowance, Meralco will source replacement power from WESM. If beyond outage allowance, RPE will purchase replacement power from WESM or third parties which shall be declared as Bilateral Contract Quantities and will be paid by Meralco at the contract price.

❖ **Billing and Payment**

Meralco is obligated to pay the entire amount indicated in the Final Invoice, despite dispute or protest, except when there is manifest error in, or apparent invalidity or incorrect substance or form of an invoice or any portion thereof.

❖ **Assignment or Transfer of Contract Capacity**

Meralco has the right to assign / transfer its rights and obligations to purchase a portion of Contract Capacity and Associated Energy that is no longer required by Meralco to any of its business segments or Affiliates without the prior consent of the Power Supplier; and to any other Person, subject to the consent of Power Supplier, which consent shall not be unreasonably withheld delayed or conditioned.

❖ **Force Majeure**

The party affected by Force Majeure (FM) is excused from performing its obligations under the PSA. There shall be no capacity payment for the period that FM subsists. For extended FM which lasts for more than 180 days, the parties shall meet to discuss amendment/s necessary to resolve the issues arising from the FM. If no such agreement is reached prior to the end of the 180-day period, or such other period agreed upon by the parties, either party may terminate the PSA.

#### ❖ Contract Price Components

The contract Price will consist of the following:

- Monthly Capacity Recovery Fee
- Monthly Fixed O&M Payment
- Monthly Fuel Payment
- Monthly Variable O&M Payment
- Monthly Interconnection Facilities Payment
- Reimbursable Cost Payment
- Value Added Tax

The contract Price is exclusive of WESM line rental cost, which shall be for the account of Meralco and passed through to Meralco customers.



**Debt/Equity Ratio**

**ANNEX " I "**

Redondo Peninsula Energy, Inc. (RPE) intends to source its funds for the power plant project at a debt to equity ratio of 70:30.

PROJECT COST

ANNEX " J "

Redondo Peninsula Energy estimates that the total project cost for the Power Plant is Php 38.35 Billion.

Project Cost Breakdown:

| PROJECT COST                    | Total in Php. Million |
|---------------------------------|-----------------------|
| EPC Costs                       | 21,573.86             |
| Non-EPC Costs                   | 4,209.21              |
| Development Costs               | 1,412.72              |
| Pre-Operating Expenses          | 2,205.10              |
| Financing Costs                 | 5,316.05              |
| Connection Costs                | 888.47                |
| Total Project Cost w/o VAT      | 35,605.41             |
| Total VAT                       | 2,745.28              |
| Total Project Cost incl. of VAT | 38,350.69             |

WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The post-tax WACC computed is 8.01%.

| WACC Calculation        |   |        |
|-------------------------|---|--------|
| Debt Element            |   |        |
| Pre-tax Cost            | % | 7.17%  |
| Post-tax Cost           | % | 5.02%  |
| Weight of Debt          | % | 70.00% |
| Weighted Cost of Debt   | % | 3.51%  |
| Equity Element          |   |        |
| Cost of Equity          | % | 15.00% |
| Weight of Equity        | % | 30.00% |
| Weighted Cost of Equity | % | 4.50%  |
| Pre-tax WACC            | % | 9.52%  |
| Post-tax WACC           | % | 8.01%  |

Cost of debt is derived as follows:

| Cost of Debt Calculation        |   |        |
|---------------------------------|---|--------|
| Benchmark Rate (7-Year PDST-R2) | % | 4.45%  |
| Bank Margin                     | % | 2.15%  |
| Fixing Premium                  | % | 0.50%  |
| Cost of Debt (Gross)            | % | 7.10%  |
| Gross Receipts Tax              | % | 1.00%  |
| Cost of Debt, Pre-tax           | % | 7.17%  |
| Income Tax                      | % | 30.00% |
| Cost of Debt, Post-Tax          | % | 5.02%  |

Cost of equity is 15%.

| Cost of Equity Calculation                                     |   |        |
|----------------------------------------------------------------|---|--------|
| Long-term US Treasury Bond Rate                                | % | 2.27%  |
| Global Average Equity Risk Premium                             | % | 6.00%  |
| Industry Beta (Coal and Related Energy Companies)              | % | 1.49   |
| Cost of Equity (US Benchmark)                                  | % | 11.21% |
| Country Risk Premium - Philippines (excess over US CDS spread) | % | 1.87%  |
| Small Size and Illiquidity Risk Premium                        | % | 2.00%  |
| Cost of Equity                                                 | % | 15.00% |

**Certification from the Bank/Lending Institution**

Redondo Peninsula Energy, Inc. (RPE)'s is in the process of securing the debt funding for the project. RPE is yet to select a lead loan arranger for its financing. Attached is a letter from the Bank of the Philippine Islands (BPI) expressing its interest with an indicative financial term sheet.



April 18, 2016

**Redondo Peninsula Energy, Inc.**  
Through Meralco PowerGen Corporation  
8/F Rockwell Business Center  
Ortigas Ave., Pasig City 1604

**ATTENTION: Jasper B. Virola**  
Senior Vice President and Project Finance Officer

**Gentlemen:**

Bank of the Philippine Islands ("BPI" or the "Lender") and BPI Capital Corporation ("BPI Capital" or the "Arranger") are pleased to submit this Proposed Financing Term Sheet ("Financing Term Sheet") to Redondo Peninsula Energy, Inc. ("RPE" or the "Borrower") under development by its sponsors Meralco PowerGen Corporation, Meralco Pension Fund, Therma Power Inc. and Taiwan Cogeneration Corporation Philippines Branch Inc. (each a "Sponsor" and collectively, the "Sponsors") for the financing of its proposed 300MW (net) circulating fluidized bed coal-fired power plant and related facilities in the municipality of Subic, Province of Zambales, the Philippines (the "Project").

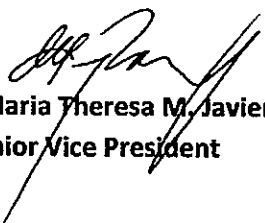
It is understood that discussions between BPI, BPI Capital and the Borrower shall remain confidential and may not be shared with other parties without the express written approval of all parties concerned.

Please note that our final participation in any proposed financing for the Project is still subject to the following: a) confirmatory due diligence review of the Lender and Arranger on the Project and the Borrower; b) approvals of the Lender and Arranger; c) receipt of the Borrower of all the necessary regulatory and legal permits and licenses; d) there being no material adverse change in the financial condition, assets, prospects or business of the Sponsors, the Borrower or the international and/or Philippine money and capital markets which could materially and adversely affect the establishment of the debt facility; and e) loan documentation acceptable to all parties. Further, this Financing Term Sheet herewith does not constitute an offer, commitment or undertaking on our part at the current time and nothing in this letter and the accompanying Financing Term Sheet shall create or shall be construed so as to create any obligation to take any credit exposure on, or to provide any credit to the Project or the Borrower.

If you have any questions on the foregoing, we will be glad to discuss these with you at your earliest convenience. We thank you for this opportunity and look forward to working with you on this transaction.

Thank you and best regards.  
For and on behalf of

**BANK OF THE PHILIPPINE ISLANDS**

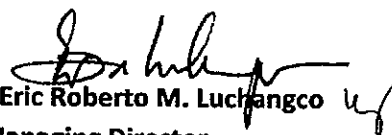


Name: Maria Theresa M. Javier  
Title: Senior Vice President

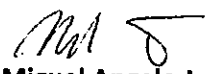


Name: Maria Teresa Anna K. Lim  
Title: Vice President

**BPI CAPITAL CORPORATION**



Name: Eric Roberto M. Luchangco  
Title: Managing Director



Name: Miguel Angelo J. Fernandez  
Title: Associate Director

**Redondo Peninsula Energy, Inc. (RPE)**

**PROPOSED FINANCING TERM SHEET – SENIOR PHP LOAN FACILITY**

Note: The proposed financing term sheet is based on indicative financing proposals received from Bank of the Philippine Islands and BPI Capital Corporation. Proposals are subject to due diligence and credit approval, but Redondo Peninsula Energy, Inc. (RPE) expects the overall structure and terms below to be bankable, subject to no material adverse change between now and financial close.

**1. Main Terms**

|    |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <b>Borrower</b>                        | Redondo Peninsula Energy, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2  | <b>Sponsor of the Borrower</b>         | Meralco PowerGen Corporation ("MGEN") – 47% (plus 2 shares)<br>Meralco Pension Fund ("MPF") – 3%<br>Therma Power Inc. ("TPI") – 25% (less 1 share)<br>Taiwan Cogeneration Corporation Philippines Branch Inc. ("TCCPB") – 25% (less 1 share)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3  | <b>Project</b>                         | <p>The development, financing, construction, ownership and operation of a 300 MW (net) circulating fluidized bed coal-fired power plant and related facilities in the municipality of Subic, province of Zambales, the Philippines (the "<b>Project</b>").</p> <p>The Project will initially be constructed as a single power generating unit scheduled for completion within 38 months after notice to proceed ("<b>NTP</b>") is issued to the EPC Contractors. In the event the Sponsors elect to proceed with construction of a second 300 MW Unit, the prior consent of the Majority Lenders will be required (not to be unreasonably withheld or delayed), subject to reasonably additional Senior Lender diligence, including in respect of transmission and connection to the Philippine grid.</p> |
| 4  | <b>Project Costs</b>                   | Approximately PHP 38.7 Billion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 5  | <b>EPC Contractor</b>                  | Bld ongoing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 6  | <b>Power Offtaker</b>                  | Manila Electric Co. ("Meralco")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 7  | <b>Senior PHP Loan</b>                 | A PHP-denominated senior term loan facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8  | <b>Total Senior PHP Loan Amount</b>    | The lower of up to 70% to 75% of Project Costs or up to PHP27.09 Billion to PHP29.03 Billion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9  | <b>Door-to-Door Tenor ("Maturity")</b> | 15 years from Financial Close                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10 | <b>Availability Period</b>             | <p>The Availability Period for the Senior PHP Loan shall commence on the date when all of the Conditions Precedent to First Disbursement are fulfilled and end on the earlier of (i) the date 6 months after the Commercial Operations Date (as defined in the PSA), and (ii) 42 months from Signing Date.</p> <p>Any undrawn amount at expiry of the Availability Period shall be cancelled</p>                                                                                                                                                                                                                                                                                                                                                                                                          |
| 11 | <b>Repayment</b>                       | <p>The Senior PHP Loan shall be fully repaid by final maturity by way of semi-annual repayments with the first repayment to be made on the date that is 48 months after Financial Close.</p> <p>Based on current financial model, the proposed repayment profile is appended to the term sheet.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|    |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | Interest Rate               | <p>The sum of PDST-R2 rate + Margin + Fixing Premium</p> <p>PDST-R2 rate will be defined as:</p> <ul style="list-style-type: none"><li>During availability period: The PDST-R2 rate (based on current rates at the time of mandate, interpolated if required) for the period from drawdown to the first rate reset date. This rate will apply until the first rate reset. (Available either in 7+8 or 8+7 rate repricing option)</li><li>Post rate reset, PDST-R2 will be determined as the PDST-R2 (interpolated if required) at time of reset for the period to final maturity</li></ul>                                                                                                                                                                                                                                                                                                                                                     |
| 13 | Fixing Premium <sup>1</sup> | <ul style="list-style-type: none"><li>50 to 75 bp p.a. for fixing the PDST-R2 rate during the drawdown period and until the first rate reset</li><li>0 bp p.a. after the rate reset date</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 14 | Margin                      | <ul style="list-style-type: none"><li>1.90% to 2.15% p.a. from Financial Close up to COD</li><li>1.50% to 1.75% p.a. thereafter</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 15 | Interest Period             | <p>During availability period: 1, 2, 3, 4, 5 or 6 months</p> <p>Post-availability period: 6 months</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 16 | Upfront Fees                | 0.75% on the loan commitment amount, payable at first drawdown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 17 | Security                    | <ul style="list-style-type: none"><li>First ranking security (fixed and floating charges) on all assets of the Borrower, both present and future, subject to exclusions to be agreed with the lender/s</li><li>Pledge of shares of RPE held by Sponsors, subject to the Meralco PSA Put/Call Provisions (if any)</li><li>Pledge of all Project Accounts</li><li>Assignment of applicable insurance policies in respect of the Project taken out by the Borrower</li><li>Assignment of the contractual rights of the Borrower under the Project Agreements</li><li>A first ranking assignment of the Borrower's rights, interests, titles and benefits in all performance and/ or maintenance bonds issued in favour of the Borrower in relation to the Project</li><li>First ranking security on all applicable licenses, permits and consents which are assignable in nature and in respect of which no further consent is required</li></ul> |

2. Proposed Debt Repayment Profile

| Semi-Annual Payment | Principal Repayment – % of Total Debt Amount |
|---------------------|----------------------------------------------|
| Sep-20              | 4.35%                                        |
| Mar-21              | 4.35%                                        |
| Sep-21              | 4.35%                                        |
| Mar-22              | 4.35%                                        |
| Sep-22              | 4.35%                                        |
| Mar-23              | 4.35%                                        |
| Sep-23              | 4.35%                                        |
| Mar-24              | 4.35%                                        |
| Sep-24              | 4.35%                                        |
| Mar-25              | 4.35%                                        |
| Sep-25              | 4.35%                                        |
| Mar-26              | 4.35%                                        |

<sup>1</sup> Fixing Premium is subject to confirmation closer to initial drawdown date and may vary depending on the final Rate Reset period chosen



Redondo Peninsula Energy, Inc.. – Proposed Financing Term Sheet

|        |       |
|--------|-------|
| Sep-26 | 4.35% |
| Mar-27 | 4.35% |
| Sep-27 | 4.35% |
| Mar-28 | 4.35% |
| Sep-28 | 4.35% |
| Mar-29 | 4.35% |
| Sep-29 | 4.35% |
| Mar-30 | 4.35% |
| Sep-30 | 4.35% |
| Mar-31 | 4.35% |
| Sep-31 | 4.35% |

Also available under for sculpted amortization with a maximum balloon payment of 30% of the Total Senior PHP Loan Amount<sup>2</sup>.

<sup>2</sup> Maximum balloon amount and sculpting subject to confirmation of the financial model during due diligence

ANNEX " M "

**PURCHASE POWER BREAKDOWN**

The Breakdown of the base prices of Operations and Maintenance; Capacity Fee; Fixed Operations Fee; and Energy Fee is part of the financial model provided in the sealed envelope:

RPE PSA  
Base Contract Price

| BILLING COMPONENT                     | UNIT        | BILLING RATE | BILLING DETERMINANT | AMOUNT (Php)     | Php/kWh |
|---------------------------------------|-------------|--------------|---------------------|------------------|---------|
| A. Capacity Payment                   |             |              |                     |                  |         |
| Peso Portion                          | Php/kW-Year | 14,913.2468  | 225,000 kW          | 3,355,480,530.00 | 2.1280  |
| B. Fixed O&M Payment                  |             |              |                     |                  |         |
| US Dollar Portion Escalating          | USD/kW-Year | 19.2828      | 225,000 kW          | 199,880,684.10   | 0.1268  |
| Peso Portion Escalating               | Php/kW-Year | 1,870.1836   | 225,000 kW          | 420,791,310.00   | 0.2669  |
| C. Variable O&M Payment               |             |              |                     |                  |         |
| Peso Portion                          | Php/kWh     | 0.1572       | 1,576,800,000 kWh   | 247,872,960.00   | 0.1572  |
| D. Fuel Payment                       |             |              |                     |                  |         |
| US Dollar Portion                     | USD/kWh     | 0.0220       | 1,576,800,000 kWh   | 1,595,887,404.73 | 1.0121  |
| E. Interconnection Facilities Payment |             |              |                     |                  |         |
| Capital Recovery                      | Php/kW-Year | 403.4155     | 225,000 kW          | 90,768,487.50    | 0.0576  |
| Fixed O&M                             | Php/kW-Year | 174.6456     | 225,000 kW          | 39,295,260.00    | 0.0249  |
| F. Reimbursable Cost Payment          |             |              |                     |                  |         |
| Real Property Tax                     | Php         | 1,854,823    |                     | 115,328,743.09   | 0.0731  |
| Lease Fees                            | Php         | 75,000,000   |                     |                  |         |
| Start-up and Shutdown Costs           | Php         | -            |                     |                  |         |
| Supplemental Payments                 | Php         | 38,473,920   |                     |                  |         |
| Commissioning Energy Charges          | Php         | -            |                     |                  |         |
| Replacement Power                     | Php         | -            |                     |                  |         |
| TOTAL PAYMENT                         | Php         |              |                     | 6,065,305,379.42 |         |
| Effective Rate at Plant Gate          | Php/kWh     |              |                     |                  | 3.8466  |

| BILLING COMPONENT                                 | UNIT                       | BASE RATE <sup>[a]</sup> | CPI Adj Factor <sup>[b]</sup> | BILLING DETERMINANT <sup>[i]</sup> | AMOUNT (PHP)       |
|---------------------------------------------------|----------------------------|--------------------------|-------------------------------|------------------------------------|--------------------|
| A. Capacity Payment (MCP)                         |                            |                          |                               |                                    |                    |
| Peso Portion                                      | (Php/kW-yr) <sup>[b]</sup> | 14,913.2468              |                               | 225,000 (kW)                       | 3,355,480,530.00   |
| B. Fixed O&M Payment (MFOM)                       |                            |                          |                               |                                    |                    |
| US Dollar Portion Escalating                      | (USD/kW-yr) <sup>[b]</sup> | 19.2828                  | 1.000000                      | 225,000 (kW)                       | 199,880,684.10     |
| Peso Portion Escalating                           | (Php/kW-yr) <sup>[b]</sup> | 1,870.1836               | 1.000000                      | 225,000 (kW)                       | 420,791,310.00     |
| C. Fuel Payment (MFP)                             |                            |                          |                               |                                    |                    |
| US Dollar Portion                                 | (USD/kWh) <sup>[c]</sup>   | 0.0220                   |                               | 1,576,800,000 (kWh)                | 1,595,887,404.73   |
| D. Variable O&M Payment (MVOM)                    |                            |                          |                               |                                    |                    |
| Peso Portion                                      | (Php/kWh)                  | 0.1572                   | 1.000000                      | 1,576,800,000 (kWh)                | 247,872,960.00     |
| E. Interconnection Facilities Payment (MIFP)      |                            |                          |                               |                                    |                    |
| Capital Recovery                                  | (Php/kW-yr)                | 403.4155                 |                               | 225,000 (kW)                       | 90,768,487.50      |
| Fixed O&M                                         | (Php/kW-yr)                | 174.6456                 | 1.000000                      | 225,000 (kW)                       | 39,295,260.00      |
| F. Reimbursable Cost Payment (RCP) <sup>[d]</sup> |                            |                          |                               |                                    |                    |
| Real Property Tax                                 | (Php)                      |                          |                               |                                    | 1,854,823          |
| Lease Fees                                        | (Php)                      |                          |                               |                                    | 75,000,000         |
| Start-up and Shutdown Costs                       | (Php)                      |                          |                               |                                    | -                  |
| Supplemental Payments                             | (Php)                      |                          |                               |                                    | 38,473,920         |
| Commissioning Energy Charges                      | (Php)                      |                          |                               |                                    | -                  |
| Replacement Power                                 | (Php)                      |                          |                               |                                    | -                  |
| TOTAL PAYMENT                                     | (Php)                      |                          |                               |                                    | 6,065,305,379.42   |
| Effective Rate at Plant Gate                      | (Php/kWh)                  |                          |                               |                                    | 3,8466             |
| WESM Line Rental Rate <sup>[e]</sup>              | (Php/kWh)                  |                          |                               |                                    | 0.3000             |
| Delivered Rate                                    | (Php/kWh)                  |                          |                               |                                    | 4.1466             |
| Effective Cost at WESM Price <sup>[f]</sup>       | (Php/kWh)                  |                          |                               |                                    | 7.0640             |
| Increase / (Decrease) over WESM Price             | (Php/kWh)                  |                          |                               |                                    | (2.9174)           |
| Meralco Captive Energy Demand <sup>[g]</sup>      | (kWh)                      |                          |                               |                                    | 34,658,621,088     |
| Increase / (Decrease) in Generation Cost          | (Php)                      |                          |                               |                                    | (4,600,188,356.80) |
| Increase / (Decrease) in Generation Cost          | (Php/kWh)                  |                          |                               |                                    | (0.1327)           |

NOTE:

- <sup>[a]</sup> Base Rates as set forth in Schedule 1 of Appendix E of the PSA
- <sup>[b]</sup> Annual Capacity Rate and Annual Fixed O&M Rate are converted into monthly rates by applying the formulas shown in Appendix E of the PSA
- <sup>[c]</sup> Fuel Payment calculated based on Guaranteed Net Plant Heat Rate at 91.25% plant load factor, Newcastle index = USD 50.38/MT, Freight Price = USD 5.90/MT, and Forex rate at Php 46.07/USD (current prices as of Mar 2016)
- <sup>[d]</sup> Reimbursable Payments (pass through costs) based on estimated taxes
- <sup>[e]</sup> Assumed estimated RPE line rental rate
- <sup>[f]</sup> Cost if equivalent volume of RPE was sourced from the WESM based on forecast average Jan - Dec 2021 hourly prices
- <sup>[g]</sup> Meralco Captive Energy Demand based on 2021 forecast
- <sup>[h]</sup> Assumed no CPI escalation
- <sup>[i]</sup> Energy Payments based on 80.00% plant capacity factor

  
Prepared by: Ryan S. Morales

  
Reviewed by: Ciprinlio C. Meneses

## INDEXATION

# ANNEX " P "

The peso component is indexed to the "Philippine Consumer Price Index for All Income Households in the Philippines – All Items (PCPI)" as all the peso components are subject to inflation and increase. These components are Peso Variable O&M, Peso Fixed O&M and Peso Interconnection Facility Fees.

The US Dollar Denominated Fixed O&M Fees is indexed to the US Consumer Price Index City Average for All Urban Consumers – All Items (USCPI) and the US Dollar-Philippine Peso exchange rate, defined as the selling rate for USD in PHP as announced by the Bangko Sentral ng Pilipinas (FX).

Coal for the project will be purchased from the international coal market and hence the Coal Price in the Energy Payments is indexed globalCOAL Monthly Index for Newcastle and the FX. This index is widely accepted industry wise and is reflective of the movement of coal prices in the global market.

ANNEX " Q "

CASH FLOW:

The cash flow statement specifying Initial Costs and Breakdown of Operating and Maintenance expenses are part of the financial model provided in the sealed envelope.

# ANNEX "R"

## **Minimum Energy Off-Take (MEOT)**

This is not applicable. Redondo Peninsula Energy, Inc. (RPE) does not have a Minimum Energy Off-Take (MEOT) as there is no Take-or-Pay provision in the Power Supply Agreement. Meralco is only obligated to pay fixed capacity payments but no fixed energy payments.

Redondo Peninsula Energy, Inc. (RPE) does not intend to enter into long-term supply agreements with coal suppliers given the PSA does not guarantee a minimum annual dispatch or minimum associated energy quantity per year. However, RPE intends to engage suitably qualified coal trader(s)/broker(s) to identify and procure the necessary supply of coal at the required quantity and quality on a spot market basis. RPE is confident that adequate supplies of coal can be procured economically and efficiently to meet the supply needs of the project and will in addition employ an in-house coal supply team with adequate resources, budget and skilled personnel, to monitor and manage the coal supply procurement process in a timely, efficient and cost conscious manner.

The RPE plant design coal is widely available in the regional and the global market. The coal price in the Power Sales Agreement has been indexed with global COAL Monthly Index for Newcastle which is a commonly accepted standard in the industry for coal pricing.



## Related Agreements

**Fuel Supply Agreement – N.A.**

**Transmission Services Agreement (TSA) – N.A.**

**Metering Service Agreement (MSA) – N.A.**

**Connection Agreement (CA)** - The Connection Agreement between the National Grid Corporation of the Philippines (NGCP) and RPE signed on 24 Oct 2014 (attached). The Connection Agreement includes a Grid Impact Study and a Facilities Study approved by NGCP.

RPE intends to secure a TSA and MSA with NGCP once construction of the Power Plant has started.

CONNECTION AGREEMENT  
BETWEEN NGCP AND RP ENERGY

KNOW ALL MEN BY THESE PRESENTS:

This CONNECTION AGREEMENT (hereinafter referred to as the "Agreement") is entered into by and between:

The NATIONAL GRID CORPORATION OF THE PHILIPPINES, a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal office address at the NGCP Building, Quezon Avenue corner BIR Road, Diliman, Quezon City, duly represented in this Agreement by its Chief Administrative Officer, ANTHONY L. ALMEDA, who is duly authorized to represent said corporation in this Agreement, hereinafter referred to as "NGCP";

- and -

REDONDO PENINSULA ENERGY, INC., a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with its principal office address at 8<sup>th</sup> Floor Rockwell Business Center Tower I, Ortigas Avenue, Pasig City, duly represented in this Agreement by its Authorized Representatives, Angelito U. Lantin and Raymond E. Cunningham, who are duly authorized to represent said corporation in this Agreement, hereinafter referred to as "RP Energy" or "Customer";

(Each a "Party" and collectively the "Parties".)

WITNESSETH:

WHEREAS, on December 13, 2006, the Energy Regulatory Commission ("ERC") issued a decision in ERC Case No. 2006-015RC, approving the revised rules, terms, and conditions for the provision of Open Access Transmission Service Rules (the "OATS Rules") which will govern the provision of transmission services to qualified grid users;

WHEREAS, pursuant to Section 21 of Republic Act No. 9136 ("EPIRA"), NGCP was awarded the concession contract to construct, install, finance,

Redondo Peninsula Energy, Inc.

By:

RAYMOND E. CUNNINGHAM

ANGELITO U. LANTIN

Authorized Representatives

Signed in the Presence of:

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer

OGC  
REVIEWE  
ZM  
GCC

Redondo Peninsula Energy, Inc.

By:

ANGELITO U. LANTIN

Authorized Representatives

RAYMOND E. CUNNINGHAM

Signed in the Presence of:

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer

manage, improve, expand, operate, maintain, rehabilitate, repair and refurbish the transmission assets of National Transmission Corporation ("TRANSCO");

WHEREAS, on January 15, 2009, NGCP took over TRANSCO's transmission function by virtue of the congressional franchise granted under Republic Act No. 9511;

WHEREAS, ERC issued ERC Resolution No. 25 dated May 23, 2006 entitled "A Resolution Adopting the Definition and Boundaries of Connection Assets", as amended by ERC Resolution No. 41 dated August 2, 2006, to delineate those assets that are put in primarily to connect a Customer to the Grid and used for purposes of Transmission Connection;

WHEREAS, under ERC Resolution No. 41, Existing Generation Plants are defined as "those which were under construction, were in existence, were in service, have been granted a Certificate of Compliance ("COC") by the ERC as a Generation Company, or have applied with the ERC for a COC as a Generation Company, as at the date of the Commission's Resolution adopting the Transmission Connection Asset ("TCA") definition and boundaries";

WHEREAS, ERC Resolution No. 41 also provides that any existing Generation Plant has no TCA beyond their Connection Point to the Grid;

WHEREAS, Customer shall own and operate an approximately 600 MW (net) Coal-Fired Power Plant, its associated ancillary and auxiliary equipment and associated transformer(s) (the "Generation Facility") located in Sitio Naglatore, Barangay Cawag, Subic Bay Freeport Zone; and

WHEREAS, pursuant to ERC Resolution No. 16 Series of 2011 entitled "Resolution Adopting the Amended Rules on the Definition and Boundaries of Connection Assets for Customer of Transmission Provider", Customer shall be connected to the Transmission System based on the System Impact Study ("SIS") conducted by NGCP through the connection details indicated in the single line diagram attached hereto as Annex "A-2".

NOW, THEREFORE, in view of the foregoing premises and in consideration of the terms and conditions set forth below, the Parties hereby agree as follows:



Redondo Peninsula Energy, Inc.

By:

ANGELITO UNALANTIN  
RAYMOND E. CUNNINGHAM  
Authorized Representatives

Signed in the Presence of:

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA  
Chief Administrative Officer

1. **Application and Incorporation of the OATS Rules, Grid Code and Issuances.** The obligations of the Parties under this Agreement shall be governed by the OATS Rules, Philippine Grid Code ("Grid Code"), and other relevant issuances, orders, rules and regulations as promulgated by proper government agencies and authorities as if they are originally written herein. This shall be understood to include all amendments and modifications thereof, as may be issued from time to time.

1.1. In case of conflict between the provisions of this Agreement and the applicable law or issuance, as may be amended from time to time, the latter shall prevail.

2. **Definition of Terms.** For purposes of this Agreement, and unless the express provisions or the context otherwise requires, the capitalized terms used herein shall have the same meaning as defined in the OATS Rules and the Grid Code, as may be amended from time to time.

3. **Force Majeure; Emergency Situations; Liability and Indemnity.** The provisions on Force Majeure, Emergency Situations and Liability and Indemnity in Module A [General Terms and Conditions] of the OATS Rules shall apply to this Agreement.

4. **Effectivity and Term.**

This Agreement shall take effect upon its execution and shall have a term of twenty (20) years; provided, that Customer follows the recommended connection details specified in Annex "A-2"; provided further, that Customer shall undergo/follow the technical requirements of NGCP as required by the OATS Rules and Grid Code, otherwise this Agreement, including the Transmission Service Agreement, may be terminated in accordance with Section 17.

#### Obligations of the Parties

5. **Agreement to Connect.** The Parties acknowledge and agree that the Customer's Generation Facility shall connect to NGCP's Transmission System based on the connection details specified in Annex "A" and connection scheme recommended by NGCP specified in the SIS and Facility Study ("FS") attached hereto as Annex "B" of this Agreement.



Redondo Peninsula Energy, Inc.

By:

ANGELITO D. LANTIN

Authorized Representative

RAYMOND E. CUNNINGHAM

Signed in the Presence of:

*[Signature]*

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer

*[Signature]*  
Ma / 8 May 7/1 for the west

- 5.1 The Customer shall stringently follow the connection scheme as shown in Annex "B" hereof; otherwise, the issuance of the Approval to Connect shall be held in abeyance by NGCP until a new SIS and FS have been conducted and approved covering the new connection point.
- 5.2 The Customer shall, upon request of NGCP and which shall not be unreasonably denied, provide information regarding the status of the construction of the power plant project in order to monitor compliance with the Grid Code, NGCP's engineering standards, SIS, and FS.
- 5.3 **Connection Charges.** The Parties acknowledge and agree that NGCP's provision of transmission service to Customer shall be subject to the applicable connection charges, if any, as provided under the OATS Rules, the Grid Code, and all applicable ERC issuances, as may be amended from time to time.
- 5.4 **Regulated Charges.** NGCP shall collect from, and the Customer shall pay, the applicable regulated charges for the Generation Facility in accordance with the OATS Rules and all applicable laws and ERC issuances, as may be amended from time to time.

6. **Interim Connection**

In case the Customer is not able to connect to the Transmission System through the connection details indicated in Annex A-2, NGCP shall allow the Customer as an interim measure, at its own costs, to connect to the Transmission System through an alternative connection point to be identified in a System Impact Study and Facilities Study to be submitted by the Customer to NGCP for review and approval. Such alternative connection, shown in Annex A-1, shall only be on an interim basis until connection to the Transmission System through the connection details indicated in Annex A-2 becomes available. For the avoidance of doubt, the alternative connection shall be to the existing Botolan-Hanjin-Olongapo transmission line of NGCP.



7. **Execution of Related Agreements.**

The Parties shall enter into a Metering Service Agreement to govern NGCP's provision of metering services to Customer and a Transmission Services Agreement to govern NGCP's provision of transmissions services to Customer.

**Billing and Payment**

8. **Billing and Payment.** Module F [Rates, Methodology, Billing and Settlement] of the OATS Rules shall govern the billing by NGCP and the payment by the Customer.

9. **Mode of Payment.** Payment shall be made by way of:

- a) Checks to be paid through Over-the-Counter (OTC) deposits;
- b) On-line funds transfer to NGCP's account;
- c) Through an Automatic Debit Account (ADA) arrangement;
- d) Cash through OTC deposits; or
- e) Other forms as may be approved by NGCP.

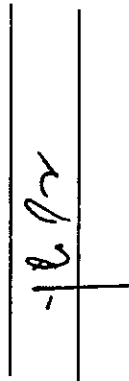
10. **Check Payments.** In the event a check issued by the Customer as payment for any charge or fee under this Agreement is dishonored by the drawee-bank, the applicable penalty under the OATS Rules shall accrue from time the obligation became due and demandable. NGCP shall have the right to refuse subsequent payments made by check. NGCP also reserves the right to pursue other available actions against the Customer.

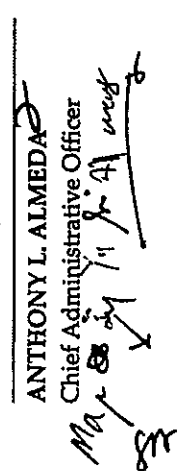
11. **Application of Payments.** In case the Customer is liable for any amounts due under the OATS Rules and this Agreement, including penalties, NGCP shall apply any payments to past due amounts before applying the same to the current billing. In case of partial payments, NGCP shall apply the hierarchy of payments in the following order: (a) regulated charges, and (b) charges for excluded services.

12. **Penalty Interest.** Interest over any unpaid account shall be governed by Module F [Rates, Methodology, Billing and Settlement] of the OATS Rules.

Redondo Peninsula Energy, Inc.  
By:   
RAYMOND E. CUNNINGHAM  
ANGELINO ULANTIN  
Authorized Representatives

Signed in the Presence of:



NATIONAL GRID CORPORATION OF THE PHILS.  
By:   
ANTHONY L. ALMEDA  
Chief Administrative Officer  




Redondo Peninsula Energy, Inc.

By:

ANGELITO U. LANTIN

Authorized Representative

RAYMOND E. CUNNINGHAM

13. **Credit Support.** Customer shall, if requested by NGCP, provide credit support or additional credit support in a form and on terms acceptable to NGCP. Types of credit support that may be provided include:

- a) a guarantee;
- b) a letter of credit;
- c) a charge over assets; or
- d) a cash bond,

in each case (other than a cash bond) from a person acceptable to NGCP. NGCP shall publish a list of persons acceptable to it who can provide credit support and update this list on a semi-annual basis. Further NGCP shall consider additional persons who can provide credit support who are proposed by the Customer and shall provide feedback on acceptability within thirty (30) days of a written request for feedback on the proposal.

14. **Application of Credit Support.** NGCP may call on any credit support provided under Section 13 hereof and apply such credit support against undisputed amounts due under Module F [Rates, Methodology, Billing and Settlement] of the OATS Rules and not paid within six (6) Business Days of the due date.

15. **Designated Commercial Banks.** In accordance with F5 of Module F [Rates, Methodology, Billing and Settlement] of the OATS Rules and for purposes of determining interest on amounts unpaid after Due Date, including amounts placed in escrow or in any other form placed by reason of a dispute, NGCP shall, no later than five (5) days from execution of this Agreement, inform the Customer in writing of its designated commercial banks. NGCP shall have the right to change its list of designated commercial banks and shall notify the Customer within a reasonable time in writing of the said change, which shall be effective commencing the billing month following the receipt of the notice.

16. **Procedure for Dispute Resolution.** In cases of disputes in relation to this Agreement, the Parties shall endeavor to amicably resolve such disputes. Otherwise, the Dispute Resolution Procedure in Module A [General Terms and Conditions] of the OATS Rules shall apply. The resolution of disputes shall be governed by the terms and

Signed in the Presence of:

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer



conditions in Annex "C" hereof, which shall form part of this Agreement.

Termination and Suspension of Service

17. **Termination.** The Parties may terminate this Agreement in accordance with Default and Termination in Module A [General Terms and Conditions] of the OATS Rules. In addition, either Party may terminate this Agreement in case of material breach by the other Party of this Agreement, by giving notice of termination stating the reasons for such termination. This Agreement shall be deemed terminated upon receipt of a notice of termination, except as otherwise provided in the OATS Rules. Termination shall be without prejudice to the fulfillment of the Parties' remaining obligations under this Agreement, if any.

17.1. NGCP may include in such notice that instead of terminating this Agreement, it may exercise its right to suspend service, as provided in Section 18 hereof.

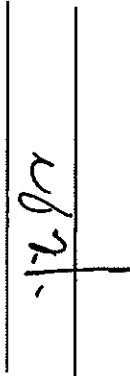
18. **Suspension of Service.** Where NGCP has the right to terminate this Agreement or any of the Related Agreements, NGCP may suspend the provision of transmission services to the Customer for causes in accordance with the OATS Rules as an interim measure until such time that the Customer has remedied the cause of suspension. In the event that the Customer fails to remedy the cause of suspension within ninety (90) days from the imposition thereof, NGCP may terminate this Agreement upon written notice to the Customer. Services shall be resumed upon Customer's remedy of the cause of suspension and subject to payment of reconnection fee.

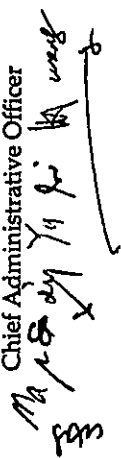
19. **No Liability for Termination or Suspension of Service.** NGCP shall not be liable for damages of any form arising from or related to, directly or indirectly, to the lawful and proper exercise of its rights under this Agreement and in accordance with the grounds provided under the OATS Rules, and other lawful and valid issuances from government entities to suspend service or terminate this Agreement.

Notices

20. **Notices.** For communications to be given in relation to this

Redondo Peninsula Energy, Inc.  
By:   
RAYMOND E. CUNNINGHAM  
ANGELITO D. LANTIN  
Authorized Representatives

Signed in the Presence of:  


NATIONAL GRID CORPORATION OF THE PHILS.  
By:   
ANTHONY L. ALMEDA  
Chief Administrative Officer  






Agreement, A12 in Module A [General Terms and Conditions] of the OATS Rules shall apply.

20.1. Communications may likewise be sent by email from an email address designated by the sending Party below to an email address designated by the recipient Party below, provided that proof of receipt shall be the email "read receipt" in accordance with A12 in Module A [General Terms and Conditions] of the OATS Rules.

**NGCP**

NGCP Building, Quezon Avenue corner BIR Road,  
Diliman, Quezon City  
Fax No.: (02) 928-1861/981-4862  
Attention: MS. MA. CYNTHIA Y. MANRIQUE  
Email Address: [mymanrique@ngcp.ph](mailto:mymanrique@ngcp.ph)  
Backup Email Address: [pddasalla@ngcp.ph](mailto:pddasalla@ngcp.ph)

**Customer**

Manila Office: 8<sup>th</sup> Floor, Rockwell Business Center  
Tower I, Ortigas Ave., Pasig City  
Fax No.: 661-4978  
Attention: MR. ANGELITO U. LANTIN  
Email Address: [alantin@meralcopowergen.com](mailto:alantin@meralcopowergen.com)  
Backup Email Address:  
[vsioson@meralcopowergen.com](mailto:vsioson@meralcopowergen.com)

**Miscellaneous**

21. **Indemnity.** The Parties shall hold each other free and harmless and indemnify each other against any liability, loss, costs, charges or expenses incurred in connection with a claim by a third party against a Party arising from or in connection with any negligent or deliberate act or omission or reckless misconduct of the other Party relative to this Agreement.
22. **Good Faith Compliance.** The Parties shall comply with this Agreement in good faith. This Agreement shall continue to govern the rights of the Parties for as long as this Agreement remains effective, except as otherwise provided herein. No Party to this Agreement shall do or attempt to do, either directly or indirectly, that which is prohibited by this Agreement.

Redondo Peninsula Energy, Inc.

By:

RAYMOND E. CUNNINGHAM

Authorized Representatives

Signed in the Presence of:

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer



Redondo Peninsula Energy, Inc.

By:

ANGELINO U. LANTIN

Authorized Representatives

RAYMOND E. CUNNINGHAM

Signed in the Presence of:

*[Signature]*

NATIONAL GRID CORPORATION OF THE PHILS.

By:

ANTHONY L. ALMEDA

Chief Administrative Officer

*[Signature]*  
11/11/11

23. **Warranty of Corporate Existence and Authority.** Each Party hereby represents and warrants that: (a) it is duly incorporated, validly existing and in good standing under the laws of the Republic of the Philippines; (b) it possesses full power and authority to enter into this Agreement, and has taken all the necessary action to authorize the entry into and delivery of this Agreement, and the transactions contemplated hereby, and the performance of its obligations hereunder; (c) it has the power, licenses and permits required to carry on its business as it is being conducted and as proposed to be conducted; (d) this Agreement and the consummation of the transactions contemplated herein are its legal, valid, binding and enforceable obligations; and (e) it shall, in good faith, comply with all its obligations under this Agreement.
24. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the Republic of the Philippines. This Agreement shall be subject to existing laws, policies, rules and regulations, administrative orders and any amendments and modifications thereof, emanating from the Department of Energy, the ERC, other government agencies or authorized bodies having jurisdiction, and shall be deemed incorporated herein.
25. **Non-waiver of Rights.** Failure or delay by any Party in the exercise of any right, power or remedy under this Agreement shall not operate as a waiver thereof.
26. **Entire Agreement and Amendments.** The OATS Rules as may be amended from time to time, and this Agreement, its schedules, attachments and annexes, supersede any previous agreement, arrangements or representation between the Parties, whether oral or written, in respect of the subject matter of this Agreement and shall constitute the entire agreement between the Parties in relation thereto. Except as otherwise provided herein, this Agreement may only be amended or modified by a written instrument signed by each of the Parties.
27. **Assignment.** This Agreement can be assigned in accordance with the Assignment provision of A11 in Module A [General Terms and Conditions] of the OATS Rules.

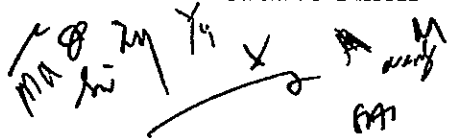


28. **Severability.** If at any time, one or more provisions in this Agreement shall be determined to be illegal, invalid or unenforceable in any respect, the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected or impaired thereby, provided that the remaining provisions are sufficient to render to each Party the benefits contemplated hereby.
29. **Counterparts.** This Agreement may be executed by the Parties in counterparts, each of which when so executed and delivered shall be an original, but all of which shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Agreement this \_\_\_\_\_ day of \_\_\_\_\_ 2013 at \_\_\_\_\_.

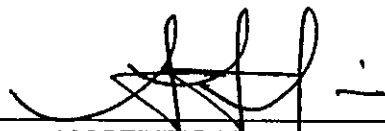
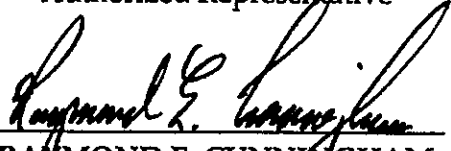
NATIONAL GRID CORPORATION  
OF THE PHILIPPINES (NGCP)

By:

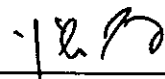
  
\_\_\_\_\_  
ANTHONY L. ALMEDA  
Chief Administrative Officer  


REDONDO PENINSULA ENERGY,  
INC.

By:

  
\_\_\_\_\_  
ANGELITO U. LANTIN  
Authorized Representative  
  
\_\_\_\_\_  
RAYMOND E. CUNNINGHAM  
Authorized Representative

Signed in the Presence of:

  
\_\_\_\_\_

\_\_\_\_\_



Republic of the Philippines)  
Quezon City )S.S.

ACKNOWLEDGEMENT

BEFORE ME on the place and date as indicated prior, personally appeared the following presenting their respective government issued identification cards bearing their pictures:

| Name                  | Government ID                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------|
| ANTHONY L. ALMEDA     | DRIVER'S LICENSE D14-84017252,<br>ISSUED AT QUEZON CITY                                          |
| ANGELITO U. LANTIN    | PASSPORT NUMBER: XX3287440<br>DATE/PLACE ISSUED: MARCH 20, 2009<br>(PHILIPPINE EMBASSY, BANGKOK) |
| RAYMOND E. CUNNINGHAM | PASSPORT NUMBER: 141929152<br>DATE/PLACE ISSUED: JAN. 04, 2007 (US<br>DEPT. OF STATE)            |

who represented themselves to be the same persons who executed this instrument and acknowledged the same to be their true and voluntary act and deed ad of the corporations represented herein.

This instrument, consisting of eleven (11) pages, including the page on which this acknowledgment is written, has been signed on the signature page and on the left margin of each and every other page thereof by the concerned parties and their witnesses, and sealed with my notarial seal.

*October 24, 2014*  
IN WITNESS WHEREOF, I have hereunto set my seal and signature.

*[Signature]*  
Atty. RICO B. CAGARA  
Notary Public, Appointment No. 070  
Commission until 31 December 2015  
PTR No.9032599; 01-02-14; Quezon City  
IBP Lifetime No. 08600; Bulacan  
Roll of Attorney's No. 53664  
MCLE Compliance No.IV-0006563;7.04.12  
Unit 305, J. Rosa Condominium  
44 Matimtiman St., Teacher's Village East  
Diliman, Quezon City

Doc. No. *261*  
Page No. *57*  
Book No. *27*  
Series of 2014

Signed in the Presence of:

*[Signature]*

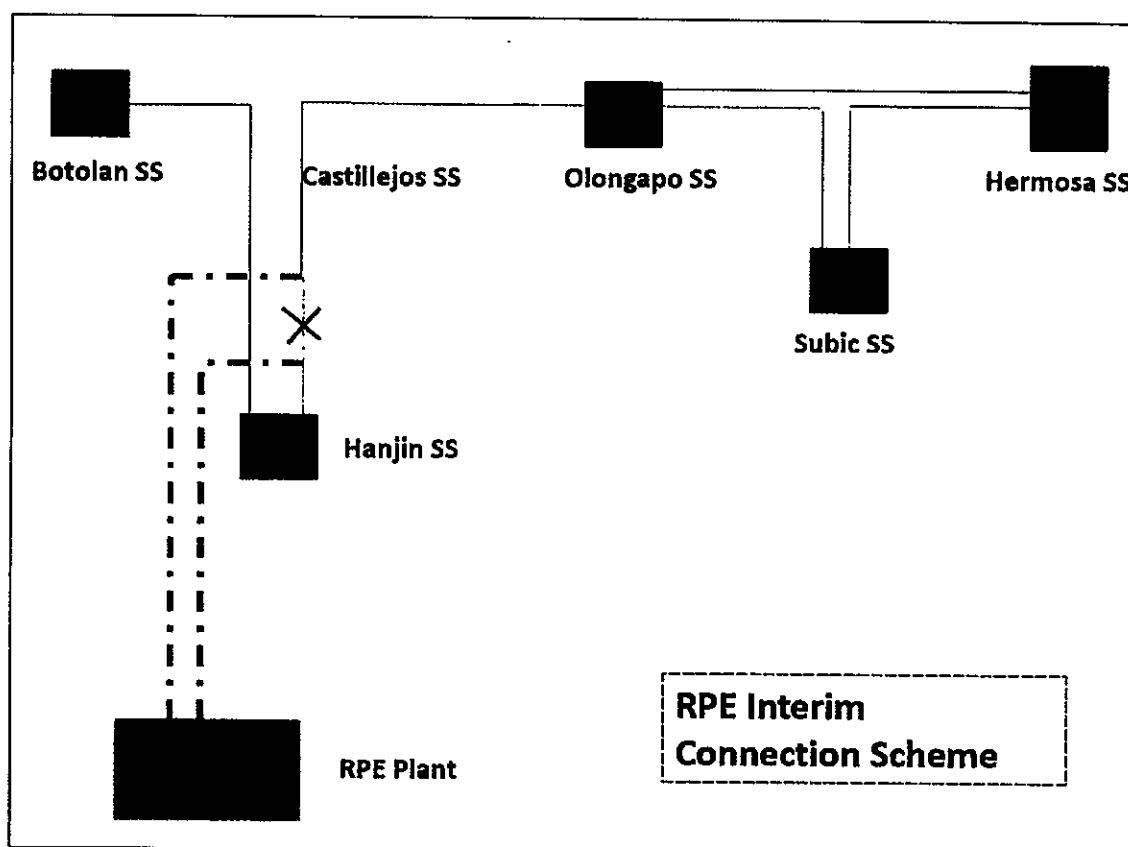
NATIONAL GRID CORPORATION OF THE PHILS.

By: *[Signature]*  
ANTHONY L. ALMEDA  
Chief Administrative Officer  
*Ma 10 day 14 hi 17 act 2*

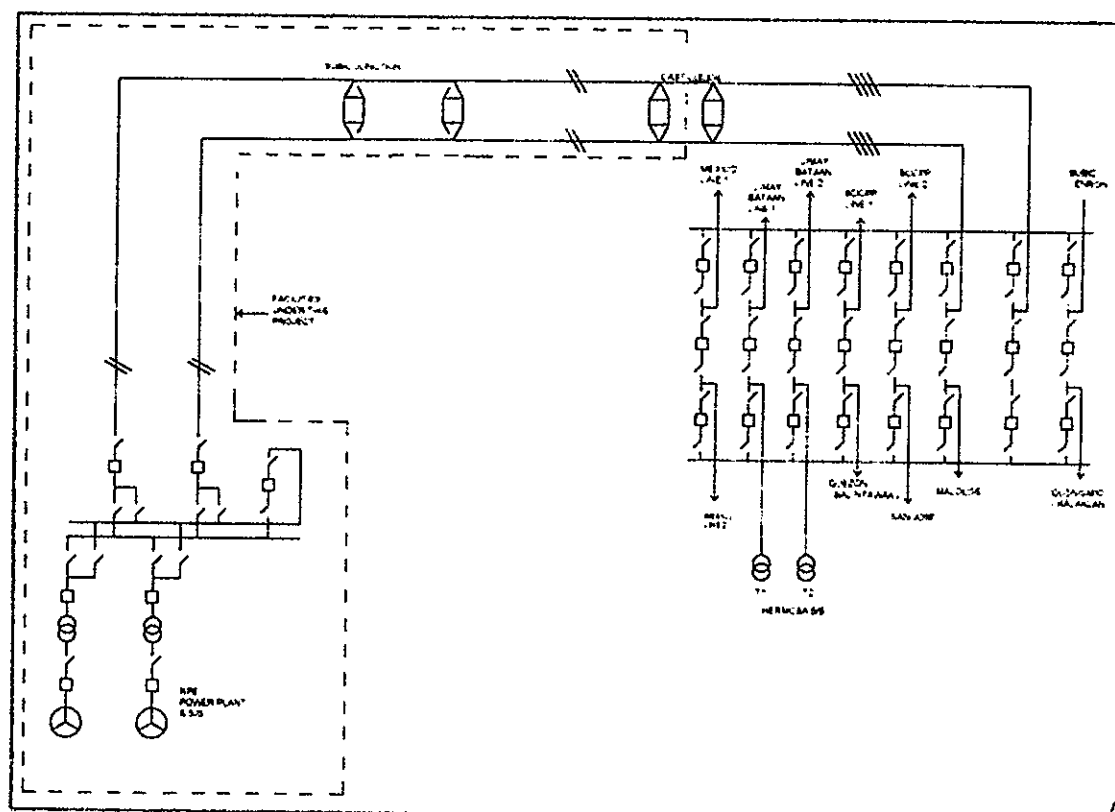


Annex "A"

A-1: INTERIM CONNECTION SCHEME



A-2: FINAL CONNECTION SCHEME



REVIEWED  
NGCP

See 201. if it is ok

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## Annex "B"

## SYSTEM IMPACT STUDY

**(Please see attached)**

Q. 21

*[Handwritten marks]*



## FACILITIES STUDY

**(Please see attached)**

OGC  
REVIEWED  
ZMC  
\$

22. 1. 2022

Annex "C"

DISPUTE PROCEDURES

1. **Dispute Resolution.** In case of any disputes in relation to this Agreement or the OATS Rules, the procedure provided in A9 in Module A [General Terms and Conditions] of the OATS Rules shall apply. In accordance with A9 in Module A [General Terms and Conditions], the Parties shall seek at the outset to resolve the dispute, in the following manner:
  - 1.1. **Dispute Notice.** The Party claiming or raising the dispute (the "Disputing Party") shall notify the other Party in writing of its claim and shall provide sufficient details thereof ("Dispute Notice").
  - 1.2. **Meeting to Resolve Dispute.** Within ten (10) days from receipt of the Dispute Notice from the Disputing party, the duly designated senior representatives of the Parties shall meet and shall discuss on how to resolve the dispute.
  - 1.3. **Resolution of Dispute or Elevation to ERC.** If the dispute is resolved, the Parties shall execute an agreement embodying the terms and conditions in resolving the same. If the dispute is not resolved within thirty (30) days from receipt of the Dispute Notice or within such other period as may be agreed upon by the Parties, the dispute shall be referred to ERC by either or both Parties for resolution.
2. **Billing Dispute.** In case of billing disputes, F6 in Module F [Rates, Methodology, and Billing and Settlement] of the OATS Rules shall apply, subject to the provisions of this Agreement. To avoid any doubt, the provisions on the OATS Rules on the transmittal of a notice of billing errors shall apply to the Dispute Notice.
3. **Representatives.** For purposes of the dispute resolution process stated-above, the Parties hereby designate their respective representatives, as follows:

NGCP                      MS. MA. CYNTHIA Y. MANRIQUE  
Head, Revenue and Regulatory Affairs

RP Energy                MR. ANGELITO U. LANTIN  
Authorized Representative

Either Party may designate an alternate or substitute representatives by giving a written notice to the other Party.

*Handwritten signature/initials*

*Handwritten signature/initials*

*Handwritten signature*  




Energy Regulatory Commission (ERC) Certificate of Compliance **ANNEX " V "**

This document is not applicable as of this time. Redondo Peninsula Energy, Inc. (RPE) has not yet started construction and has not yet secured its ERC Certificate of Compliance (COC). RPE will apply for its COC prior to commissioning of the power plant and submit the same once secured

**National Power Corporation (NPC) Certification**

**ANNEX " W "**

This document is not applicable to Redondo Peninsula Energy, Inc. (RPE). The proposed power plant of RPE, a Greenfield project, was not a state-owned asset and does not have a Transition Supply Contract (TSC).

ANNEX " X "

Technical and Economic Characteristics

| Technical Parameter                                    | Technical Limit                                                                 | Remarks                                                                                                                            |
|--------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Design capacity (in MW)                                | 1 x 338 MW (Gross/Installed Capacity)<br><br>1x300 MW (Net/Dependable Capacity) | 1 x 338MW gross unit generation at TMCR measured at plant gate<br><br>1 x 300MW net unit generation at TMCR measured at plant gate |
| Mode of Operation                                      | Baseload                                                                        |                                                                                                                                    |
| Frequency Limits (Hertz)                               | 60 ± 4.1Hz                                                                      | Generator will be disconnected from the grid at either 57.6 Hz or 62.4 Hz (with a 5 s delay), as per Grid Code                     |
| Voltage Limits (kV)                                    | 230 ± 5%                                                                        | As per Grid Code                                                                                                                   |
| Reactive Power                                         | 0.85 lag - 0.90 lead                                                            | As per Grid Code                                                                                                                   |
| Grid System Fault Level                                | 50kA                                                                            |                                                                                                                                    |
| Critical Fault detection and Clearing Time Limits      | 83ms                                                                            |                                                                                                                                    |
| Start-up times (in minutes)*<br>(Times from light off) |                                                                                 |                                                                                                                                    |
| a. Cold Start                                          | a. to Pmin (435min)<br>to TMCR (660min)                                         | a. ≥48h                                                                                                                            |
| b. Warm Start                                          | b. to Pmin (305min); to TMCR (510min)                                           | b. >8h to <48h                                                                                                                     |
| c. Hot Start                                           | c. to Pmin (180min); to TMCR (300min)                                           | c. ≤8h                                                                                                                             |
| Dispatch Ramp Rates (MW/min)*                          |                                                                                 |                                                                                                                                    |
| a. Hot condition                                       | a. Pmin to 90% (2.45MW/min);<br>90% to 100% (0.75MW/min)                        |                                                                                                                                    |
| b. Warm condition                                      | b. Pmin to 90% (1.58MW/min);<br>90% to 100% (0.67MW/min)                        |                                                                                                                                    |
| c. Cold condition                                      | c. Pmin to 90% (0.83MW/min);<br>90% to 100% (0.67 MW/min)                       |                                                                                                                                    |

|                                               |     |                                                                                                     |
|-----------------------------------------------|-----|-----------------------------------------------------------------------------------------------------|
| Pmin (in MWnet) (as registered with the WESM) | 120 | Minimum Net Unit generation for continuous stable operation – no oil firing, measured at plant gate |
|-----------------------------------------------|-----|-----------------------------------------------------------------------------------------------------|

\*startup times and ramp rate values are design targets to be confirmed at COD

**COST ANALYSIS**

All cost analysis related to the generation in support of the proposed pricing provisions of the contract are part of the financial model provided in the sealed envelope.

# ANNEX " 2 "

## **PROCUREMENT PROCESS LEADING TO THE EXECUTION OF THE POWER SUPPLY AGREEMENT (PSA) BETWEEN MANILA ELECTRIC COMPANY (MERALCO) AND REDONDO PENINSULA ENERGY, INC. (RPE)**

In a letter dated July 19, 2012, Redondo Peninsula Energy, Inc. (RPE) invited Manila Electric Company (MERALCO) to begin discussions on the execution of a Power Supply Agreement (PSA).

Thereafter, a series of meetings transpired between the Parties as they negotiated the terms and conditions of the PSA, including the Price.

Following extensive negotiations, on April 20, 2016, the Parties executed the PSA for the purchase of Contract Capacity and Associated Energy from the sub-critical circulating fluidized-bed coal-fired Plant which RPE intends to construct, own, operate, manage and maintain in Sitio Naglatore, Barangay Cawag, Municipality of Subic in the Province of Zambales, within the Subic Bay Freeport Zone .

The Power Plant will be connected to the Luzon Grid through a new 56-km transmission line composed of a 23-km segment from the Power Plant to Castillejos ("*Connection Asset*") and a 33-km segment from Castillejos to the existing Hermosa Substation ("*Transmission Asset*")

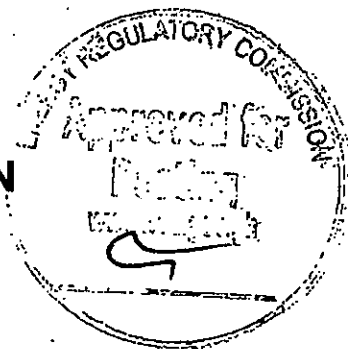
Connection Asset: 23-km transmission line from the Power Plant to Castillejos

- The Connection Asset from the power plant to Castillejos is nearly 23 km long consisting of 6.48 km of forest land, 6.71 km of private land and 9.39 km of land within Subic Bay Metropolitan Authority. The connection asset will be developed by Redondo Peninsula Energy, Inc. (RPE). The estimated cost for the Connection Asset is PHP1,167,099,849.70.
- The ERC approved RPE's application for the Connection Asset on 22 May 2015 (see attached).

Transmission Asset: 33-km, 500 kV transmission line from Castillejos to existing Hermosa Sub-Station

- The Transmission Asset from Castillejos to Hermosa is nearly 33 km long consisting of private land, land under Ancestral Domain, and land within Olongapo Watershed Reserve. The transmission line will be developed by the National Grid Corporation of the Philippines (NGCP). The estimated cost for the Transmission Asset is PhP3,305,313,083.62.
- The ERC approved RPE's application for the Transmission Asset on 13 May 2015 (see attached).

Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City



IN THE MATTER OF THE  
APPLICATION FOR THE  
APPROVAL OF THE WESTERN  
LUZON 500 KV BACKBONE  
PROJECT (STAGE I:  
CASTILLEJOS-HERMOSA 500  
KV TRANSMISSION LINE  
PROJECT), WITH PRAYER FOR  
THE ISSUANCE OF A  
PROVISIONAL AUTHORITY

ERC CASE NO. 2013-063 RC

NATIONAL GRID  
CORPORATION OF THE  
PHILIPPINES (NGCP),

Applicant.

X-----X

DOCKETS  
Date: MAY 11 2015  
By: *[Signature]*

## DECISION

Before this Commission for resolution is the application filed on April 5, 2013 by the National Grid Corporation of the Philippines (NGCP) for the approval of the Western Luzon 500 kV Backbone Project (Stage I: Castillejos-Hermosa 500 kV Transmission Line Project), with prayer for the issuance of a provisional authority.

Having found said application sufficient in form and in substance with the required fees having been paid, an Order and a Notice of Public Hearing, both dated May 14, 2013, were issued setting the case for jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing on June 17, 2013.

In the same Order, NGCP was directed to cause the publication of the Notice of Public Hearing, at its own expense, twice (2x) for two (2) successive weeks in two (2) newspapers of general circulation in the Philippines, with the date of the last publication to be made not later than ten (10) days before the date of the scheduled initial hearing. It was also directed to inform the consumers, by any other means available and appropriate, of the filing of the instant application, its reasons therefor and of the scheduled hearing thereon.



The Office of the Solicitor General (OSG), the Commission on Audit (COA) and the Committees on Energy of both Houses of Congress were furnished with copies of the Order and Notice of Public Hearing and were requested to have their respective duly authorized representatives present at the initial hearing.

Likewise, the Offices of the Provincial Governors of Nueva Vizcaya, Nueva Ecija, Bulacan, Rizal, Pampanga, Bataan, Tarlac, Zambales and Pangasinan and the Mayor of Quezon City were furnished with copies of the Order and Notice of Public Hearing for the appropriate posting thereof on their respective bulletin boards.

On May 24, 2013, the Manila Electric Company (MERALCO) filed a "*Petition for Intervention (With Entry of Appearance)*".

On June 11, 2013, the following pleadings were filed with the Commission: 1) "*Pre-Trial Brief*" by the NGCP; b) "*Petition for Leave to Intervene with Motion*" by the Redondo Peninsula Energy, Inc. (RPE); and c) "*Pre-Trial Brief*" by the MERALCO.

During the June 17, 2013 initial hearing, the NGCP, MERALCO, and RPE appeared. No other intervenor or oppositor appeared nor was there any other intervention or opposition registered.

At the said hearing, NGCP presented its proofs of compliance with the Commission's posting and publication of notice requirements which were marked as Exhibits "A" to "M-1", inclusive. Thereafter, it conducted an expository presentation of its application. After the termination of the expository presentation, the Commission scheduled the pre-trial conference of the case on June 26, 2013.

On June 21, 2013, the RPE filed its "*Pre-Trial Brief*".

During the June 26, 2013 continuation of hearing, NGCP, MERALCO, and RPE appeared.

At the said hearing, the Commission conducted a pre-trial conference where parties proposed facts and issues for admission or denial by the other, and issues for resolution were joined. At the termination of the pre-trial conference, the Commission scheduled the

next hearing of the case on July 16, 2013 for the presentation by the NGCP of its evidences.

During the July 16, 2013 continuation of hearing, NGCP, MERALCO, and RPE appeared.

At the said hearing, NGCP presented its lone witness, Engr. Redi Allan B. Remoroza, its Head of the Luzon Planning Division who testified in support of the application. In the course thereof, additional documents were presented and duly marked as exhibits. The direct examination having been terminated, MERALCO and RPE conducted their respective cross-examinations.

The cross-examination of the witness having been terminated, MERALCO and RPE manifested that they are waiving their rights to present their respective evidences.

On July 22, 2013, NGCP filed its "*Compliance*" and "*Formal Offer of Evidence (With Motion for Additional Markings)*".

On July 26, 2013, MERALCO filed a "*Manifestation*".

On August 5, 2013, the Commission issued an Order directing the NGCP to submit various documents. On the same date, RPE filed its "*Manifestation and Motion*" praying that it be provided by the NGCP of a copy of the latter's "*Formal Offer of Evidence*".

On August 29, 2013, the NGCP filed its "*Compliance*" and on September 2, 2013, the RPE filed its "*Manifestation and Motion*" with attached "*Formal Offer of Evidence*"<sup>1</sup>.

On September 3, 2013, the Commission issued an Order admitting the RPE's "*Formal Offer of Evidence*".

On September 17, 2013, RPE filed its "*Memorandum*" and October 8, 2013, the NGCP filed its "*Manifestation*".

On February 23, 2015, the Commission issued an Order admitting NGCP's "*Formal Offer of Evidence with Motion for Additional Markings*" and declaring the case submitted for resolution.

---

<sup>1</sup> RPE adopts and offers in evidence NGCP's Exhibits "N and Series", "O and Series", "P", "Q" and "R"

## **DISCUSSION**

### **I. Background and Project Description**

The development of the transmission corridors in the Island of Luzon is essential to ensure a stable power-grid network and reliable future power supply. The National Capital Region (NCR) will especially benefit in the stability and reliability. With special mention is the Bolo-Nagsaag-San Jose 500 kV double-circuit line, which not only serves as a backbone transmission line of the Luzon Grid, but transmits, among others, the Sual Power Plant's 1200 MW capacity and Masinloc Coal-Fired Power Plant's (MCP) 600 MW capacity to the load center of the Luzon Grid.

Sual Power Plant has expanded to another 600 MW while the MCP to another 382 MW. The expansion would result in a total generation capacity of 2,782 MW delivering power at one node and heavier loading for the existing 500 kV backbone, which is at 2,850 MVA capacity per circuit.

To provide a higher level of reliability and to avoid outage in an event of a double-circuit tripping, it proposes a long-term plan for 500 kV backbone development from Bolo (Kadampat) down to Hermosa Substation which includes the development of a 500 kV Substation in Castillejos, Zambales.

From Hermosa Substation, further developments for a 500 kV backbone will also be implemented. This involves a 500 kV transmission line loop in order to strengthen the transmission network and ensure sufficient transmission capacity for the long-term power requirements of the country's load center.

The Castillejos-Hermosa 500 kV Transmission Line (Castillejos-Hermosa Line) is the first stage of the Western Luzon 500 kV Backbone that aims to develop a 500 kV western corridor. Shown below are proposed project's components, as follows:

| PROJECT COMPONENT              | DESCRIPTION                                                               |
|--------------------------------|---------------------------------------------------------------------------|
| <b>Transmission Line</b>       |                                                                           |
| Castillejos – Hermosa          | 500 kV, 4 X 795 MCM ACSR/AS, ST-DC, 32 km (initially energized at 230 kV) |
| <b>Substation</b>              |                                                                           |
| Hermosa Substation (Expansion) | 4-230 PCB + Associated Equipment                                          |

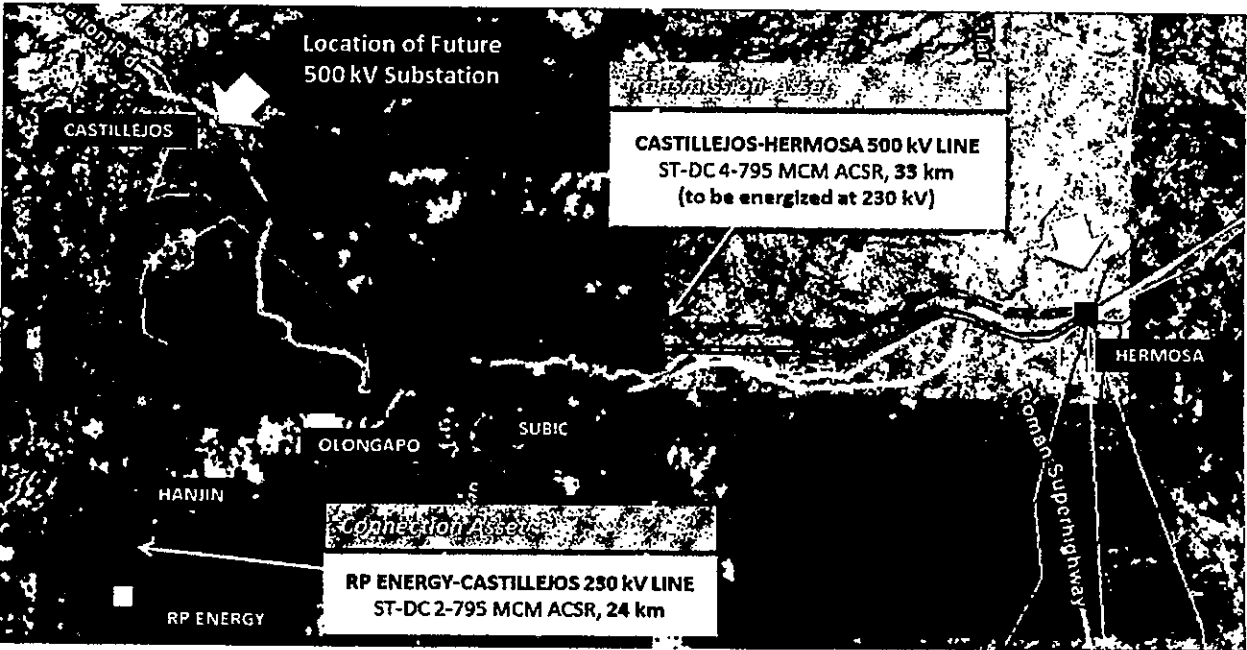
**II. Rationale of the Proposed Project**

- To serve as an initial segment (Stage 1) of the Western Luzon 500 kV Backbone Project, which is part of the long-term Transmission Development Plan (TDP)
- To cater the full 600 MW capacity of RP Energy Plant (RPE) and facilitate the direct delivery of power to Hermosa Substation

**III. Components of the Proposed Project**

**A. Transmission Line**

Shown below is a Map of the description of the proposed transmission line route:



Proposed Scheme of RP Energy Coal-Associated Project Showing Hybrid Asset Classification

The proposed transmission line will traverse about three kilometer (3 km.) portion of the Roosevelt National Park at Purok 2, Barangay Payangan, Dinalupihan, Bataan. It will also traverse large tract of rice lands, mango plantation and other agricultural lands planted with fruit-bearing trees and root crops. The line route is characterized to be flat to rolling to mountainous terrain. The total length of the transmission line is approximately thirty-two kilometers (32 km.).

After the completion of the Castillejos – Hermosa Transmission Line, the project will be electrically connected to the RP Energy – Castillejos Transmission Line<sup>1</sup> to effect the interconnection of RP Energy 600 MW CFPP to the Luzon Grid through the Hermosa Substation<sup>2</sup>.

## **B. Substation**

Hermosa Substation is located in Barangay Balsik, Hermosa, Bataan about one hundred twenty-five kilometers (125 km.) north-east of Manila. It is the receiving substation of two (2) generating plants, namely: a) the 120 MW Subic-Enron and 620 MW Bataan Combined-Cycle Power Plants; and b) in the future, the RP Energy 600 MW CFPP. The existing substation facility has 2 X 100 MVA, 230/69-13.8 kV power transformers that serve the power requirements of Bataan Province through the Peninsula Electric Cooperative, Inc. (PENELCO). The 25 MVAR, 230 kV shunt reactor installed at 230 kV Bus A provides support to prevent overvoltage during off-peak periods.

To provide enough space to accommodate the incoming Castillejos – Hermosa Transmission Line, the following expansion and reconfiguration works will be undertaken at Hermosa 230 kV Substation:

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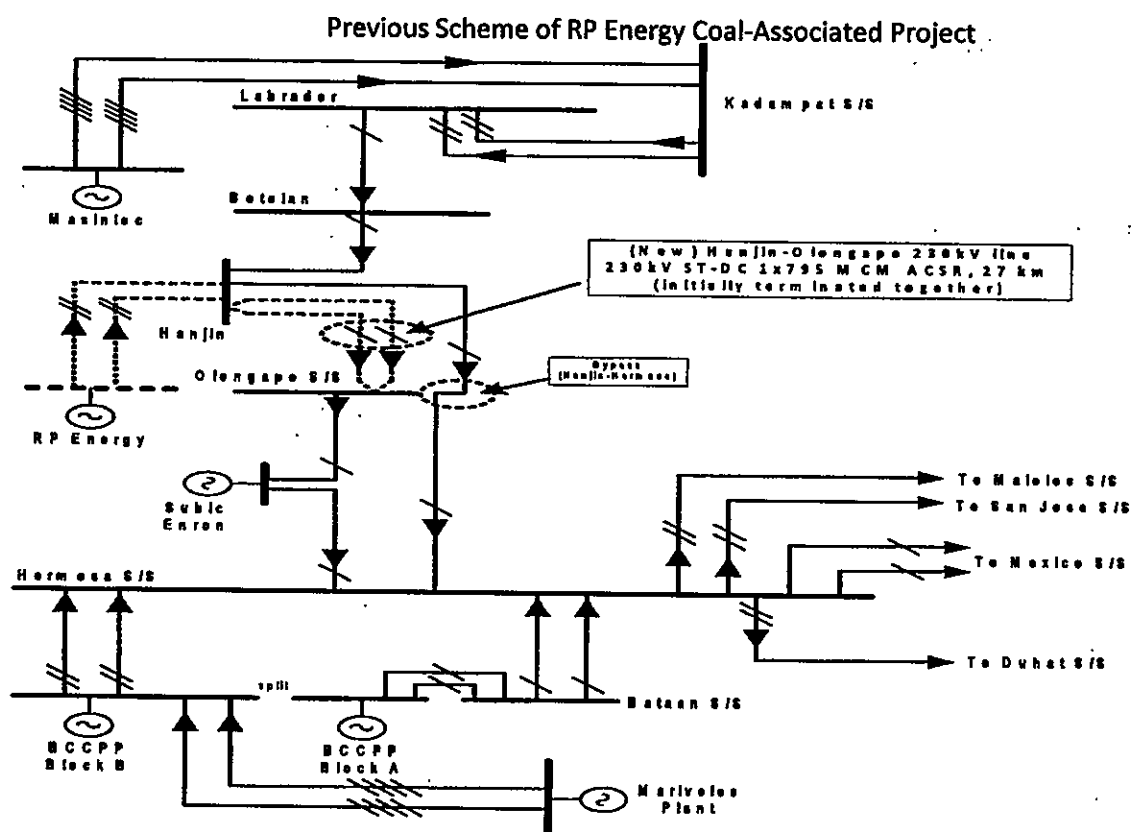
<sup>1</sup> Classified as Connection Asset thus, RP Energy will implement this segment to initially connect the RP Energy 600 MW CFPP to the Luzon Grid through Hermosa Substation.

<sup>2</sup> Due to space constraint at Subic (Hanjin) and Olongapo Substations, RP Energy CFPP will be initially connected at Hermosa Substation. Its ultimate connection will be at Castillejos Substation once it will be finally implemented.

1. Construction of additional bay beside Bay 88 (present termination of the Olongapo and Subic-Enron 230 kV Lines) wherein 3-230 kV PCBs including associated substation equipment shall be installed;
2. Transfer the termination of the Olongapo and Subic-Enron 230 kV lines to the newly-constructed bay;
3. The vacated feeder (Bay 88, Bus B) of the Subic-Enron Line will be utilized as one of the termination point of the Castillejos – Hermosa Line; and
4. The other termination point is at the vacant feeder Bay 87 (Bus B) wherein PCB 87HM8, an Oil Circuit Breaker, needs to be replaced.

#### IV. System Simulation Results

The previous scheme of RP Energy Coal-Associated Project was re-evaluated under the new capacity of RP Energy Plant at 2 X 300 MW. Due to the increase in plant capacity and with existing lines at 300 MVA capacity only per circuit overloading issues have been identified as tabulated below:



Year 2020

| Monitored Elements                  | Rating (MVA) | Normal |           | N-1   |           | Element on Outage                                |
|-------------------------------------|--------------|--------|-----------|-------|-----------|--------------------------------------------------|
|                                     |              | MW     | % loading | MW    | % loading |                                                  |
| Subic (Hanjin)-Olongapo 230 kV line | 300          | 620.5  | 201       | 648.7 | 218       | Bolo (Kadampat)-Nagsaag (San Manuel) 500 kV line |
| Olongapo-Subic Enron 230 kV line    | 300          | 120.8  | 44        | 435.6 | 149       | Hermosa-Olongapo 230 kV line                     |
| Olongapo-Hermosa 230 kV line        | 300          | 357.0  | 122       | 645.6 | 221       | Hermosa-Subic (SBMA) 230 kV line                 |
| Subic Enron-Hermosa 230 kV line     | 300          | 316.8  | 108       | 628.3 | 215       | Hermosa-Olongapo 230 kV line                     |

Upon implementation of the proposed Western Luzon 500 kV Backbone (Stage 1), the new Castillejos-Hermosa Line will facilitate the direct delivery of power to Hermosa Substation. Thus, the Subic (Hanjin) to Hermosa corridor will no longer be congested. Shown below are the resulting loadings:

Year 2016

| Monitored Elements                                              | Rating (MVA) | Normal |           | N-1   |           | Element on Outage                         |
|-----------------------------------------------------------------|--------------|--------|-----------|-------|-----------|-------------------------------------------|
|                                                                 |              | MW     | % loading | MW    | % loading |                                           |
| Castillejos-Hermosa 500 kV line (initially energized at 230 kV) | 1,200        | 149.2  | 13        | 297.0 | 25        | Castillejos-Hermosa 500 kV line           |
| Hanjin-Olongapo 230 kV line                                     | 300          | 73.2   | 26        | 113.3 | 43        | Nagsaag (San Manuel)-San Jose 500 kV line |
| Olongapo-Subic Enron 230 kV line                                | 300          | 92.4   | 35        | 200.5 | 70        | Hermosa-Subic (SBMA) 230 kV line          |
| Olongapo-Hermosa 230 kV line                                    | 300          | 63.9   | 23        | 162.7 | 57        | Hermosa-Subic (SBMA) 230 kV line          |

| Monitored Elements              | Rating (MVA) | Normal |           | N-1   |           | Element on Outage                 |
|---------------------------------|--------------|--------|-----------|-------|-----------|-----------------------------------|
|                                 |              | MW     | % loading | MW    | % loading |                                   |
| Subic Enron-Hermosa 230 kV line | 300          | 108.7  | 36        | 201.3 | 69        | Olongapo-Subic (SBMA) 230 kV line |

Year 2020

| Monitored Elements                                              | Rating (MVA) | Normal |           | N-1   |           | Element on Outage                                |
|-----------------------------------------------------------------|--------------|--------|-----------|-------|-----------|--------------------------------------------------|
|                                                                 |              | MW     | % loading | MW    | % loading |                                                  |
| Castillejos-Hermosa 500 kV line (initially energized at 230 kV) | 1,200        | 297.1  | 24        | 588.4 | 48        | Castillejos-Hermosa 500 kV line                  |
| Subic (Hanjin)-Olongapo 230 kV line                             | 300          | 99.5   | 38        | 121.3 | 50        | Bolo (Kadampat)-Nagsaag (San Manuel) 500 kV line |
| Olongapo-Subic Enron 230 kV line                                | 300          | 89.8   | 38        | 195.5 | 69        | Hermosa-Subic (SBMA) 230 kV line                 |
| Olongapo-Hermosa 230 kV line                                    | 300          | 62.3   | 27        | 159.1 | 60        | Hermosa-Subic (SBMA) 230 kV line                 |
| Subic Enron-Hermosa 230 kV line                                 | 300          | 105.8  | 36        | 194.7 | 67        | Olongapo-Subic (SBMA) 230 kV line                |

The immediately succeeding tabulation below would show a summary of power plants that will directly deliver power towards Hermosa 230 kV Substation:

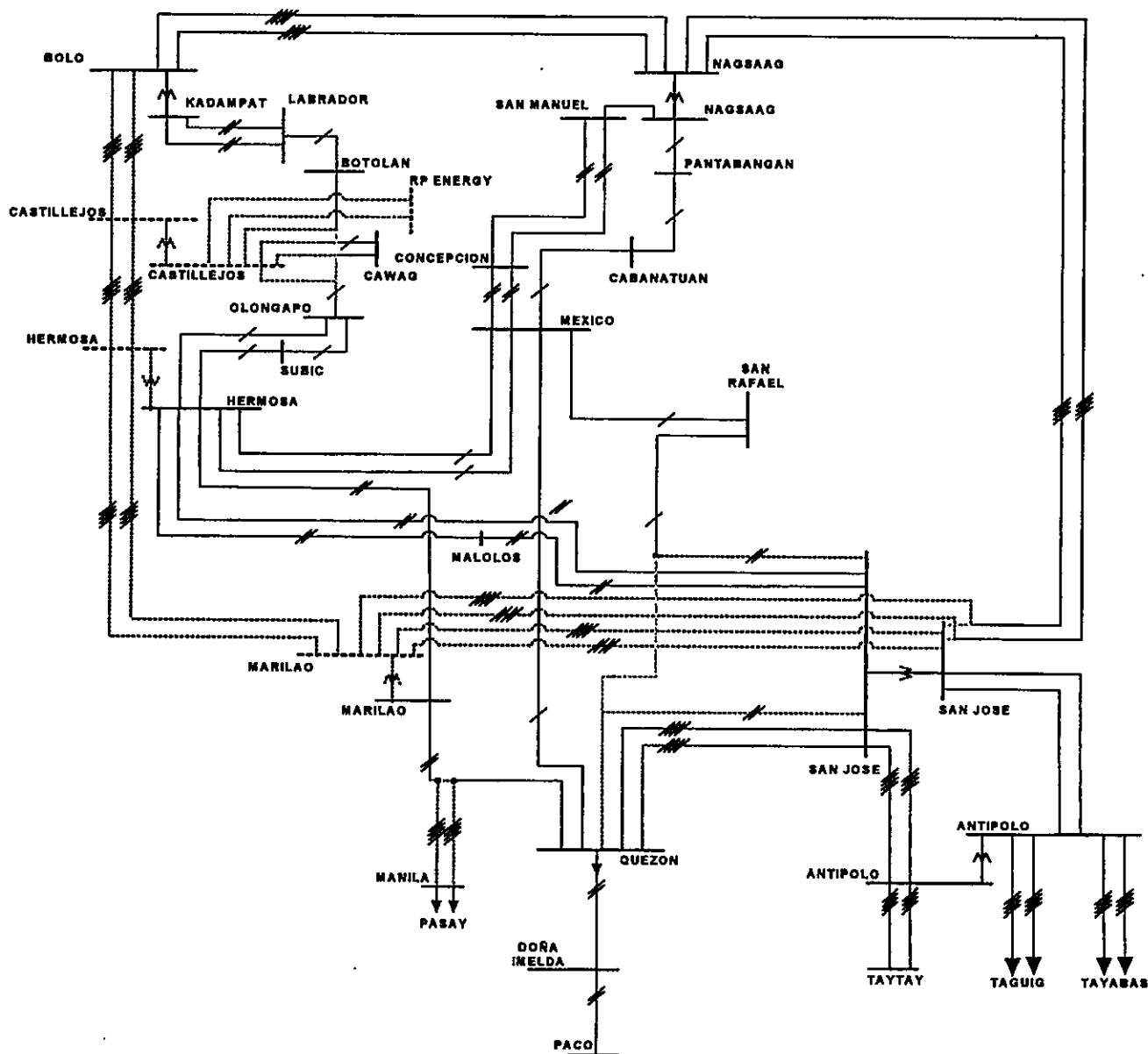
| Plant           | Capacity (MW) | Remarks    | Commitment Year                        |
|-----------------|---------------|------------|----------------------------------------|
| RPE Plant (new) | 600           | Coal-fired | Unit 1 – Oct 2016<br>Unit 2 – Dec 2016 |
| Mariveles (new) | 600           | Coal-fired | 2018                                   |
| Limay           | 620           | Oil-based  | Existing                               |
| Subic-Enron     | 116           | Oil-based  | Existing                               |
| TOTAL           | 1,936 MW      |            |                                        |



Based on the capacity of the existing outgoing circuits from Hermosa Substation, the allowable combined generation of RPE, Subic Enron, Mariveles and Limay Plants is about **1,653 MW** for the year 2016 system peak load scenario. It must be emphasized that the Hermosa-Mexico 230 kV Line is identified as the first limiting facility and in view thereof, there will be limitation in the dispatch of the least priority plant among the above-listed generators. To address this issue, the NGCP proposed the development of new Hermosa-San Jose 500 kV Line (another transmission line project) to be initially energized at 230 kV.

**V. Diagram of the Proposed Project**

Shown below is the proposed scheme of the RP Energy Coal-Associated Project which is aligned with the Long-term Development Plan for the Area:



## VI. Project Cost

The capital investment for the proposed projects and activities amounted to Three Billion Three Hundred Five Million Three Hundred Thirteen Thousand Eighty-Three and 62/100 Pesos (PhP3,305,313,083.62).

The contract for the supply of materials for the proposed projects will be assigned to qualified suppliers and contractors following a competitive bidding and selection process. The funding will be sourced through NGCP's Internal Cash Generated (ICG) fund.

The cost estimates were based on cost per kilometer for the transmission line which was derived from previous contracts. Included in the estimated cost are the technical services such as cost of route/topological survey, geologic investigation, Right-Of-Way (ROW) negotiations/acquisitions, relocation cost, RVAT for local purchases and site management.

The proposed project will be subject to optimization and asset classification based on its actual use pursuant to the Rules for Setting Transmission Wheeling Rates (RTWR) and other relevant issuances of the Commission.

A perusal of the evidences presented herein showed that the approval of NGCP's Western Luzon 500 kV Backbone Project (Stage I: Castillejos-Hermosa 500 kV Transmission Line Project), with prayer for the issuance of a provisional authority is in accordance with the Commission's *"Resolution Amending the Rules for Approval of Regulated Entities' Capital Expenditure Projects"* and will redound to the benefit of the consumers in terms of continuous, reliable and efficient power supply as mandated by Republic Act No. 9136 (R.A. 9136), or the Electric Power Industry Reform Act of 2001 (Section 2. Declaration of Policy – (b) *"to ensure the quality, reliability, security and affordability of the supply of electric power"*).

**WHEREFORE**, the foregoing premises considered, the application filed by the National Grid Corporation of the Philippines (NGCP) for approval of the Western Luzon 500 kV Backbone Project (Stage I: Castillejos-Hermosa 500 kV Transmission Line Project), with prayer for the issuance of a provisional authority, is hereby **APPROVED**, subject to optimization and asset classification based on its actual use pursuant to the Rules for Setting Transmission

Wheeling Rates (RTWR) and other relevant issuances of the Commission.

Relative thereto, NGCP is hereby directed to remit to the Commission, within fifteen (15) days from receipt hereof, a total permit fee in the amount of **Twenty-Four Million Seven Hundred Eighty-Nine Thousand Eight Hundred Forty-Eight Pesos (PhP24,789,848.00)**, computed as follows:

$$\begin{array}{r} \text{PhP3,305,313,083.62} \\ \hline \text{PhP100.00} \end{array} \times \text{PhP0.75} = \text{PhP24,789,848.00}$$

Further, NGCP is hereby directed to: 1) submit a progress report with an indication of any variance in the implementation of the project and time schedule; and 2) conduct a competitive bidding for the purchase of major materials in the implementation of the proposed project.

**SO ORDERED.**

Pasig City, March 9, 2015.

  
**ZENAIDA G. CRUZ-DUCUT**  
Chairperson

  
**ALFREDO J. NON**  
Commissioner

  
**GLORIA VICTORIA C. YAP-TARUC**  
Commissioner

  
**JOSEFINA PATRICIA A. MAGPALE-ASIRIT**  
Commissioner

**Copy Furnished:**

1. **THE NATIONAL GRID CORPORATION OF THE PHILIPPINES (NGCP)**  
NGCP Building, Quezon Avenue corner BIR Road, Diliman, Quezon City
2. **REDONDO PENINSULA ENERGY, INC. (RPE)**  
Unit 310, The Venue, Rizal Hi-Way, Subic Industrial Park  
Phase I, Subic Freeport Zone 2222
3. **MANILA ELECTRIC COMPANY (MERALCO)**  
Lopez Building, MERALCO Compound, Ortigas Avenue  
Pasig City
4. **Puno and Puno Law Offices**  
Counsel for Intervenor RPE  
12<sup>th</sup> Floor, East Tower, Philippine Stock Exchange Centre  
Exchange Road, Ortigas Center, Pasig City
5. **The Office of the Solicitor General**  
134 Amorsolo Street, Legaspi Village, Makati City  
Metro Manila
3. **The Commission on Audit**  
Don Mariano Marcos Avenue  
Diliman, Quezon City, Metro Manila
4. **The Senate Committee on Energy**  
Senate of the Philippines  
GSIS Building, Roxas Blvd., Pasay City, Metro Manila
5. **The House Committee on Energy**  
House of Representatives  
Batasan Hills, Quezon City, Metro Manila
6. **Office of the President of PCCI**  
Philippine Chamber of Commerce and Industry (PCCI)  
3<sup>rd</sup> Floor, Chamber and Industry Plaza (CIP)  
1030 Campus Avenue corner Park Avenue  
McKinley Town Center, Fort Bonifacio, Taguig City
7. **Office of the Provincial Governor**  
Province of Nueva Vizcaya
8. **Office of the Provincial Governor**  
Province of Nueva Ecija
9. **Office of the Provincial Governor**  
Province of Bulacan
10. **Office of the Provincial Governor**  
Province of Rizal
11. **Office of the Provincial Governor**  
Province of Pampanga
12. **Office of the Provincial Governor**  
Province of Bataan
13. **Office of the Provincial Governor**  
Province of Tarlac
14. **Office of the Provincial Governor**  
Province of Zambales
15. **Office of the Provincial Governor**  
Province of Pangasinan
16. **Office of the City Mayor**  
Quezon City 1100

16923  
Redondo - Transmission Line

Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

|                                   |       |
|-----------------------------------|-------|
| P&P PUNO & PUNO<br>AND ASSOCIATES |       |
| RECEIVED<br>MAY 22 2015           |       |
| BY: Kathy Selga                   | TIME: |

IN THE MATTER OF THE  
APPLICATION FOR AUTHORITY  
TO DEVELOP, OWN AND  
OPERATE DEDICATED POINT-  
TO-POINT LIMITED FACILITIES  
TO CONNECT TO THE  
TRANSMISSION SYSTEM OF THE  
NATIONAL GRID CORPORATION  
OF THE PHILIPPINES (NGCP),  
WITH PRAYER FOR  
PROVISIONAL AUTHORITY

ERC CASE NO. 2013-072 MC

REDONDO PENINSULA ENERGY,  
INC. (RPE),

Applicant.

X-----X

RECORDED  
Date: MAY 21 2015  
By: [Signature]

**DECISION**

Before the Commission for resolution is the application filed on July 11, 2013 by the Redondo Peninsula Energy, Inc. (RPE) for authority to develop, own and operate dedicated point-to-point limited facilities to connect to the transmission system of the National Grid Corporation of the Philippines (NGCP), with prayer for provisional authority.

In the said application, RPE alleged, among others, the following:

1. It is a power generation company duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal office address at Unit 310, The Venue, Rizal Hi-Way, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport Zone 2222. It may be served orders and other legal process through its undersigned counsel.

2. It is a power generation company organized pursuant to the EPIRA and other applicable laws. Its primary purpose is to build, own and operate power plants in the Philippines, to provide electric energy, and to conduct business in other areas of the power industry under the laws of the Republic of the Philippines including the sale of excess coal, fly ash, water, heat steam and other inputs or by-products of its operations, and undertake any related activity necessary for and conducive to the attainment of this purpose.<sup>1</sup>
3. In its 2013 Supply-Demand Outlook, the Department of Energy (DOE) recognized the growing demand for power in the Philippines. For the Luzon Grid, the DOE projects the energy demand "to increase at an average annual growth rate (AAGR) of 4.13 percent, from 7,969 MW in 2012 to 10,693 MW in 2020 and will increase further to 16,477 MW in 2030." Thus, a need for 500 MW required additional capacity by 2016.<sup>2</sup>
4. To help address the need for additional capacity in the Luzon Grid, it will design, engineer, procure, construct, supply, start-up, test, commission, own, operate, and maintain a generating facility (Generating Facility) to be located at Sitio Naglatore, Brgy. Cawag, Subic Bay Freeport Zone, Zambales, consisting of two (2) units of Circulating Fluidized Bed Coal Fired Power Plant with a net output capacity of approximately three hundred megawatts (300 MW) per unit for a combined net output capacity of six hundred megawatts (600 MW), and the related switching stations and line facilities. The Generating Facility is projected to be completed between the years 2016 and 2017.
5. To test, commission and dispatch its Generating Facility, soon after completion, it proposes to connect the Generating Facility to the transmission system of the National Grid Corporation of the Philippines (NGCP) through dedicated point-to-point limited interconnection

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<sup>1</sup>Copies of RP Energy's Certificate of Incorporation and Amended Articles of Incorporation are attached to the application as Annexes "A" and "A-1" and made integral parts thereof.

<sup>2</sup>A copy of the Department of Energy's ("DOE") 2013 Supply-Demand Outlook (please see Figure: Luzon Grid Supply Demand Outlook, 2012-2030, p. 2) is attached to the application as Annex "B" and made an integral part thereof.

facilities to be developed, owned, and operated by it (the RPE-Castillejos Transmission Line).<sup>3</sup>

5.1 The RPE-Castillejos Transmission Line will consist of 230 kV, double circuit transmission line with 2 – 795 MCM ACSR conductors with an approximate length of twenty three (23) kilometres.<sup>4</sup>

5.2 The RPE-Castillejos Transmission Line is projected to be completed by July 2015.<sup>5</sup> The estimated cost for the project is One Billion One Hundred Sixty-Seven Million Ninety-Nine Thousand Eight Hundred Forty-Nine Pesos (Php1,167,099,849.70).<sup>6</sup>

6. The connection of the Generating Facility through the RPE-Castillejos Transmission Line to be developed, owned, and operated by it to NGCP's transmission system is the most viable option among all the interconnection schemes considered, recommended, and evaluated by it and NGCP that will enable it to dispatch the plant capacity when the need arises.<sup>7</sup> It had entered into discussions with NGCP on the proposed interconnection and are currently finalizing the terms of the connection agreement. NGCP has already approved a connection scheme for it which will connect its Generating Facility through a new transmission line to Hermosa Substation.<sup>8</sup> Technical studies and grid impact studies on the proposed interconnection have been conducted and based on the results thereof, the said interconnection is technically feasible.<sup>9</sup> The Grid Impact

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<sup>3</sup> A copy of the description and scope of the project is attached to the application as Annex "C" and made an integral part thereof.

<sup>4</sup> A copy of the Conceptual Engineering Design is attached as to the application Annex "D" and made an integral part thereof.

<sup>5</sup> A copy of the Project Schedule Gantt chart is attached to the application as Annex "E" and made an integral part thereof.

<sup>6</sup> A copy of the Detailed Cost Estimates is attached to the application as Annex "F" and made an integral part thereof.

<sup>7</sup> Copies of the options/alternatives considered in lieu of the proposed project with corresponding documents and correspondences showing the analyses of the advantages/disadvantages of each option, all attached to the application as Annex "G" and made integral parts thereof.

<sup>8</sup> A copy of NGCP's Letter to RPE dated October 23, 2012 is attached to the application as Annex "H" and made an integral part thereof.

<sup>9</sup> Copies Phase One (1) Grid Impact Study for the first unit of RPE's 2x300 MW (net) Coal Fired Power Plant and Phase Two (2) Grid Impact Study for the second unit of RPE's 2x300 MW (net) Coal Fired Power Plant are attached to the application as Annexes "I" and "J" and made integral parts thereof.

Studies have also been reviewed and approved by NGCP.<sup>10</sup>

7. The RPE-Castillejos Transmission Line is likewise consistent with NGCP's 2012 Transmission Development Plan (TDP). The TDP states:

Based on the latest development in coordination with the power plant proponent, the scheme will now involve direct connection of the plant to Hermosa Substation but with 500 kV-designed segment from Castillejos area to Hermosa which will become part of the Western 500 kV Backbone development project. This will optimize the right-of-way to be acquired and will have provision also for any further capacity addition in Zambales area and provision for the eventual looping of the 500 kV backbone from Bolo (Kadampat) EHV Substation.

It can be noted that for purposes only of setting out asset boundary, a new 230 kV substation at Castillejos should be provided, however, the proposal is to initially connect together the RPE lines and NGCP 500 kV-designed lines in order to have a lower capex. The 500 kV-designed segment (33 km) will be classified as "transmission asset" while the 230 kV line (24 km) from RPE plant site to Castillejos area will be classified as "connection asset". The new substation in Castillejos will be developed later when the looping to Masinloc/Kadampat needs to be implemented or when new committed power plants in the area will be connected directly to the 500 kV-designed transmission line asset.<sup>11</sup>

8. Section 9(f) of the Electric Power Industry Reform Act ("EPIRA") provides:

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<sup>10</sup> A copy of NGCP's Review of the Third Party Grid Impact Study is attached to the application as Annex "K" and made an integral part thereof.

<sup>11</sup> A copy of the 2012 Transmission Development Plan, Major Network Development, Vol. 1, November 2012, Consultation Draft is attached to the application as Annex "L" and made an integral part thereof; please see pp. 34-35 thereof.



A generation company may develop and own or operate dedicated point-to-point limited transmission facilities that are consistent with the TDP: Provided, that such facilities are required only for the purpose of connecting to the transmission system, and are used solely by the generating facility, subject to prior authorization by the ERC.

9. In accordance with the requirement of Section 9(f) of the EPIRA, it hereby seeks the Commission's authorization to develop, own, and operate the RPE-Castillejos Transmission Line, a dedicated point-to-point limited interconnection facilities, to connect the Generating Facility to the NGCP transmission system.
10. It has the technical capability to operate the RPE-Castillejos Transmission Line.<sup>12</sup> It, likewise, has the financial capability to undertake the development, construction, operation and maintenance of the RPE-Castillejos Transmission Line.
  - 10.1 It is a consortium<sup>13</sup> among Meralco PowerGen Corporation (MPGC), a wholly owned subsidiary of Manila Electric Company (MERALCO),<sup>14</sup> Therma Power, Incorporated (TPI), a wholly owned subsidiary of Aboitiz Power Corporation,<sup>15</sup> and Taiwan Cogeneration International Corporation (TCIC), a wholly owned subsidiary of Taiwan Cogeneration Corporation (TCC).
  - 10.2 MPGC has a 40% stake at PacificLight Power, a state-of-the-art 800 MW natural gas fired combined

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<sup>12</sup> Copies of the Generator's Statement of Compliance to the Philippine Grid Code, the Generator's Summary of Compliance Plan to the Philippine Grid Code and the Generator's Specific and Detailed Compliance Plan to the Philippine Grid Code are attached to the application as Annexes "M", "N" and "O" and made integral parts thereof.

<sup>13</sup> A copy of RPE's 2012 General Information Sheet is attached to the application as Annex "P" and made an integral part thereof.

<sup>14</sup> A copy of MPGC's 2012 General Information Sheet is attached to the application as Annex "Q" and made an integral part thereof.

<sup>15</sup> A copy of TPI's 2012 General Information Sheet is attached to the application as Annex "R" and made an integral part thereof.

cycle power plant at Jurong Island, Singapore which is expected to start commercial operations by end of 2013. MPGC also has a number of ongoing power plant projects at varying stages of development in the Philippines including the RPE power plant project.

- 10.3 MERALCO is the sole power distribution utility for the entire Metro Manila and nearby provinces. MERALCO has extensive experience in the development, operations, and maintenance of distribution facilities such as substations, switchyards, distribution lines, and subtransmission lines with operating voltage levels of up to 115 kV. As of May 21, 2013 MERALCO's market capitalization amounts to PhP434,609,260,648.00.
- 10.4 MERALCO's subsidiary, Meralco Industrial Engineering Services Corporation (MIESCOR), provides engineering, consulting, construction, and operations and maintenance services for transmission and distribution lines since being established in 1973. It has constructed 115 kV, 138 kV, 230 kV and 500 kV transmission projects such as the Mauban-Tayabas 230 kV TL for Quezon Power, Dasma-Imus-Zapote 230 kV TL and Casecnan-San Miguel 230 kV TL for the National Power Corporation, and the 500 kV designed but 230 kV energized Naga-Tayabas TL. It is also undertaking the operation and maintenance (O&M) of the Mauban-Tayabas 230 kV TL for Quezon Power and the Sta. Rita-Calaca 230 kV TL for First Gen Power Corp.
- 10.5 TPI is a holding company which owns 100% equity interest in generation companies such as: Therma Luzon, Inc., the IPP Administrator of the 700 MW contracted capacity of the Pagbilao Power Plant; Therma South Inc., which owns the 2 x 150 MW capacity of the CFB Coal Plant located in Santa Cruz, Davao del Sur; Therma Mobile, owner of the 259 MW Navotas Power Barges; and Therma Marine, owner of the 200 MW Power Barges in Mindanao. TPI also owns 26% effective interest in

Cebu Energy Dev. Corp., which owns and operates the 3 x 82 MW coal plant in Toledo, Cebu.

- 10.6 TPI's affiliates include Aboitiz Renewables, Inc., Luzon Hydro Corp., Aboitiz Power Renewables Inc., Hedcor Inc., SN Aboitiz Power, Cebu Private Power Corporation and distribution utilities, such as: Davao Light & Power Company, Inc., Cotabato Light & Power Company, and Visayas Electric Corporation, San Fernando Electric Light and Power, Subic Enerzone Corp., Mactan Enerzone Corp., and Balamban Enerzone Corp. TPI's parent company, Aboitiz Power Corporation has a market capitalization of Two Hundred Sixty-Seven Billion One Hundred Seventeen Million Three Hundred Thirty-Six Thousand Three Hundred Forty-Four and 10/100 Pesos (PhP267,117,336,344.10) as of May 21, 2013.
- 10.7 TCC, the parent of TCIC, is one of the largest power companies in Taiwan with at least 2610 MW of power generation and has extensive experience in cogeneration facilities. TCC is principally engaged in the project planning, design, purchase, assembly, construction management and financial planning of cogeneration systems. TCC also provides capital for constructing cogeneration plants, as well as investment, construction and engineering consulting services to generation plants. TCC is also involved in power transmission and transformation business, as well as renewable sources business. TCC operates its businesses primarily in Taiwan. As of May 21, 2013, TCC has a market capitalization of Eleven Billion Seven Hundred Twenty-Two Million Seventy Thousand New Taiwanese Dollars (NT\$11,722,070,000.00).
- 10.8 RPE also has the financial capability to develop, construct and fund the RPE – Castillejos Transmission Line Project. As shown in its Audited Financial Statements for 2012, RPE has total assets of One Billion Three Hundred Thirty-Four Million Three Hundred Seventeen Thousand Four Hundred Eighty-Seven Pesos (PhP1,334,317,487.00) as of December 31, 2012 with Six Hundred Eleven Million

Seventeen Thousand Six Hundred Twenty-Three Pesos (PhP611,017,623.00) in current assets. RPE is currently in discussions with banks for the project financing of the Generating Facility as well as the RPE-Castillejos Transmission Line.<sup>16</sup>

**Motion for Provisional Authority and Allegations in Support of Prayer for Provisional Authority**

11. Rule 14 of the Commission's Rules of Practice and Procedure authorizes the issuance of a provisional authority or an interim relief prior to a final decision, provided that the facts and circumstances warrant the issuance of the same.
12. It prays that the Commission provisionally authorize the development, ownership, and operation of the RPE-Castillejos Transmission Line considering that the facts, circumstances and the magnitude of the opportunity costs entailed by any further delay in the interconnection of the Generating Facility warrants the issuance of a Provisional Authority. It hopes to be able to complete development and construction of the facilities at the soonest possible time in order to be able to dispatch electric power supply to the transmission system of NGCP when the need arises. Without such interconnection, the Generating Facility may become idle and its capacity put to waste. More importantly, the projected power demand of the country will not be met to the detriment of the public.
13. It is in such context that it prays that provisional authority be immediately issued for the development and construction of the proposed dedicated point-to-point limited interconnection facilities.
14. In support of the foregoing allegations for the immediate implementation of the RPE-Castillejos Transmission Line, a copy of the judicial affidavit of Mr. Vicente C. Sioson is attached as **Annex "T"** hereof.

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<sup>16</sup> A copy of RPE's Audited Financial Statement for 2012 is attached to the application as **Annex "S"** and made an integral part thereof.

15. It prays that this Commission:

- a. **ISSUE** an order provisionally authorizing it to implement the development, ownership and operation of the RPE-Castillejos Transmission Line; and
- b. **APPROVE** the application for authority to develop, own and operate RPE-Castillejos Transmission Line.

Having found said application sufficient in form and in substance with the required fees having been paid, an Order and a Notice of Public Hearing, both dated September 23, 2013, were issued setting the case for initial hearing on October 29, 2013.

In the same Order, RPE was directed to cause the publication of the Notice of Public Hearing, at its own expense, once (1x) in a newspaper of general circulation in the Philippines, with the date of publication to be made not later than ten (10) days before the date of the scheduled initial hearing.

The Office of the Solicitor General (OSG), the Commission on Audit (COA) and the Committees on Energy of both Houses of Congress were furnished with copies of the Order and the Notice of Public Hearing and were requested to have their respective duly authorized representatives present at the initial hearing.

Likewise, the Offices of the Governor of the Province of Zambales, Mayor of the Municipality of Subic, Zambales and the Office of the Administrator of Subic Bay Freeport Zone were furnished with copies of the Order and Notice of Public Hearing for the appropriate posting thereof on their respective bulletin boards.

On October 23, 2013, RPE filed its "Pre-Trial Brief".

On October 25, 2013, RPE filed its "Compliance".

On October 29, 2013, the National Grid Corporation of the Philippines (NGCP) filed its "Petition for Intervention" and "Pre-Trial Brief".

During the October 29, 2013 initial hearing, RPE and NGCP appeared.

At the said hearing, RPE presented proofs of its compliance with the Commission's posting and publication of notice requirements which were duly marked as Exhibits "A-Jurisdictional" to "I-Jurisdictional", inclusive. Thereafter, it conducted an expository presentation of its application.

At the end of the expository presentation, the Commission conducted a pre-trial conference where the parties presented their proposed stipulations or admissions of facts and the issues to be tried or resolved.

At the termination of the pre-trial conference, RPE presented Mr. Vicente C. Sioson, RPE's authorized representative in charge of transmission connection, who testified in support of the application. In the course thereof, additional documents were presented and duly marked as exhibits. The direct examination having been terminated, NGCP cross-examined said witness.

Thereafter, the Commission propounded clarificatory questions on the said witness and directed the submission of various documents.

The Commission directed RPE to submit its formal offer of evidence within ten (10) days from said date of hearing.

NGCP manifested that it will no longer submit its comment to RPE's formal offer of evidence.

On November 8, 2013, RPE filed its "Formal Offer of Evidence".

On October 16, 2014, RPE filed its "Motion to Present Additional Documentary Evidence".

On October 24, 2014, the Commission issued an Order taking note of the said motion and setting the hearing for the presentation of additional evidence of RPE on November 12, 2014.

During the November 12, 2014 hearing, only RPE appeared. NGCP failed to appear despite due notice.

At the said hearing, Mr. Vicente C. Sioson, RPE's authorized representative was re-called to testify on the Environmental

Compliance Certificate (ECC) confirming that the RPE Transmission Line Project will not cause a significant negative environment impact.

In the course of his direct examination, the Supplemental Judicial Affidavit of Mr. Sioson, his signature on page 4 thereof, and the ECC were presented as evidence and were marked as Exhibits "X", "X-1", and "W", respectively.

The direct examination having been terminated, the Commission propounded clarificatory questions on the said witness.

The counsel for RPE moved to declare NGCP to have waived its right to cross-examine the witness since it failed to appear in the said hearing. Said motion was granted by the Commission.

On November 13, 2014, the Commission issued an Order directing RPE to file, within fifteen (15) days from receipt of the said Order, its Supplemental Formal Offer of Evidence. NGCP was directed to file its comment on RPE's Supplemental Formal Offer of Evidence, within five (5) days from receipt thereof, if it so desires.

On December 2, 2014, RPE filed its "Supplemental Formal Offer of Evidence".

On December 3, 2014, NGCP filed its "Manifestation" that RPE's application is consistent with the System Impact Study conducted for the connection of RPE's 600 MW coal-fired thermal power plant in Subic, Zambales to the transmission system of NGCP.

On February 11, 2015, RPE filed its "Urgent Motion for Resolution".

On March 2, 2015, the Commission issued an Order admitting RPE's "Formal Offer of Evidence" and "Supplemental Formal Offer of Evidence" and declaring the case submitted for resolution.

On March 11, 2015, RPE filed its "Manifestation" that it submits a copy of the February 3, 2015 Decision<sup>17</sup> of the Supreme Court, in Hon. Ramon Jesus Paje vs. Hon. Teodoro Casino, et al.<sup>18</sup>, Redondo

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<sup>17</sup> Attached as Annex "A" thereof.

<sup>18</sup> G.R. No. 207257.

Peninsula Energy, Inc. vs. Hon. Teodoro Casino, et al.<sup>19</sup>, Hon. Teodoro Casino, et al. vs. Hon. Ramon Jesus Paje, et al.<sup>20</sup>, and Subic Bay Metropolitan Authority vs. Hon. Teodoro Casino, et al.<sup>21</sup> which (1) denied the Petition for Writ of Kalikasan against RPE's 600 MW power plant project in Brgy. Cawag, Subic Bay Freeport Zone, Zambales (the Project); (ii) upheld the validity of the Project's 22 December 2008 Environmental Clearance Certificate (as amended on July 8, 2010 and May 26, 2011); and (iii) upheld the validity of the June 8, 2010 Lease and Development Agreement between Subic Bay Metropolitan Authority and RPE.

**DISCUSSION**

**I. Project Description**

| Project Component                    | Description                                                             |
|--------------------------------------|-------------------------------------------------------------------------|
| Transmission Line (Connection Asset) |                                                                         |
| RPE – Castillejos                    | 230 kV, Steel Tower Double Circuit 2 x 795 MCM ACSR conductors, 24 kms. |

**II. Project Rationale**

As stated in the application and as manifested during the hearings, the connection facilities for the 2 X 300 MW Circulating Fluidized Bed Coal Fired Power Plant in Sitio Naglatore, Brgy. Cawag, Subic Bay Freeport Zone, Zambales, is expected to be on-line by year 2017. The Connection Assets are essential to the delivery of power from the Generation Facility to the Luzon Grid.

A double circuit interconnection scheme for the project is considered utilizing 795 MCM ACSR, the standard conductor for 230 kV transmission lines used by NGCP.

It should be noted that a previous approval in the Final Determination of NGCP's 3<sup>rd</sup> Regulatory Period with project entitled, *RP Energy Coal Associated Transmission Line Project*, the connection point of the RPE plant is at Hanjin 230 kV Substation through a 230 kV double circuit transmission line. This connection

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<sup>19</sup> G.R. No. 207276.  
<sup>20</sup> G.R. No. 207282.  
<sup>21</sup> G.R. No. 207366



scheme was considered under the previous 2x150 MW plant configuration for RPE which was upgraded to 2x300 MW. With the upgrading of the proposed power plant, the previously approved scheme is not anymore sufficient to accommodate said capacity, thus, the need for the subject new scheme.

### **III. Project Cost**

The capital investment for the proposed project amounted to One Billion One Hundred Sixty-Seven Million Ninety-Nine Thousand Eight Hundred Forty-Nine and 70/100 Pesos (PhP1,167,099,849.70).

The contract for the supply of materials for the proposed project will be assigned to qualified suppliers and contractors following a competitive bidding and selection process. The funding will be sourced through RPE's equity and loan.

The cost estimates were based on a per unit cost estimate of the transmission line pre-engineering contractor for the first 8 km of the transmission line.

It is worthy to note that the estimated project cost is just for the purpose of computing the permit fee.

### **IV. Result of the Grid Impact Study (GIS) conducted by NGCP**

The power plant is comprised of 2 x 300 MW generating units, with a maximum net output of 600 MW.

The project is primarily proposed to connect to the plant to the grid along the proposed Castillejos-Hermosa 500 kV Transmission Line, which will also be its connection point. Associated line from the plant site to the proposed 500 kV line will be via 230 kV double circuit 6-795 MCM ACSR conductors, about 24 km in distance.

Tapping into NGCP's proposed Castillejos-Hermosa 500 kV Line is the most viable and best option to connect RPE's 2 x 300 MW generating units to the Luzon Grid. Other options were considered to connect to the Luzon Grid, such as direct connection of the RPE plant to the Hermosa Substation through a 57 km, 230 kV, double circuit transmission line. Under this recommended scheme by NGCP, RPE found significant schedule risk associated with securing rights-of-way

for the entire 57 km route of the RPE-Hermosa line because of lack of eminent domain powers of RPE.

## **V. Technical Configuration**

The 6-795 MCM ACSR is capable of accommodating the generation of Circulating Fluidized Bed Coal Fired Power Plant of about 600 MW.

Further, the single line diagram submitted by RPE shows that the proposed project will be used solely by it in compliance with Rule 5, Section 5 a (i) of the Implementing Rules and Regulations of the Electric Power Industry Reform Act of 2001, which provides:

*"Such dedicated point-to-point limited transmission facilities are required only for the purpose of connecting to the Grid which will be used solely by the Generation Facility, and are not used to serve End-users or Suppliers directly;"*

## **VI. Technical and Financial Capability**

RPE did not submit definite justifications as to its technical capability to operate and maintain its proposed dedicated point-to-point limited transmission facilities. It only manifested during the hearing that it has the option of operating and maintaining the RPE-Castillejos Transmission Line either through a third party contractor or through organizing its own Transmission Operations and Maintenance group. Should it decide to contract a third party to do the operations and maintenance of the line, one possible contractor is MIESCOR, which has a long experience in maintaining and operating 230 kV transmission lines. It likewise, has the technical capability and resources to assemble its own operations and maintenance group through its principal shareholders MERALCO, Aboitiz Power (AP) and TCC. AP owns DLCP, CLPC and VECO. Whichever option it chooses, RPE claimed that it will ensure either the third party or its own operations and maintenance group will have the capability to fully operate and maintain the RPE-Castillejos Transmission Line. The chosen operations and maintenance strategy will also ensure that the RPE-Castillejos Transmission Line will be running in compliance with all Philippine Grid Code (PGC) and NGCP requirements, as well as, all other applicable standards.

In the absence of an assurance that the subject facilities will be operated without any adverse effect on the reliability of the grid, the Commission deems it appropriate that the operation and maintenance of said facilities should be undertaken by NGCP who has been granted the exclusive franchise to operate and maintain the transmission system. TRANSCO, now NGCP, is mandated in Section 9 of RA 9136 to:

*"c) Ensure and maintain the reliability, adequacy, security, stability and integrity of the nationwide electrical grid xxx"*

Section 8 of the said law also provides that *"no person, company or entity other than TransCo (now NGCP) shall own any transmission facilities."* The only exception is when it recognizes that a generation company may construct, own and operate a dedicated point-to-point limited transmission facilities. This exemption, however, is bound by numerous strict limitations. The Commission's position is consistent with its decision in the case of the dedicated point-to-point limited transmission facility of GNPowder Mariveles Coal Plant Ltd. Co (GMCP) wherein, GMCP will finance the project and NGCP will operate the subject asset.<sup>22</sup> This is also consistent with the OATS rules which provides:

*"Section B17.2 of the Open Access Transmission Service (OATS) Rules provides that "Financing by the Transmission Provider. In cases where the Transmission Provider provides financing, the End-user shall pay a Connection Charge to the Transmission Provider based on the capital and financing cost associated with the Connection Assets. In addition the operation and maintenance costs shall also be reflected in such Connection Charge. These shall be treated as Excluded Services under the TWRG and the details in F(AIV) shall be applied to compute the charges."*

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<sup>22</sup> ERC Case No. 2010-009 RC.

A perusal of the evidence presented herein showed that the approval of RPE's application for authority to develop, own and operate dedicated point-to-point limited facilities to connect to the transmission system of the National Grid Corporation of the Philippines (NGCP) is in accordance with the provisions of Section 9 paragraph 3 of Republic Act No. 9136 (R.A. 9136), or the Electric Power Industry Reform Act of 2001 (EPIRA), Article II, Section 2.9.2 of the DSOAR, as amended, the Philippine Distribution Code (PDC) and other issuances of the Commission and will redound to the benefit of the power consumers in terms of continuous, quality, reliable and efficient power supply.

**WHEREFORE**, the foregoing premises considered, the application filed by Redondo Peninsula Energy, Inc. (RPE) for authority to develop, own and operate dedicated point-to-point limited facilities to connect to the transmission system of the National Grid Corporation of the Philippines (NGCP), with prayer for provisional authority, is hereby **APPROVED** subject to the following conditions:

- a) The National Grid Corporation of the Philippines (NGCP) shall operate the subject dedicated point to point transmission facilities subject to applicable charges;
- b) The subject facilities shall be developed and constructed in accordance with the System Impact Study (SIS) requirements and Facility Study (FS) requirements so as not to result in the degradation of NGCP's transmission system;
- c) The subject facilities shall be used solely by the generating facility; and
- d) In the event that any portion thereof will be required for competitive purposes or to connect any other user, ownership of the subject asset shall be transferred to TransCo/NGCP.

Relative thereto, RPE is hereby directed to remit to the Commission, within fifteen (15) days from receipt hereof, a total permit fee in the amount of **Eight Million Seven Hundred Fifty-Three Thousand Two Hundred Forty-Eight Pesos (PhP8,753,248.00)**, computed as follows:

$$\frac{\text{PhP}1,167,099,849.70}{\text{PhP}100.00} \times \text{PhP}0.75 = \text{PhP}8,753,248.00$$

**SO ORDERED.**

Pasig City, March 9, 2015.

  
**ZENAIDA G. CRUZ-DUCUT**  
Chairperson

  
**ALFREDO J. NON**  
Commissioner

  
**GLORIA VICTORIA O. YAP-TARUC**  
Commissioner

  
**JOSEFINA PATRICIA A. MAGPALE-ASIRIT**  
Commissioner

**Copy Furnished:**

1. **PUNO AND PUNO**  
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Subic Freeport Zone 2222
3. **NATIONAL GRID CORPORATION OF THE PHILIPPINES (NGCP)**  
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Metro Manila
7. **House Committee on Energy**  
Batasan Hills, Quirino City, Metro Manila
8. **Office of the President-PCCI**  
Philippine Chamber of Commerce and Industry (PCCI)  
3<sup>RD</sup> Floor ECC Building  
Sen. Gil Puyat Avenue, Makati City
9. **Office of the Municipal Mayor**  
Subic, Zambales
10. **Office of the Provincial Governor**  
Province of Zambales
11. **Office of the Administrator**  
Subic Bay Freeport Zone, Zambales



Republic of the Philippines  
**DEPARTMENT OF ENERGY**

**ANNEX " BB "**

19 April 2016

**MR. ANGELITO U. LANTIN**

Authorized Representative

Redondo Peninsula Energy, Inc. (RPEI)

8/F, Rockwell Business Center Tower I

Ortigas Avenue, Pasig City

Dear Mr. Lantin:

We refer to your letter addressed to Secretary Zenaida Y. Monsada, which we received on 7 April 2016, requesting the Department of Energy's (DOE) Certificate of Endorsement for the 600 MW RPEI Coal-Fired Power Plant Project located in Subic Bay Freeport Zone.

Based on our records, the project is included as "Indicative Power Project" in the DOE's List of Private Sector Initiated Power Projects. DOE has already endorsed the said Redondo Peninsula Energy Inc.'s power project to the Board of Investment for availment of incentives.

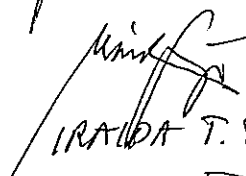
Accordingly, we hereby issue this Certification in connection with your filing application with the Energy Regulatory Commission for the approval of bilateral power supply contract for the said power project.

Thank you and best regards.

Very truly yours,

  
MYLENE C. CAPONGCOL  
OIC-Undersecretary

4/19/16

*Certified True Copy*  
  
IRATNA T. DUNSD  
DOCUMENT CONTROLLER  
RP ENERGY, INC.

|                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Name of Utility in Full                                                                        | MANILA ELECTRIC COMPANY, MERALCO                                                                                                                                                                                                                                                                                                                                                                                            |  |
| 2. ERC/NEA Authority/License No./R.A.#                                                            | Various Resolutions                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| 3. Brief Description of Franchise Area: (Provinces and Municipality/ies covered; Area in Sq. Km.) | Covers the whole of Metro Manila; the whole province of Bulacan, Cavite, and Rizal; and portions of the provinces of Laguna, Batangas, Quezon, and Pampanga.                                                                                                                                                                                                                                                                |  |
| Province/s and Municipality/ies Covered                                                           | Laguna: Alaminos, Bay, Biñan, Cabuyao, Calamba, Calauan, Liliw, Los Baños, Luisiana, Magdalena, Majayjay, Nagcarlan, Pila, Rizal, San Pablo City, San Pedro, Sta. Cruz, Sta. Rosa, Victoria<br>Batangas: Batangas City, San Pascual, Sto. Tomas<br>Quezon: Candelaria, Dolores, Lucban, Lucena City, Mauban, Pagbilao, Sampaloc, San Antonio, Sariaya, Tayabas, Tiaong<br>Pampanga: barangays of Apalit, Candaba, San Simon |  |
| Area in Sq. Km                                                                                    | 9,337.5 sq. km.                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| Franchise Population                                                                              | 27,339,156                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| 4. Grid                                                                                           | MERALCO Connection Points: Amadeo, Aranela, Balintawak, Batangas, Biñan, Bolocan, Calauan, Caliraya, CND, Dasmariñas, Dolores, Duhat, Makban, Malaya, Malolos, Paco, Pagbilao, San Jose, Sta. Rosa, Sucal, Tayabas, Zapote                                                                                                                                                                                                  |  |
| 5a. Brief description of methodology used in load forecasting and supply expansion plan:          | 1. Load Forecasting Model using Econometric method.<br>2. Supply Expansion Plan: Supply Capacity = Forecast Peak Load - DSM impact + 15% Capacity Margin                                                                                                                                                                                                                                                                    |  |
| 5b. Brief description and sources of assumptions:                                                 | Population: National Statistics Office<br>CPI, GDP growth: Economist Intelligence Unit (EIU)<br>Appendix I                                                                                                                                                                                                                                                                                                                  |  |



Forecast/Planning Results

|  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378 | 2379 | 2380 | 2381 | 2382 | 2383 | 2384 | 2385 | 2386 | 2387 | 2388 | 2389 | 2390 | 2391 | 2392 | 2393 | 2394 | 2395 | 2396 | 2397 | 2398 | 2399 | 2400 | 2401 | 2402 | 2403 | 2404 | 2405 | 2406 | 2407 | 2408 | 2409 | 2410 | 2411 | 2412 | 2413 | 2414 | 2415 | 2416 | 2417 | 2418 | 2419 | 2420 | 2421 | 2422 | 2423 | 2424 | 2425 | 2426 | 2427 | 2428 | 2429 | 2430 | 2431 | 2432 | 2433 | 2434 | 2435 | 2436 | 2437 | 2438 | 2439 | 2440 | 2441 | 2442 | 2443 | 2444 | 2445 | 2446 | 2447 | 2448 | 2449 | 2450 | 2451 | 2452 | 2453 | 2454 | 2455 | 2456 | 2457 | 2458 | 2459 | 2460 | 2461 | 2462 | 2463 | 2464 | 2465 | 2466 | 2467 | 2468 | 2469 | 2470 | 2471 | 2472 | 2473 | 2474 | 2475 | 2476 | 2477 | 2478 | 2479 | 2480 | 2481 | 2482 | 2483 | 2484 | 2485 | 2486 | 2487 | 2488 | 2489 | 2490 | 2491 | 2492 | 2493 | 2494 | 2495 | 2496 | 2497 | 2498 | 2499 | 2500 | 2501 | 2502 | 2503 | 2504 | 2505 | 2506 | 2507 | 2508 | 2509 | 2510 | 2511 | 2512 | 2513 | 2514 | 2515 | 2516 | 2517 | 2518 | 2519 | 2520 | 2521 | 2522 | 2523 | 2524 | 2525 | 2526 | 2527 | 2528 | 2529 | 2530 | 2531 | 2532 | 2533 | 2534 | 2535 | 2536 | 2537 | 2538 | 2539 | 2540 | 2541 | 2542 | 2543 | 2544 | 2545 | 2546 | 2547 | 2548 | 2549 | 2550 | 2551 | 2552 | 2553 | 2554 | 2555 | 2556 | 2557 | 2558 | 2559 | 2560 | 2561 | 2562 | 2563 | 2564 | 2565 | 2566 | 2567 | 2568 | 2569 | 2570 | 2571 | 2572 | 2573 | 2574 | 2575 | 2576 | 2577 | 2578 | 2579 | 2580 | 2581 | 2582 | 2583 | 2584 | 2585 | 2586 | 2587 | 2588 | 2589 | 2590 | 2591 | 2592 | 2593 | 2594 | 2595 | 2596 | 2597 | 2598 | 2599 | 2600 | 2601 | 2602 | 2603 | 2604 | 2605 | 2606 | 2607 | 2608 | 2609 | 2610 | 2611 | 2612 | 2613 | 2614 | 2615 | 2616 | 2617 | 2618 | 2619 | 2620 | 2621 | 2622 | 2623 | 2624 | 2625 | 2626 | 2627 | 2628 | 2629 | 2630 | 2631 | 2632 | 2633 | 2634 | 2635 | 2636 | 2637 | 2638 | 2639 | 2640 | 2641 | 2642 | 2643 | 2644 | 2645 | 2646 | 2647 | 2648 | 2649 | 2650 | 2651 | 2652 | 2653 | 2654 | 2655 | 2656 | 2657 | 2658 | 2659 | 2660 | 2661 | 2662 | 2663 | 2664 | 2665 | 2666 | 2667 | 2668 | 2669 | 2670 | 2671 | 2672 | 2673 | 2674 | 2675 | 2676 | 2677 | 2678 | 2679 | 2680 | 2681 | 2682 | 2683 | 2684 | 2685 | 2686 | 2687 | 2688 | 2689 | 2690 | 2691 | 2692 | 2693 | 2694 | 2695 | 2696 | 2697 | 2698 | 2699 | 2700 | 2701 | 2702 | 2703 | 2704 | 2705 | 2706 | 2707 | 2708 | 2709 | 2710 | 2711 | 2712 | 2713 | 2714 | 2715 | 2716 | 2717 | 2718 | 2719 | 2720 | 2721 | 2722 | 2723 | 2724 | 2725 | 2726 | 2727 | 2728 | 2729 | 2730 | 2731 | 2732 | 2733 | 2734 | 2735 | 2736 | 2737 | 2738 | 2739 | 2740 | 2741 | 2742 | 2743 | 2744 | 2745 | 2746 | 2747 | 2748 | 2749 | 2750 | 2751 | 2752 | 2753 | 2754 | 2755 | 2756 | 2757 | 2758 | 2759 | 2760 | 2761 | 2762 | 2763 | 2764 | 2765 | 2766 | 2767 | 2768 | 2769 | 2770 | 2771 | 2772 | 2773 | 2774 | 2775 | 2776 | 2777 | 2778 | 2779 | 2780 | 2781 | 2782 | 2783 | 2784 | 2785 | 2786 | 2787 | 2788 | 2789 | 2790 | 2791 | 2792 | 2793 | 2794 | 2795 | 2796 | 2797 | 2798 | 2799 | 2800 | 2801 | 2802 | 2803 | 2804 | 2805 | 2806 | 2807 | 2808 | 2809 | 2810 | 2811 | 2812 | 2813 | 2814 | 2815 | 2816 | 2817 | 2818 | 2819 | 2820 | 2821 | 2822 | 2823 | 2824 | 2825 | 2826 | 2827 | 2828 | 2829 | 2830 | 2831 | 2832 | 2833 | 2834 | 2835 | 2836 | 2837 | 2838 | 2839 | 2840 | 2841 | 2842 | 2843 | 2844 | 2845 | 2846 | 2847 | 2848 | 2849 | 2850 | 2851 | 2852 | 2853 | 2854 | 2855 | 2856 | 2857 | 2858 | 2859 | 2860 | 2861 | 2862 | 2863 | 2864 | 2865 | 2866 | 2867 | 2868 | 2869 | 2870 | 2871 | 2872 | 2873 | 2874 | 2875 | 2876 | 2877 | 2878 | 2879 | 2880 | 2881 | 2882 | 2883 | 2884 | 2885 | 2886 | 2887 | 2888 | 2889 | 2890 | 2891 | 2892 | 2893 | 2894 | 2895 | 2896 | 2897 | 2898 | 2899 | 2900 | 2901 | 2902 | 2903 | 2904 | 2905 | 2906 | 2907 | 2908 | 2909 | 2910 | 2911 | 2912 | 2913 | 2914 | 2915 | 2916 | 2917 | 2918 | 2919 | 2920 | 2921 | 2922 | 2923 | 2924 | 2925 | 2926 | 2927 | 2928 | 2929 | 2930 | 2931 | 2932 | 2933 | 2934 | 2935 | 2936 | 2937 | 2938 | 2939 | 2940 | 2941 | 2942 | 2943 | 2944 | 2945 | 2946 | 2947 | 2948 | 2949 | 2950 | 2951 | 2952 | 2953 | 2954 | 2955 | 2956 | 2957 | 2958 | 2959 | 2960 | 2961 | 2962 | 2963 | 2964 | 2965 | 2966 | 2967 | 2968 | 2969 | 2970 | 2971 | 2972 | 2973 | 2974 | 2975 | 2976 | 2977 | 2978 | 2979 | 2980 | 2981 | 2982 | 2983 | 2984 | 2985 | 2986 | 2987 | 2988 | 2989 | 2990 | 2991 | 2992 | 2993 | 2994 | 2995 | 2996 | 2997 | 2998 | 2999 | 3000 | 3001 | 3002 | 3003 | 3004 | 3005 | 3006 | 3007 | 3008 | 3009 | 3010 | 3011 | 3012 | 3013 | 3014 | 3015 | 3016 | 3017 | 3018 | 3019 | 3020 | 3021 | 3022 | 3023 | 3024 | 3025 | 3026 | 3027 | 3028 | 3029 | 3030 | 3031 | 3032 | 3033 | 3034 | 3035 | 3036 | 3037 | 3038 | 3039 | 3040 | 3041 | 3042 | 3043 | 3044 | 3045 | 3046 | 3047 | 3048 | 3049 | 3050 | 3051 | 3052 | 3053 | 3054 | 3055 | 3056 | 3057 | 3058 | 3059 | 3060 | 3061 | 3062 | 3063 | 3064 | 3065 | 3066 | 3067 | 3068 | 3069 | 3070 | 3071 | 3072 | 3073 | 3074 | 3075 | 3076 | 3077 | 3078 | 3079 | 3080 | 3081 | 3082 | 3083 | 3084 | 3085 | 3086 | 3087 | 3088 | 3089 | 3090 | 3091 | 3092 | 3093 | 3094 | 3095 | 3096 | 3097 | 3098 | 3099 | 3100 | 3101 | 3102 | 3103 | 3104 | 3105 | 3106 | 3107 | 3108 | 3109 | 3110 | 3111 | 3112 | 3113 | 3114 | 3115 | 3116 | 3117 | 3118 | 3119 | 3120 | 3121 | 3122 | 3123 | 3124 | 3125 | 3126 | 3127 | 3128 | 3129 | 3130 | 3131 | 3132 | 3133 | 3134 | 3135 | 3136 | 3137 | 3138 | 3139 | 3140 | 3141 | 3142 | 3143 | 3144 | 3145 | 3146 | 3147 | 3148 | 3149 | 3150 | 3151 | 3152 | 3153 | 3154 | 3155 | 3156 | 3157 | 3158 | 3159 | 3160 | 3161 | 3162 | 3163 | 3164 | 3165 | 3166 | 3167 | 3168 | 3169 | 3170 | 3171 | 3172 | 3173 | 3174 | 3175 | 3176 | 3177 | 3178 | 3179 | 3180 | 3181 | 3182 | 3183 | 3184 | 3185 | 3186 | 3187 | 3188 | 3189 | 3190 | 3191 | 3192 | 3193 | 3194 | 3195 | 3196 | 3197 | 3198 | 3199 | 3200 | 3201 | 3202 | 3203 | 3204 | 3205 | 3206 | 3207 | 3208 | 3209 | 3210 | 3211 | 3212 | 3213 | 3214 | 3215 | 3216 | 3217 | 3218 | 3219 | 3220 | 3221 | 3222 | 3223 | 3224 | 3225 | 3226 | 3227 | 3228 | 3229 | 3230 | 3231 | 3232 | 3233 | 3234 | 3235 | 3236 | 3237 | 3238 | 3239 | 3240 | 3241 | 3242 | 3243 | 3244 | 3245 | 3246 | 3247 | 3248 | 3249 | 3250 | 3251 | 3252 | 3253 | 3254 | 3255 | 3256 | 3257 | 3258 | 3259 | 3260 | 3261 | 3262 | 3263 | 3264 | 3265 | 3266 | 3267 | 3268 | 3269 | 3270 | 3271 | 3272 | 3273 | 3274 | 3275 | 3276 | 3277 | 3278 | 3279 | 3280 | 3281 | 3282 | 3283 | 3284 | 3285 | 3286 | 3287 | 3288 | 3289 | 3290 | 3291 | 3292 | 3293 | 3294 | 3295 | 3296 | 3297 | 3298 | 3299 | 3300 | 3301 | 3302 | 3303 | 3304 | 3305 | 3306 | 3307 | 3308 | 3309 | 3310 | 3311 | 3312 | 3313 | 3314 | 3315 | 3316 | 3317 | 3318 | 3319 | 3320 | 3321 | 3322 | 3323 | 3324 | 3325 | 3326 | 3327 | 3328 | 3329 | 3330 | 3331 | 3332 | 3333 | 3334 | 3335 | 3336 | 3337 | 3338 | 3339 | 3340 | 3341 | 3342 | 3343 | 3344 | 3345 | 3346 | 3347 | 3348 | 3349 | 3350 | 3351 | 3352 | 3353 | 3354 | 3355 | 3356 | 3357 | 3358 | 3359 | 3360 | 3361 | 3362 | 3363 | 3364 | 3365 | 3366 | 3367 | 3368 | 3369 | 3370 | 3371 | 3372 | 3373 | 3374 | 3375 | 3376 | 3377 | 3378 | 3379 | 3380 | 3381 | 3382 |
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|                                          |     | Forecast/Planning Results |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
|------------------------------------------|-----|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
|                                          |     | Historical                |            |            |            |            |            |            |            |            |            |            |            | Forecast   |            |            |  |
| Units                                    |     | 2010                      | 2011       | 2012       | 2013       | 2014       | 2015       | 2016       | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023       | 2024       |  |
| 10. ENERGY REQUIREMENT                   |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| 10a. Electricity Consumption (On-grid)   |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Direct Sales To Customers                |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Residential                              | MWh | 9,535,342                 | 9,340,088  | 9,774,589  | 10,231,421 | 10,360,482 | 10,637,717 | 10,896,053 | 11,172,197 | 11,440,582 | 11,714,937 | 12,043,013 | 12,360,319 | 12,687,928 | 13,026,167 | 13,375,400 |  |
| Commercial                               | MWh | 11,682,531                | 11,886,362 | 12,601,798 | 13,147,743 | 13,645,610 | 14,253,670 | 14,900,218 | 15,485,357 | 16,138,719 | 16,821,259 | 17,566,372 | 18,347,600 | 19,175,598 | 20,053,283 | 20,984,186 |  |
| Industrial                               | MWh | 8,616,118                 | 8,947,369  | 9,964,361  | 10,196,554 | 10,513,134 | 10,916,182 | 11,316,163 | 11,717,305 | 12,152,956 | 12,612,958 | 13,133,853 | 13,673,034 | 14,250,995 | 14,869,851 | 15,531,435 |  |
| Others                                   | MWh | 142,173                   | 140,111    | 130,363    | 128,312    | 130,211    | 131,228    | 132,759    | 134,249    | 135,948    | 137,848    | 140,097    | 142,492    | 145,094    | 147,908    | 150,943    |  |
| Public Bldgs                             | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Street Lights                            | MWh | 142,173                   | 140,111    | 130,363    | 128,312    | 130,211    | 131,228    | 132,759    | 134,249    | 135,948    | 137,848    | 140,097    | 142,492    | 145,094    | 147,908    | 150,943    |  |
| Company Use: Company/Office/ Housing     | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Company Use: Utility's Station use       | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Others (Direct sale or Large Load )      | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| On-Grid: Direct Sales to Customers       | MWh | 29,976,164                | 30,303,930 | 32,471,112 | 33,704,030 | 34,649,437 | 35,938,797 | 37,245,194 | 38,509,108 | 39,868,205 | 41,237,002 | 42,883,337 | 44,523,445 | 46,259,614 | 48,097,210 | 50,041,964 |  |
| 10b. Electricity Consumption (Off-Grid)  |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Direct Sales To Customers                |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Residential                              | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Commercial                               | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Industrial                               | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Others                                   | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Public Bldgs                             | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Street Lights                            | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Company Use: Company/Office/ Housing     | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Company Use: Utility's Station use       | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Others (Direct sale or Large Load )      | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Off-grid: Direct Sales to Customers      | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| 10c. Electricity Consumption (Franchise) |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Direct Sales To Customers                |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Residential                              | MWh | 9,535,342                 | 9,340,088  | 9,774,589  | 10,231,421 | 10,360,482 | 10,637,717 | 10,896,053 | 11,172,197 | 11,440,582 | 11,714,937 | 12,043,013 | 12,360,319 | 12,687,928 | 13,026,167 | 13,375,400 |  |
| Commercial                               | MWh | 11,682,531                | 11,886,362 | 12,601,798 | 13,147,743 | 13,645,610 | 14,253,670 | 14,900,218 | 15,485,357 | 16,138,719 | 16,821,259 | 17,566,372 | 18,347,600 | 19,175,598 | 20,053,283 | 20,984,186 |  |
| Industrial                               | MWh | 8,616,118                 | 8,947,369  | 9,964,361  | 10,196,554 | 10,513,134 | 10,916,182 | 11,316,163 | 11,717,305 | 12,152,956 | 12,612,958 | 13,133,853 | 13,673,034 | 14,250,995 | 14,869,851 | 15,531,435 |  |
| Others                                   | MWh | 142,173                   | 140,111    | 130,363    | 128,312    | 130,211    | 131,228    | 132,759    | 134,249    | 135,948    | 137,848    | 140,097    | 142,492    | 145,094    | 147,908    | 150,943    |  |
| Public Bldgs                             | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Street Lights                            | MWh | 142,173                   | 140,111    | 130,363    | 128,312    | 130,211    | 131,228    | 132,759    | 134,249    | 135,948    | 137,848    | 140,097    | 142,492    | 145,094    | 147,908    | 150,943    |  |
| Company Use: Company/Office/ Housing     | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Company Use: Utility's Station use       | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Others (Direct sale or Large Load )      | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Total: Direct Sales to Customers         | MWh | 29,976,164                | 30,303,930 | 32,471,112 | 33,704,030 | 34,649,437 | 35,938,797 | 37,245,194 | 38,509,108 | 39,868,205 | 41,237,002 | 42,883,337 | 44,523,445 | 46,259,614 | 48,097,210 | 50,041,964 |  |
| 10d. Utility's Energy Consumption        |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Company/Office/Housing                   |     |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| On-grid                                  | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Off-grid                                 | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Pumped Storage Requirement               | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| On-grid                                  | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Off-grid                                 | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Utility's Station use: Distribution      | MWh | 74,517                    | 66,078     | 57,532     | 57,661     | 56,696     | 62,258     | 64,322     | 66,711     | 69,066     | 71,523     | 74,289     | 77,130     | 80,138     | 83,321     | 86,690     |  |
| On-grid                                  | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Off-grid                                 | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Utility's System Losses                  | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| On-grid                                  | MWh | 2,575,955                 | 2,410,042  | 2,463,681  | 2,508,944  | 2,407,812  | 2,502,747  | 2,593,724  | 2,681,741  | 2,776,388  | 2,875,192  | 2,986,359  | 3,100,575  | 3,221,480  | 3,349,449  | 3,484,880  |  |
| Off-grid                                 | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |
| Subtotal: Utility's Energy Consumption   | MWh |                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |  |

| Forecast/Planning Results                                                         |       |           |           |           |           |           |           |           |           |           |           |
|-----------------------------------------------------------------------------------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                                                                   | Units | Year      |           |           |           |           |           |           |           |           |           |
|                                                                                   |       | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016      | 2017      | 2018      | 2019      |
| 10c. Total Electricity Purchased or Generated Supplied by Utility Owned Generator |       |           |           |           |           |           |           |           |           |           |           |
| On-grid                                                                           | MWh   |           |           |           |           |           |           |           |           |           |           |
| Off-grid                                                                          | MWh   |           |           |           |           |           |           |           |           |           |           |
| Electricity Purchased                                                             | MWh   | 32,626.63 | 32,990.03 | 34,992.32 | 36,270.63 | 37,113.94 | 38,503.80 | 39,903.43 | 41,257.56 | 42,713.63 | 44,233.71 |
| On-grid                                                                           | MWh   | 32,626.63 | 32,990.03 | 34,992.32 | 36,270.63 | 37,113.94 | 38,503.80 | 39,903.43 | 41,257.56 | 42,713.63 | 44,233.71 |
| Off-grid                                                                          | MWh   |           |           |           |           |           |           |           |           |           |           |
| Local Private Supply                                                              | MWh   |           |           |           |           |           |           |           |           |           |           |
| On-grid                                                                           | MWh   |           |           |           |           |           |           |           |           |           |           |
| Off-grid                                                                          | MWh   |           |           |           |           |           |           |           |           |           |           |
| TOTAL Electricity Purchased or Generated                                          | MWh   | 32,626.63 | 32,990.03 | 34,992.32 | 36,270.63 | 37,113.94 | 38,503.80 | 39,903.43 | 41,257.56 | 42,713.63 | 44,233.71 |
|                                                                                   |       | 0.00%     | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |
| Note: (1) plus (2) must equal to (3)                                              |       |           |           |           |           |           |           |           |           |           |           |
| Total                                                                             | MWh   |           |           |           |           |           |           |           |           |           |           |
| %                                                                                 | %     | 7.50%     | 7.35%     | 7.04%     | 6.97%     | 6.49%     | 6.50%     | 6.50%     | 6.50%     | 6.50%     | 6.50%     |
| 10f. Percent System Loss                                                          |       |           |           |           |           |           |           |           |           |           |           |

|                                      |    |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------|----|--|--|--|--|--|--|--|--|--|--|
| <b>11. PEAK DEMAND REQUIREMENT</b>   |    |  |  |  |  |  |  |  |  |  |  |
| <b>11a. Peak Demand (On-grid)</b>    |    |  |  |  |  |  |  |  |  |  |  |
| Customers Demand Requirement         | kW |  |  |  |  |  |  |  |  |  |  |
| Residential                          | kW |  |  |  |  |  |  |  |  |  |  |
| Commercial                           | kW |  |  |  |  |  |  |  |  |  |  |
| Industrial                           | kW |  |  |  |  |  |  |  |  |  |  |
| Others                               | kW |  |  |  |  |  |  |  |  |  |  |
| Public Bldgs                         | kW |  |  |  |  |  |  |  |  |  |  |
| Street Lights                        | kW |  |  |  |  |  |  |  |  |  |  |
| Company Use: Company/Office/ Housing | kW |  |  |  |  |  |  |  |  |  |  |
| Company Use: Utility's Station use   | kW |  |  |  |  |  |  |  |  |  |  |
| Others (Direct sale or Large Load)   | kW |  |  |  |  |  |  |  |  |  |  |
| On-Grid: Demand Requirement          | kW |  |  |  |  |  |  |  |  |  |  |

|                                      |    |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------|----|--|--|--|--|--|--|--|--|--|--|
| <b>11b. Peak Demand (Off-Grid)</b>   |    |  |  |  |  |  |  |  |  |  |  |
| Customers Demand Requirement         | kW |  |  |  |  |  |  |  |  |  |  |
| Residential                          | kW |  |  |  |  |  |  |  |  |  |  |
| Industrial                           | kW |  |  |  |  |  |  |  |  |  |  |
| Commercial                           | kW |  |  |  |  |  |  |  |  |  |  |
| Others                               | kW |  |  |  |  |  |  |  |  |  |  |
| Public Bldgs                         | kW |  |  |  |  |  |  |  |  |  |  |
| Street Lights                        | kW |  |  |  |  |  |  |  |  |  |  |
| Company Use: Company/Office/ Housing | kW |  |  |  |  |  |  |  |  |  |  |
| Company Use: Utility's Station use   | kW |  |  |  |  |  |  |  |  |  |  |
| Others (Direct sale or Large Load)   | kW |  |  |  |  |  |  |  |  |  |  |
| Off-grid: Demand Requirement         | kW |  |  |  |  |  |  |  |  |  |  |

|                                     |    |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------|----|--|--|--|--|--|--|--|--|--|--|
| <b>11c. Peak Demand (Franchise)</b> |    |  |  |  |  |  |  |  |  |  |  |
| Customers Demand Requirement        | kW |  |  |  |  |  |  |  |  |  |  |
| Residential                         | kW |  |  |  |  |  |  |  |  |  |  |
| Commercial                          | kW |  |  |  |  |  |  |  |  |  |  |
| Industrial                          | kW |  |  |  |  |  |  |  |  |  |  |

| Forecast/Planning Results                                                    |        |      |      |      |      |      |      |      |      |
|------------------------------------------------------------------------------|--------|------|------|------|------|------|------|------|------|
|                                                                              | Units  | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| Others                                                                       | kW     |      |      |      |      |      |      |      |      |
| Public Bldgs                                                                 | kW     |      |      |      |      |      |      |      |      |
| Street Lights                                                                | kW     |      |      |      |      |      |      |      |      |
| Company Use: Company/Office/Housing                                          | kW     |      |      |      |      |      |      |      |      |
| Company Use: Utility's Station use                                           | kW     |      |      |      |      |      |      |      |      |
| Others (Direct sale or Large Load)                                           | kW     |      |      |      |      |      |      |      |      |
| Total: Customers Demand Requirement                                          | kW     |      |      |      |      |      |      |      |      |
| 11d. Utility's Demand Requirement                                            |        |      |      |      |      |      |      |      |      |
| Company/Office/Housing                                                       | (2) kW |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Pumped Storage Requirement                                                   | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Utility's Station use: Distribution                                          | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Utility's System Losses                                                      | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Subtotal: Utility's Total Demand Requirement                                 | kW     |      |      |      |      |      |      |      |      |
| 11e. Total Peak Demand Requirement                                           |        |      |      |      |      |      |      |      |      |
| Supplied by Utility Owned Generator                                          | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Electricity Purchased                                                        | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| Local Private Supply                                                         | kW     |      |      |      |      |      |      |      |      |
| On-grid                                                                      | kW     |      |      |      |      |      |      |      |      |
| Off-grid                                                                     | kW     |      |      |      |      |      |      |      |      |
| TOTAL Peak Demand Requirement (Coincident)                                   | kW     |      |      |      |      |      |      |      |      |
| 11f. Time of Utility's Peak                                                  |        |      |      |      |      |      |      |      |      |
| 11g. Month of Utility's Peak                                                 |        | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|                                                                              |        | May  | May  | May  | May  | May  | May  | May  | May  |
| 11h. Demand Side Management Programs (Please attach details of DSM Programs) |        |      |      |      |      |      |      |      |      |
|                                                                              | kW     |      |      |      |      |      |      |      |      |
| 12. SYSTEM LOAD FACTOR                                                       |        |      |      |      |      |      |      |      |      |
|                                                                              | %      |      |      |      |      |      |      |      |      |

### 13. MONTHLY LOAD DATA

| 13a. Actual Monthly Load Data |  | Year: | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378 | 2379 | 2380 | 2381 | 2382 | 2383 | 2384 | 2385 | 2386 | 2387 | 2388 | 2389 | 2390 | 2391 | 2392 | 2393 | 2394 | 2395 | 2396 | 2397 | 2398 | 2399 | 2400 | 2401 | 2402 | 2403 | 2404 | 2405 | 2406 | 2407 | 2408 | 2409 | 2410 | 2411 | 2412 | 2413 | 2414 | 2415 | 2416 | 2417 | 2418 | 2419 | 2420 | 2421 | 2422 | 2423 | 2424 | 2425 | 2426 | 2427 | 2428 | 2429 | 2430 | 2431 | 2432 | 2433 | 2434 | 2435 | 2436 | 2437 | 2438 | 2439 | 2440 | 2441 | 2442 | 2443 | 2444 | 2445 | 2446 | 2447 | 2448 | 2449 | 2450 | 2451 | 2452 | 2453 | 2454 | 2455 | 2456 | 2457 | 2458 | 2459 | 2460 | 2461 | 2462 | 2463 | 2464 | 2465 | 2466 | 2467 | 2468 | 2469 | 2470 | 2471 | 2472 | 2473 | 2474 | 2475 | 2476 | 2477 | 2478 | 2479 | 2480 | 2481 | 2482 | 2483 | 2484 | 2485 | 2486 | 2487 | 2488 | 2489 | 2490 | 2491 | 2492 | 2493 | 2494 | 2495 | 2496 | 2497 | 2498 | 2499 | 2500 | 2501 | 2502 | 2503 | 2504 | 2505 | 2506 | 2507 | 2508 | 2509 | 2510 | 2511 | 2512 | 2513 | 2514 | 2515 | 2516 | 2517 | 2518 | 2519 | 2520 | 2521 | 2522 | 2523 | 2524 | 2525 | 2526 | 2527 | 2528 | 2529 | 2530 | 2531 | 2532 | 2533 | 2534 | 2535 | 2536 | 2537 | 2538 | 2539 | 2540 | 2541 | 2542 | 2543 | 2544 | 2545 | 2546 | 2547 | 2548 | 2549 | 2550 | 2551 | 2552 | 2553 | 2554 | 2555 | 2556 | 2557 | 2558 | 2559 | 2560 | 2561 | 2562 | 2563 | 2564 | 2565 | 2566 | 2567 | 2568 | 2569 | 2570 | 2571 | 2572 | 2573 | 2574 | 2575 | 2576 | 2577 | 2578 | 2579 | 2580 | 2581 | 2582 | 2583 | 2584 | 2585 | 2586 | 2587 | 2588 | 2589 | 2590 | 2591 | 2592 | 2593 | 2594 | 2595 | 2596 | 2597 | 2598 | 2599 | 2600 | 2601 | 2602 | 2603 | 2604 | 2605 | 2606 | 2607 | 2608 | 2609 | 2610 | 2611 | 2612 | 2613 | 2614 | 2615 | 2616 | 2617 | 2618 | 2619 | 2620 | 2621 | 2622 | 2623 | 2624 | 2625 | 2626 | 2627 | 2628 | 2629 | 2630 | 2631 | 2632 | 2633 | 2634 | 2635 | 2636 | 2637 | 2638 | 2639 | 2640 | 2641 | 2642 | 2643 | 2644 | 2645 | 2646 | 2647 | 2648 | 2649 | 2650 | 2651 | 2652 | 2653 | 2654 | 2655 | 2656 | 2657 | 2658 | 2659 | 2660 | 2661 | 2662 | 2663 | 2664 | 2665 | 2666 | 2667 | 2668 | 2669 | 2670 | 2671 | 2672 | 2673 | 2674 | 2675 | 2676 | 2677 | 2678 | 2679 | 2680 | 2681 | 2682 | 2683 | 2684 | 2685 | 2686 | 2687 | 2688 | 2689 | 2690 | 2691 | 2692 | 2693 | 2694 | 2695 | 2696 | 2697 | 2698 | 2699 | 2700 | 2701 | 2702 | 2703 | 2704 | 2705 | 2706 | 2707 | 2708 | 2709 | 2710 | 2711 | 2712 | 2713 | 2714 | 2715 | 2716 | 2717 | 2718 | 2719 | 2720 | 2721 | 2722 | 2723 | 2724 | 2725 | 2726 | 2727 | 2728 | 2729 | 2730 | 2731 | 2732 | 2733 | 2734 | 2735 | 2736 | 2737 | 2738 | 2739 | 2740 | 2741 | 2742 | 2743 | 2744 | 2745 | 2746 | 2747 | 2748 | 2749 | 2750 | 2751 | 2752 | 2753 | 2754 | 2755 | 2756 | 2757 | 2758 | 2759 | 2760 | 2761 | 2762 | 2763 | 2764 | 2765 | 2766 | 2767 | 2768 | 2769 | 2770 | 2771 | 2772 | 2773 | 2774 | 2775 | 2776 | 2777 | 2778 | 2779 | 2780 | 2781 | 2782 | 2783 | 2784 | 2785 | 2786 | 2787 | 2788 | 2789 | 2790 | 2791 | 2792 | 2793 | 2794 | 2795 | 2796 | 2797 | 2798 | 2799 | 2800 | 2801 | 2802 | 2803 | 2804 | 2805 | 2806 | 2807 | 2808 | 2809 | 2810 | 2811 | 2812 | 2813 | 2814 | 2815 | 2816 | 2817 | 2818 | 2819 | 2820 | 2821 | 2822 | 2823 | 2824 | 2825 | 2826 | 2827 | 2828 | 2829 | 2830 | 2831 | 2832 | 2833 | 2834 | 2835 | 2836 | 2837 | 2838 | 2839 | 2840 | 2841 | 2842 | 2843 | 2844 | 2845 | 2846 | 2847 | 2848 | 2849 | 2850 | 2851 | 2852 | 2853 | 2854 | 2855 | 2856 | 2857 | 2858 | 2859 | 2860 | 2861 | 2862 | 2863 | 2864 | 2865 | 2866 | 2867 | 2868 | 2869 | 2870 | 2871 | 2872 | 2873 | 2874 | 2875 | 2876 | 2877 | 2878 | 2879 | 2880 | 2881 | 2882 | 2883 | 2884 | 2885 | 2886 | 2887 | 2888 | 2889 | 2890 | 2891 | 2892 | 2893 | 2894 | 2895 | 2896 | 2897 | 2898 | 2899 | 2900 | 2901 | 2902 | 2903 | 2904 | 2905 | 2906 | 2907 | 2908 | 2909 | 2910 | 2911 | 2912 | 2913 | 2914 | 2915 | 2916 | 2917 | 2918 | 2919 | 2920 | 2921 | 2922 | 2923 | 2924 | 2925 | 2926 | 2927 | 2928 | 2929 | 2930 | 2931 | 2932 | 2933 | 2934 | 2935 | 2936 | 2937 | 2938 | 2939 | 2940 | 2941 | 2942 | 2943 | 2944 | 2945 | 2946 | 2947 | 2948 | 2949 | 2950 | 2951 | 2952 | 2953 | 2954 | 2955 | 2956 | 2957 | 2958 | 2959 | 2960 | 2961 | 2962 | 2963 | 2964 | 2965 | 2966 | 2967 | 2968 | 2969 | 2970 | 2971 | 2972 | 2973 | 2974 | 2975 | 2976 | 2977 | 2978 | 2979 | 2980 | 2981 | 2982 | 2983 | 2984 | 2985 | 2986 | 2987 | 2988 | 2989 | 2990 | 2991 | 2992 | 2993 | 2994 | 2995 | 2996 | 2997 | 2998 | 2999 | 3000 | 3001 | 3002 | 3003 | 3004 | 3005 | 3006 | 3007 | 3008 | 3009 | 3010 | 3011 | 3012 | 3013 | 3014 | 3015 | 3016 | 3017 | 3018 | 3019 | 3020 | 3021 | 3022 | 3023 | 3024 | 3025 | 3026 | 3027 | 3028 | 3029 | 3030 | 3031 | 3032 | 3033 | 3034 | 3035 | 3036 | 3037 | 3038 | 3039 | 3040 | 3041 | 3042 | 3043 | 3044 | 3045 | 3046 | 3047 | 3048 | 3049 | 3050 | 3051 | 3052 | 3053 | 3054 | 3055 | 3056 | 3057 | 3058 | 3059 | 3060 | 3061 | 3062 | 3063 | 3064 | 3065 | 3066 | 3067 | 3068 | 3069 | 3070 | 3071 | 3072 | 3073 | 3074 | 3075 | 3076 | 3077 | 3078 | 3079 | 3080 | 3081 | 3082 | 3083 | 3084 | 3085 | 3086 | 3087 | 3088 | 3089 | 3090 | 3091 | 3092 | 3093 | 3094 | 3095 | 3096 | 3097 | 3098 | 3099 | 3100 | 3101 | 3102 | 3103 | 3104 | 3105 | 3106 | 3107 | 3108 | 3109 | 3110 | 3111 | 3112 | 3113 | 3114 | 3115 | 3116 | 3117 | 3118 | 3119 | 3120 | 3121 | 3122 | 3123 | 3124 | 3125 | 3126 | 3127 | 3128 | 3129 | 3130 | 3131 | 3132 | 3133 | 3134 | 3135 | 3136 | 3137 | 3138 | 3139 | 3140 | 3141 | 3142 | 3143 | 3144 | 3145 | 3146 | 3147 | 3148 | 3149 | 3150 | 3151 | 3152 | 3153 | 3154 | 3155 | 3156 | 3157 | 3158 | 3159 | 3160 | 3161 | 3162 | 3163 | 3164 | 3165 | 3166 | 3167 | 3168 | 3169 | 3170 | 3171 | 3172 | 3173 | 3174 | 3175 | 3176 | 3177 | 3178 | 3179 | 3180 | 3181 | 3182 | 3183 | 3184 | 3185 | 3186 | 3187 | 3188 | 3189 | 3190 | 3191 | 3192 | 3193 | 3194 | 3195 | 3196 | 3197 | 3198 | 3199 | 3200 | 3201 | 3202 | 3203 | 3204 | 3205 | 3206 | 3207 | 3208 | 3209 | 3210 | 3211 | 3212 | 3213 | 3214 | 3215 | 3216 | 3217 | 3218 | 3219 | 3220 | 3221 | 3222 | 3223 | 3224 | 3225 | 3226 | 3227 | 3228 | 3229 | 3230 | 3231 | 3232 | 3233 | 3234 | 3235 | 3236 | 3237 | 3238 | 3239 | 3240 | 3241 | 3242 | 3243 | 3244 | 3245 | 3246 | 3247 | 3248 | 3249 | 3250 | 3251 | 3252 | 3253 | 3254 | 3255 | 3256 | 3257 | 3258 | 3259 | 3260 | 3261 | 3262 | 3263 | 3264 | 3265 | 3266 | 3267 | 3268 | 3269 | 3270 | 3271 | 3272 | 3273 | 3274 | 3275 | 3276 | 3277 | 3278 | 3279 | 3280 | 3281 | 3282 | 3283 | 3284 | 3285 | 3286 | 3287 | 3288 | 3289 | 3290 | 3291 | 3292 | 3293 | 3294 | 3295 | 3296 | 3297 | 3298 | 3299 | 3300 | 3301 | 3302 | 3303 | 3304 | 3305 | 3306 | 3307 | 3308 | 3309 | 3310 | 3311 | 3312 | 3313 | 3314 | 3315 | 3316 | 3317 | 3318 | 3319 | 3320 | 3321 | 3322 | 3323 | 3324 | 3325 | 3326 | 3327 | 3328 | 3329 | 3330 | 3331 | 3332 | 3333 | 3334 | 3335 | 3336 | 3337 | 3338 | 3339 | 3340 | 3341 | 3342 | 3343 | 3344 | 3345 | 3346 | 3347 | 3348 | 3349 | 3350 | 3351 | 3352 | 3353 | 3354 | 3355 | 3356 | 3357 | 3358 | 3359 | 3360 | 3361 | 3362 | 3363 | 3364 | 3365 | 3366 | 3367 | 3368 | 3369 | 3370 | 3371 | 3372 | 3373 | 3374 | 3375 | 3376 | 3377 | 3378 | 3379 | 3380 | 3381 | 3382 | 3383 | 3384 | 3385 | 3386 |
|-------------------------------|--|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|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|                                                                 | Jan       | Feb       | Mar       | Apr       | May       | Jun         | Jul       | Aug       | Sep       | Oct       | Nov       | Dec       |
|-----------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Utility's Actual Monthly Energy Consumption                     |           |           |           |           |           |             |           |           |           |           |           |           |
| Utility's Monthly Contracted Energy from Power Suppliers:       |           |           |           |           |           |             |           |           |           |           |           |           |
| Quezon Power Philippines Ltd.                                   | 2,707,693 | 2,898,287 | 2,761,773 | 3,180,837 | 2,703,078 | 2,762,802   | 3,007,888 | 3,200,783 | 3,205,510 | 2,488,636 | 3,206,092 | 2,993,928 |
| First Gas Power, Sta. Rita                                      | 2,154,988 | 2,278,820 | 2,176,367 | 2,560,039 | 2,911,671 | 2,808,263   | 2,486,677 | 2,528,838 | 2,519,054 | 2,488,636 | 2,515,553 | 2,340,700 |
| First Gas Power, San Lorenzo                                    | 194,059   | 139,074   | 273,203   | 297,624   | 503,136   | 339,290     | 445,618   | 606,510   | 562,485   | 570,671   | 565,479   | 569,311   |
| SEM-CALACA Power Corporation                                    | 533,336   | 533,888   | 417,430   | 450,480   | 315,304   | 324,092     | 272,010   | 291,546   | 304,901   | 305,782   | 230,724   | 264,994   |
| AES Corp. (Masinloc Power Partners Co., Ltd.)                   | 278,097   | 297,917   | 294,858   | 282,982   | 193,874   | 200,880     | 166,884   | 194,919   | 184,383   | 179,845   | 185,642   | 176,005   |
| Therma Luzon Inc.-Pagbilao Plant                                | 94,677    | 83,792    | 59,845    | 142,226   | 194,400   | 200,766     | 194,400   | 176,267   | 177,359   | 175,425   | 167,481   | 152,993   |
| Therma Luzon Inc.-Pagbilao Plant                                | 120,109   | 183,968   | 171,680   | 200,371   | 194,400   | 200,766     | 194,400   | 176,267   | 177,359   | 175,425   | 167,481   | 152,993   |
| San Miguel Energy Corp.-Sual Plant                              | 158,787   | 161,845   | 161,343   | 180,092   | 151,812   | 84,546,809  | 11,033    | 163,878   | 174,720   | 173,837   | 176,063   | 155,397   |
| South Premiere Power Corp.-Ilijan Plant                         | 194,966   | 190,812   | 210,668   | 223,214   | 214,836   | 188,877     | 211,748   | 176,767   | 203,548   | 7,522     | 184,023   | 168,994   |
| Therma Mobile Inc.                                              | 548,551   | 582,139   | 482,761   | 618,352   | 659,119   | 660,123,21  | 577,934   | 596,174   | 575,625   | 643,876   | 621,834   | 555,214   |
| Global Business Power Corp. - Panay Plant*                      | 3,943     | 1,921     | 25,897    | 57,610    | 51,732    | 56,401,861  | 70,465    | 14,147    | 21,191    | 15,868    | 7,387     | 3,349     |
| Global Business Power Corp. - Toledo Plant*                     |           |           |           | 3,159     | 7,695     | 6,966       | 5,751     | 0         | 0         | 0         | 0         | 0         |
| 1590 Energy Corp. - Bauang Plant*                               |           |           |           | 4,699     | 10,770    | 8,076       | 6,359     | 0         | 0         | 0         | 0         | 0         |
| Embedded Generation**                                           | 3,028     | 2,604     | 2,322     | 2,709     | 2,561     | 3,103,1994  | 34,110    | 2,623     | 8,445     | 9,208     | 1,400     | 0         |
| Wholesale Electricity Spot Market                               | 25,436    | 100,860   | 76,360    | 96,522    | 93,046    | 177,745,281 | 149,837   | 2,224     | 2,041     | 1,792     | 1,891     | 1,843     |
| Utility's Actual Monthly Energy Withdrawn from Power Suppliers: | 2,154,988 | 2,278,820 | 2,176,367 | 2,560,039 | 2,703,078 | 2,762,802   | 2,486,677 | 2,528,838 | 2,519,054 | 2,488,636 | 2,515,553 | 2,340,700 |
| Quezon Power Philippines Ltd.                                   | 194,059   | 139,074   | 273,203   | 297,624   | 503,136   | 339,290     | 445,618   | 606,510   | 562,485   | 570,671   | 565,479   | 569,311   |
| First Gas Power, Sta. Rita                                      | 533,336   | 533,888   | 417,430   | 450,480   | 315,304   | 324,092     | 272,010   | 291,546   | 304,901   | 305,782   | 230,724   | 264,994   |
| SEM-CALACA Power Corporation                                    | 278,097   | 297,917   | 294,858   | 282,982   | 193,874   | 200,880     | 166,884   | 194,919   | 184,383   | 179,845   | 185,642   | 176,005   |
| AES Corp. (Masinloc Power Partners Co., Ltd.)                   | 94,677    | 83,792    | 59,845    | 142,226   | 194,400   | 200,766     | 194,400   | 176,267   | 177,359   | 175,425   | 167,481   | 152,993   |
| Therma Luzon Inc.-Pagbilao Plant                                | 120,109   | 183,968   | 171,680   | 200,371   | 194,400   | 200,766     | 194,400   | 176,267   | 177,359   | 175,425   | 167,481   | 152,993   |
| Therma Luzon Inc.-Pagbilao Plant                                | 158,787   | 161,845   | 161,343   | 180,092   | 151,812   | 84,546,809  | 11,033    | 163,878   | 174,720   | 173,837   | 176,063   | 155,397   |
| San Miguel Energy Corp.-Sual Plant                              | 194,966   | 190,812   | 210,668   | 223,214   | 214,836   | 188,877     | 211,748   | 176,767   | 203,548   | 7,522     | 184,023   | 168,994   |
| South Premiere Power Corp.-Ilijan Plant                         | 548,551   | 582,139   | 482,761   | 618,352   | 659,119   | 660,123,21  | 577,934   | 596,174   | 575,625   | 643,876   | 621,834   | 555,214   |
| Therma Mobile Inc.                                              | 3,943     | 1,921     | 25,897    | 57,610    | 51,732    | 56,401,861  | 70,465    | 14,147    | 21,191    | 15,868    | 7,387     | 3,349     |
| Global Business Power Corp. - Panay Plant*                      |           |           |           | 3,159     | 7,695     | 6,966       | 5,751     | 0         | 0         | 0         | 0         | 0         |
| Global Business Power Corp. - Toledo Plant*                     |           |           |           | 4,699     | 10,770    | 8,076       | 6,359     | 0         | 0         | 0         | 0         | 0         |
| 1590 Energy Corp. - Bauang Plant*                               |           |           |           |           | 13,625    | 3,103,1994  | 34,110    | 2,623     | 8,445     | 9,208     | 1,400     | 0         |
| Embedded Generation**                                           | 3,028     | 2,604     | 2,322     | 2,709     | 2,561     | 3,103,1994  | 34,110    | 2,623     | 8,445     | 9,208     | 1,400     | 0         |
| Wholesale Electricity Spot Market                               | 25,436    | 100,860   | 76,360    | 96,522    | 93,046    | 177,745,281 | 149,837   | 2,224     | 2,041     | 1,792     | 1,891     | 1,843     |
| Variance (Excess/Deficit)                                       |           |           |           |           |           |             |           |           |           |           |           |           |
| Utility Load Factor                                             |           |           |           |           |           |             |           |           |           |           |           |           |
| %                                                               |           |           |           |           |           |             |           |           |           |           |           |           |



| 13b. Projected Monthly Load Data                        |           |           |           |           |           |           |           |           |           |           |           |           |
|---------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Year: 2015                                              |           |           |           |           |           |           |           |           |           |           |           |           |
| Utility's Projected Monthly Coincident Peak Demand      |           |           |           |           |           |           |           |           |           |           |           |           |
| Utility's Monthly Contract Demand                       |           |           |           |           |           |           |           |           |           |           |           |           |
| from Power Suppliers:                                   |           |           |           |           |           |           |           |           |           |           |           |           |
| Quezon Power Philippines Ltd.                           | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   | 460,000   |
| First Gas Power, Sta. Rita                              | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| First Gas Power, San Lorenzo                            | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   | 500,000   |
| SEM-CALACA Power Corporation                            | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   |
| AES Corp. (Masinloc Power Partners Co., Ltd.)           | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   | 230,000   |
| Therma Luzon Inc.-Pagbilao Plant                        | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   | 250,000   |
| San Miguel Energy Corp.-Sual Plant                      | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   | 330,000   |
| South Premiere Power Corp.-Ilijan Plant                 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 | 1,065,000 |
| Therma Mobile Inc.                                      | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   | 200,000   |
| 1590 Energy Corp.-Bauang Plant*                         | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   | 140,000   |
| Embedded Generation**                                   | 14,890    | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     | 6,562     |
| Utility's Projected Monthly Energy Consumption          | 2,715,852 | 3,001,937 | 2,849,564 | 3,271,986 | 3,391,732 | 3,432,832 | 3,328,043 | 3,364,399 | 3,339,536 | 3,284,927 | 3,202,651 | 3,053,407 |
| Utility's Monthly Contract Energy from Power Suppliers: | 2,105,198 | 2,267,854 | 2,170,343 | 2,537,992 | 2,665,985 | 2,686,901 | 2,566,517 | 2,577,654 | 2,536,128 | 2,495,144 | 2,375,232 | 2,245,434 |
| Quezon Power Philippines Ltd.                           | 161,632   | 0         | 231,231   | 264,307   | 266,635   | 289,059   | 262,32    | 264,654   | 263,551   | 259,989   | 270,352   | 229,409   |
| First Gas Power, Sta. Rita                              | 543,235   | 633,867   | 518,941   | 644,162   | 603,818   | 628,679   | 7531      | 561,270   | 588,159   | 617,280   | 577,418   | 558,577   |
| First Gas Power, San Lorenzo                            | 289,295   | 298,067   | 262,184   | 328,709   | 317,352   | 311,994   | 7953      | 293,327   | 319,896   | 267,240   | 316,983   | 289,978   |
| SEM-CALACA Power Corporation                            | 136,477   | 184,764   | 154,909   | 161,495   | 158,933   | 165,127   | 5         | 160,138   | 152,901   | 133,496   | 132,949   | 101,249   |
| AES Corp. (Masinloc Power Partners Co., Ltd.)           | 129,987   | 163,188   | 143,055   | 157,637   | 161,631   | 166,725   | 5564      | 160,231   | 160,849   | 164,751   | 160,842   | 145,847   |
| Therma Luzon Inc.-Pagbilao Plant                        | 147,472   | 144,645   | 152,582   | 169,186   | 170,478   | 231,388   | 8475      | 151,142   | 165,960   | 168,613   | 153,618   | 147,008   |
| San Miguel Energy Corp.-Sual Plant                      | 172,494   | 203,675   | 185,321   | 214,941   | 215,632   | 234,731   | 2942      | 213,735   | 210,297   | 118,036   | 89,616    | 179,552   |
| South Premiere Power Corp.-Ilijan Plant                 | 423,862   | 533,667   | 417,159   | 374,669   | 608,597   | 663,519   | 7363      | 609,144   | 608,831   | 611,016   | 618,198   | 595,056   |
| Therma Mobile Inc.                                      | 13,704    | 23,841    | 21,000    | 30,124    | 38,585    | 41,887    | 87676     | 13,528    | 25,068    | 29,198    | 29,520    | 512       |
| 1590 Energy Corp.-Bauang Plant*                         | 3,772     | 18,012    | 19,940    | 35,613    | 28,704    | 35,226    | 31627     | 28,014    | 75,309    | 151,428   | 59,449    | 52,322    |
| Embedded Generation**                                   | 1,971     | 59,128    | 64,023    | 157,149   | 95,619    | 106,548   | 8439      | 92,936    | 103,691   | 151,428   | 59,449    | 52,322    |
| Wholesale Electricity Spot Market                       | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    | 81,298    |
| Utility Load Factor                                     | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    | 69.55%    |

\* Interim Power Supply Agreement

\*\* Embedded Generation consists of supply from Montalban Methane, Bacavalley, Pangea and Philipdeco. (Montalban Methane terminated on Jan 26, 2015)

Note: NSI used for System Loss computation includes energy purchased by customers directly from suppliers.

| Supply Expansion Plan                                       |        |                                       |                    |                         |                |           |           |           |           |           |           |
|-------------------------------------------------------------|--------|---------------------------------------|--------------------|-------------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 14a. Utility Owned Power generating Facilities              |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name                                                        | Status | Fuel Requirement (liters, tons, etc.) | Installed Capacity | Net Dependable Capacity | Net Production |           |           |           |           |           |           |
|                                                             |        |                                       | KW                 | KW                      | MWh            |           |           |           |           |           |           |
| Sub Total (Utility-Owned RE-based Generating Facility only) |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Installed Capacity                                          |        |                                       | KW                 |                         |                |           |           |           |           |           |           |
| Net Dependable Capacity                                     |        |                                       | KW                 |                         |                |           |           |           |           |           |           |
| Net Production                                              |        |                                       | MWh                |                         |                |           |           |           |           |           |           |
| Total (Utility Owned Power Generating Facilities)           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Installed Capacity                                          |        |                                       | KW                 |                         |                |           |           |           |           |           |           |
| Net Dependable Capacity                                     |        |                                       | KW                 |                         |                |           |           |           |           |           |           |
| Net Production                                              |        |                                       | MWh                |                         |                |           |           |           |           |           |           |
| 14b. Supply from NPC:                                       |        |                                       |                    |                         |                |           |           |           |           |           |           |
| NPC-CCP                                                     |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name of Plant                                               |        |                                       | KW                 | 299,893                 | 282,000        | 404,391   |           |           |           |           |           |
| Contracted Demand                                           |        |                                       | %                  | 75%                     | 83%            | 61%       |           |           |           |           |           |
| Load Factor                                                 |        |                                       | MWh                | 1,963,038               | 2,040,000      | 2,172,771 |           |           |           |           |           |
| Contracted Energy                                           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| NPC-Ecozone                                                 |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name of Plant                                               |        |                                       | KW                 | 391,919                 | 555,000        | 648,471   |           |           |           |           |           |
| Contracted Demand                                           |        |                                       | %                  | 72%                     | 71%            | 65%       |           |           |           |           |           |
| Load Factor                                                 |        |                                       | MWh                | 2,455,320               | 3,461,987      | 3,719,530 |           |           |           |           |           |
| Contracted Energy                                           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| NPC-Sunpower                                                |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name of Plant                                               |        |                                       | KW                 | 31,427                  | 33,621         | 34,009    | 26,932    | 34,000    | 34,000    | 34,000    | 34,000    |
| Contracted Demand                                           |        |                                       | %                  | 77%                     | 93%            | 77%       | 87%       | 91%       | 100%      | 100%      | 100%      |
| Load Factor                                                 |        |                                       | MWh                | 213,121                 | 274,128        | 230,233   | 204,955   | 225,507   | 297,840   | 297,840   | 297,840   |
| Contracted Energy                                           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| NPC-CCP (RE-based)                                          |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name of Plant                                               |        |                                       | KW                 | 11,107                  |                |           |           |           |           |           |           |
| Contracted Demand                                           |        |                                       | %                  | 75%                     |                |           |           |           |           |           |           |
| Load Factor                                                 |        |                                       | MWh                | 72,705                  |                |           |           |           |           |           |           |
| Contracted Energy                                           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| NPC-Ecozone (RE-based)                                      |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Name of Plant                                               |        |                                       | KW                 | 25,081                  |                |           |           |           |           |           |           |
| Contracted Demand                                           |        |                                       | %                  | 72%                     |                |           |           |           |           |           |           |
| Load Factor                                                 |        |                                       | MWh                | 157,131                 |                |           |           |           |           |           |           |
| Contracted Energy                                           |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Total (NPC):                                                |        |                                       |                    |                         |                |           |           |           |           |           |           |
| Contracted Demand                                           |        |                                       | KW                 | 47,295,028              | 4,706,212      | 5,104,671 | 3,726,932 | 4,700,000 | 4,700,000 | 4,700,000 | 4,700,000 |
| Load Factor                                                 |        |                                       | %                  | 86.27430%               | 84.82331%      | 83.86167% | 85.51709% | 85.81010% | 85.81010% | 85.81010% | 85.81010% |
| Contracted Energy                                           |        |                                       | MWh                | 32,186,811              | 3,257,766      | 3,617,766 | 2,920,495 | 3,223,507 | 3,223,507 | 3,223,507 | 3,223,507 |



| Supply Expansion Plan                             |     |           |              |              |           |              |           |           |           |
|---------------------------------------------------|-----|-----------|--------------|--------------|-----------|--------------|-----------|-----------|-----------|
| I.e. Supply from NPC's Transition Supply Contract |     |           |              |              |           |              |           |           |           |
| NPC - TSC                                         |     |           |              |              |           |              |           |           |           |
| Name of Plant                                     | KW  | 2012      | 2013         | 2014         | 2015      | 2016         | 2017      | 2018      | 2019      |
| Contracted Capacity                               |     | 357,400   |              |              |           |              |           |           |           |
| Load Factor                                       | %   | 63%       |              |              |           |              |           |           |           |
| Contracted Energy                                 | MWH | 8,159,753 | 10,304,664   | 8,810,639    |           |              |           |           |           |
| NPC - TSC (RE-based)                              |     |           |              |              |           |              |           |           |           |
| Name of Plant                                     | KW  | 2012      | 2013         | 2014         | 2015      | 2016         | 2017      | 2018      | 2019      |
| Contracted Capacity                               |     | 13,931    |              |              |           |              |           |           |           |
| Load Factor                                       | %   | 41%       |              |              |           |              |           |           |           |
| Contracted Energy                                 | MWH | 573,710   | 897,749      | 773,731      |           |              |           |           |           |
| Total (NPC + TSC)                                 |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 521,310   | 1,252,208    | 1,851,065    | 357,400   |              |           |           |           |
| Load Factor                                       | %   | 63%       |              |              |           |              |           |           |           |
| Contracted Energy                                 | MWH | 8,733,503 | 21,309,413   | 19,621,278   | 8,810,639 |              |           |           |           |
| Quezon Power Philippines Ltd                      |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 460,000   | 460,000      | 460,000      | 460,000   | 460,000      | 460,000   | 460,000   | 460,000   |
| Contracted Demand                                 | KW  | 460,000   | 460,000      | 460,000      | 460,000   | 460,000      | 460,000   | 460,000   | 460,000   |
| Contracted Energy                                 | MWH | 3,188,022 | 3,265,006    | 2,951,117    | 2,821,472 | 3,051,721.60 | 2,752,896 | 3,079,695 | 3,146,821 |
| First Gas Power Corp. (Sta Rita)                  |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 1,000,000 | 1,000,000    | 1,000,000    | 1,000,000 | 1,000,000    | 1,000,000 | 1,000,000 | 1,000,000 |
| Contracted Demand                                 | KW  | 1,000,000 | 1,000,000    | 1,000,000    | 1,000,000 | 1,000,000    | 1,000,000 | 1,000,000 | 1,000,000 |
| Contracted Energy                                 | MWH | 7,535,528 | 8,116,528    | 7,215,528    | 7,532,287 | 6,297,614.00 | 7,074,656 | 6,683,264 | 6,792,568 |
| EGP Corp. (San Lorenzo)                           |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 500,000   | 500,000      | 500,000      | 500,000   | 500,000      | 500,000   | 500,000   | 500,000   |
| Contracted Demand                                 | KW  | 500,000   | 500,000      | 500,000      | 500,000   | 500,000      | 500,000   | 500,000   | 500,000   |
| Contracted Energy                                 | MWH | 3,824,362 | 4,117,962    | 3,821,180    | 2,746,209 | 3,483,207.00 | 3,606,742 | 3,161,634 | 3,244,275 |
| SEM Calaca Power Corp                             |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 210,000   | 210,000      | 210,000      | 210,000   | 210,000      | 210,000   | 210,000   | 210,000   |
| Contracted Demand                                 | KW  | 210,000   | 210,000      | 210,000      | 210,000   | 210,000      | 210,000   | 210,000   | 210,000   |
| Contracted Energy                                 | MWH | 1,586,081 | 2,321,718    | 1,862,972.01 | 1,724,911 | 2,174,302    | 2,137,468 | 1,310,216 |           |
| Mainloc Power Partners Co. Ltd                    |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 630,000   | 630,000      | 630,000      | 630,000   | 630,000      | 630,000   | 630,000   | 630,000   |
| Contracted Demand                                 | KW  | 630,000   | 630,000      | 630,000      | 630,000   | 630,000      | 630,000   | 630,000   | 630,000   |
| Contracted Energy                                 | MWH | 2,606,084 | 2,115,219.00 | 1,865,609    | 2,017,479 | 2,064,203    | 1,197,639 | 1,037,547 |           |
| Thermal Luzon Inc.                                |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 735,000   | 735,000      | 735,000      | 735,000   | 735,000      | 735,000   | 735,000   | 735,000   |
| Contracted Demand                                 | KW  | 735,000   | 735,000      | 735,000      | 735,000   | 735,000      | 735,000   | 735,000   | 735,000   |
| Contracted Energy                                 | MWH | 2,097,529 | 1,753,354.23 | 1,764,648    | 1,874,210 | 1,919,688    | 1,526,071 | 1,398,375 |           |
| San Miguel Energy Corp                            |     |           |              |              |           |              |           |           |           |
| Contracted Capacity                               | KW  | 1,218,000 | 1,218,000    | 1,218,000    | 1,218,000 | 1,218,000    | 1,218,000 | 1,218,000 | 1,218,000 |
| Contracted Demand                                 | KW  | 1,218,000 | 1,218,000    | 1,218,000    | 1,218,000 | 1,218,000    | 1,218,000 | 1,218,000 | 1,218,000 |
| Contracted Energy                                 | MWH | 2,751,634 | 2,175,975.19 | 2,243,421    | 2,316,580 | 2,371,818    | 1,833,441 | 1,543,431 |           |

| Supply Expansion Plan                                                                                          |     |           |              |              |              |              |              |              |              |              |              |
|----------------------------------------------------------------------------------------------------------------|-----|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Name of Supplier                                                                                               |     | 2014      | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         |
| South Premier Power Corp.                                                                                      |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 1,278,000 | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    | 1,278,000    |
| Contracted Demand                                                                                              | KW  | 1,180,000 | 1,080,000    | 1,065,000    | 1,065,000    | 1,065,000    | 970,000      | 930,000      |              |              |              |
| Contracted Energy                                                                                              | MWH | 6,889,749 | 7,121,701.58 | 6,604,700    | 5,763,932    | 6,038,576    | 4,199,249    | 3,602,604    |              |              |              |
| Therma Mobile Inc.                                                                                             |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 214,000   | 242,000.00   | 242,000      | 242,000      | 242,000      |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  | 100,000   | 200,000.00   | 200,000      | 200,000      | 200,000      |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH | 54,351    | 329,911.03   | 292,137      | 245,076      | 176,296      |              |              |              |              |              |
| Global Business Power Corp. (Panay)                                                                            |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           | 72,000.00    |              |              |              |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  |           | 27,000.00    |              |              |              |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH |           | 23,371.00    |              |              |              |              |              |              |              |              |
| Global Business Power Corp. (Toledo)                                                                           |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           | 40,000.00    |              |              |              |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  |           | 37,000.00    |              |              |              |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH |           | 29,904.00    |              |              |              |              |              |              |              |              |
| 1590 Energy Corp.                                                                                              |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           | 235,200.00   | 235,200      |              |              |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  |           | 140,000.00   | 140,000      |              |              |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH |           | 100,442.49   | 169,281      |              |              |              |              |              |              |              |
| San Buenaventura Power Ltd.                                                                                    |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           |              |              |              |              |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  |           |              |              |              |              |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH |           |              |              |              |              |              |              |              |              |              |
| Total (RE-based generating facility)                                                                           |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           |              |              |              |              |              |              |              |              |              |
| Contracted Demand                                                                                              | KW  |           |              |              |              |              |              |              |              |              |              |
| Contracted Energy                                                                                              | MWH |           |              |              |              |              |              |              |              |              |              |
| Total (Utility Firm Contract Supply)                                                                           |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 1,196,000 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 | 1,252,560.00 |
| Contracted Demand                                                                                              | KW  | 1,196,000 | 1,080,000    | 1,065,000    | 1,065,000    | 1,065,000    | 970,000      | 930,000      |              |              |              |
| Contracted Energy                                                                                              | MWH | 6,889,749 | 7,121,701.58 | 6,604,700    | 5,763,932    | 6,038,576    | 4,199,249    | 3,602,604    |              |              |              |
| * PSA Capacity starting June 26, 2013 (start of Initial OARC) net of assigned capacity to Miraflores Local RES |     |           |              |              |              |              |              |              |              |              |              |
| Miraflores Local Private Supply (Embedded Generation)                                                          |     |           |              |              |              |              |              |              |              |              |              |
| Philippines                                                                                                    |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 1,150     | 1,150        | 1,150        | 1,150        | 1,150        | 1,150        | 1,150        | 1,150        | 1,150        | 1,150        |
| Firm Contracted Capacity                                                                                       | KW  |           |              |              |              |              |              |              |              |              |              |
| Energy Supply                                                                                                  | MWH | 3,159     | 3,651        | 3,087        | 2,567.00     | 1,903        | 1,903        | 1,903        | 1,903        | 1,903        | 1,903        |
| Montalban Methane                                                                                              |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 8,190     | 8,325        | 8,325        | 8,325        | 8,325        | 8,325        | 8,325        | 8,325        | 8,325        | 8,325        |
| Firm Contracted Capacity                                                                                       | KW  |           |              |              |              |              |              |              |              |              |              |
| Energy Supply                                                                                                  | MWH | 13,119    | 31,844       | 20,561       | 14,642       | 19,344.06    |              |              |              |              |              |
| Bretville                                                                                                      |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  | 4,212     | 4,212        | 4,212        | 4,212        | 4,212        | 4,212        | 4,212        | 4,212        | 4,212        | 4,212        |
| Firm Contracted Capacity                                                                                       | KW  |           |              |              |              |              |              |              |              |              |              |
| Energy Supply                                                                                                  | MWH | 8,354     | 6,284        | 4,359        | 2,082.20     | 6,988        |              |              |              |              |              |
| Prague                                                                                                         |     |           |              |              |              |              |              |              |              |              |              |
| Installed Capacity                                                                                             | KW  |           |              |              |              |              |              |              |              |              |              |
| Firm Contracted Capacity                                                                                       | KW  |           |              |              |              |              |              |              |              |              |              |
| Energy Supply                                                                                                  | MWH |           |              |              |              |              |              |              |              |              |              |

| Contracted Supply                                     |     |        |        |        |        |        |        |        |        |        |        |
|-------------------------------------------------------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Supply Expansion Plan:                                |     |        |        |        |        |        |        |        |        |        |        |
| Sub Total (Embedded RE-based generating facility)     |     |        |        |        |        |        |        |        |        |        |        |
| Installed Capacity                                    | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Firm Contracted Capacity                              | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Energy Supply                                         | MWH | 30,503 | 33,439 | 36,386 | 39,333 | 42,280 | 45,227 | 48,174 | 51,121 | 54,068 | 57,015 |
| Total (All Embedded)                                  |     |        |        |        |        |        |        |        |        |        |        |
| Installed Capacity                                    | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Firm Contracted Capacity                              | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Energy Supply                                         | MWH | 30,503 | 33,439 | 36,386 | 39,333 | 42,280 | 45,227 | 48,174 | 51,121 | 54,068 | 57,015 |
| 14. TOTAL SUPPLY                                      |     |        |        |        |        |        |        |        |        |        |        |
| Total Supply from RE-Based Generation Facilities only |     |        |        |        |        |        |        |        |        |        |        |
| Capacity                                              | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Energy                                                | MWH | 30,503 | 33,439 | 36,386 | 39,333 | 42,280 | 45,227 | 48,174 | 51,121 | 54,068 | 57,015 |
| Total Supply from All Generation Facilities           |     |        |        |        |        |        |        |        |        |        |        |
| Capacity                                              | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Energy                                                | MWH | 30,503 | 33,439 | 36,386 | 39,333 | 42,280 | 45,227 | 48,174 | 51,121 | 54,068 | 57,015 |
| 14a. Supply-Demand Surplus/(Deficit)                  |     |        |        |        |        |        |        |        |        |        |        |
| Capacity                                              | KW  | 13,687 | 14,897 | 15,652 | 16,563 | 17,500 | 18,463 | 19,450 | 20,469 | 21,519 | 22,600 |
| Capacity Margin                                       | %   | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    | 100    |
| Energy                                                | MWH | 30,503 | 33,439 | 36,386 | 39,333 | 42,280 | 45,227 | 48,174 | 51,121 | 54,068 | 57,015 |

| 14b. Owned Production Facilities (See Item 14a.) |          |             |                   |             |                      |                     |
|--------------------------------------------------|----------|-------------|-------------------|-------------|----------------------|---------------------|
| Plant Name                                       | Operator | Plant Type  | Year Installed    | Fuel Type   | Contract Effectivity | Contract Expiration |
| 1. Quizon Power Philippines Ltd.                 | Operator | Coal        | May 2000          | Coal        | May 2000             | May 2023            |
| 2. First Gas Power, Sta. Rita                    | Operator | Natural Gas | October 2002      | Natural Gas | October 2002         | October 2023        |
| 3. First Gas Power, San Lorenzo                  | Operator | Natural Gas | August 2000       | Natural Gas | December 2011        | August 2027         |
| 4. SEM-CALACA Power Corporation                  | Operator | Coal        | December 2012     | Coal        | December 2012        | December 2019       |
| 5. AES Corp. (Masinloc Power Partners Co., Ltd.) | Operator | Coal        | December 2012     | Coal        | December 2012        | December 2019       |
| 6. Thermo Luzon Inc.-Pagulipan Plant             | Operator | Coal        | December 2012     | Coal        | December 2012        | December 2019       |
| 7. San Miguel Energy Corp.-Sual Plant            | Operator | Natural Gas | December 2012     | Natural Gas | December 2012        | December 2019       |
| 8. South Premiere Power Corp.-Ilijan Plant       | Operator | Diesel      | November 2013     | Diesel      | November 2013        | June 23, 2017       |
| 9. Thermo Mobile Inc.                            | Operator | Bunker Oil  | November 14, 2014 | Bunker Oil  | November 14, 2014    | July 23, 2015       |
| 10. Global Business Power Corp. - Pampanga Plant | Operator | Bunker Oil  | November 14, 2014 | Bunker Oil  | November 14, 2014    | July 23, 2015       |
| 11. Global Business Power Corp. - Toledo Plant   | Operator | Diesel      | May 12, 2014      | Diesel      | May 12, 2014         | July 23, 2015       |
| 12. 1590 Energy Corp. -Bauang Plant              | Operator | Hydro       | May 16, 2014      | Hydro       | May 16, 2014         | May 16, 2019        |
| 13. Philipdeco                                   | Operator | Biomass     | June 2009         | Biomass     | June 2009            | September 2016*     |
| 14. Montalban Methane*                           | Operator | Biomass     | March 16, 2013    | Biomass     | March 16, 2013       | March 16, 2016      |
| 15. Bacayalloy                                   | Operator | Biomass     | March 15, 2013    | Biomass     | March 15, 2013       | February 29, 2016   |
| 16. Panga                                        | Operator | Biomass     |                   | Biomass     |                      |                     |

14c. Do you wheel power for other users/producers? (YES/NO)

14d. If yes in Item (above question), please answer the following, else go to Item (next):

|                              |     |
|------------------------------|-----|
| Name of Customer             |     |
| Complete Address of Customer |     |
| Capacity to be wheeled       | KW  |
| Energy to be wheeled         | MWH |
| Contract Term in Years       |     |

\*Note: Contract terminated on January 26, 2015



2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

13a. Utility Owned Power generating Facilities

Name: KW  
Status: KW  
Fuel Requirement (liters, tons, etc.) MWH  
Installed Capacity  
Net Dependable Capacity  
Net Production

|                                                             |  |  |  |  |  |  |  |  |     |
|-------------------------------------------------------------|--|--|--|--|--|--|--|--|-----|
| Sub Total (Utility-Owned RE-based Generating Facility only) |  |  |  |  |  |  |  |  |     |
| Installed Capacity                                          |  |  |  |  |  |  |  |  | KW  |
| Net Dependable Capacity                                     |  |  |  |  |  |  |  |  | KW  |
| Net Production                                              |  |  |  |  |  |  |  |  | MWH |
| Total (Utility Owned Power Generating Facilities)           |  |  |  |  |  |  |  |  |     |
| Installed Capacity                                          |  |  |  |  |  |  |  |  | KW  |
| Net Dependable Capacity                                     |  |  |  |  |  |  |  |  | KW  |
| Net Production                                              |  |  |  |  |  |  |  |  | MWH |

13b. Supply from NPC:

Name of Plant KW  
Contracted Demand  
Load Factor %  
Contracted Energy MWH

|                   |  |  |  |  |  |  |  |  |     |
|-------------------|--|--|--|--|--|--|--|--|-----|
| Total (NPC):      |  |  |  |  |  |  |  |  |     |
| Contracted Demand |  |  |  |  |  |  |  |  | KW  |
| Load Factor       |  |  |  |  |  |  |  |  | %   |
| Contracted Energy |  |  |  |  |  |  |  |  | MWH |

13c. Supply from NPC's Transition Supply Contract

Name of Plant KW  
Contracted Demand  
Load Factor %  
Contracted Energy MWH

|                    |  |  |  |  |  |  |  |  |     |
|--------------------|--|--|--|--|--|--|--|--|-----|
| Total (NPC's TSC): |  |  |  |  |  |  |  |  |     |
| Contracted Demand  |  |  |  |  |  |  |  |  | KW  |
| Load Factor        |  |  |  |  |  |  |  |  | %   |
| Contracted Energy  |  |  |  |  |  |  |  |  | MWH |

| Supply Expansion Plan                                                                                 |     | Supply Forecast |         |         |           |           |            |            |            |            |            |
|-------------------------------------------------------------------------------------------------------|-----|-----------------|---------|---------|-----------|-----------|------------|------------|------------|------------|------------|
|                                                                                                       |     | 2015            | 2016    | 2017    | 2018      | 2019      | 2020       | 2021       | 2022       | 2023       | 2024       |
| 13d. Utility Firm Contract Supply from others. (Pls. use additional sheet for other power suppliers.) |     |                 |         |         |           |           |            |            |            |            |            |
| Power Supply Agreement Extensions                                                                     |     |                 |         |         |           |           |            |            |            |            |            |
| Name of Supplier                                                                                      | KW  |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 |         |         |           | 170,000   | 880,000    | 880,000    | 880,000    | 880,000    | 880,000    |
| Contracted Demand                                                                                     | MWH |                 |         |         |           | 1,330,216 | 5,309,569  | 5,309,569  | 5,309,569  | 5,309,569  | 5,309,569  |
| Contracted Energy                                                                                     |     |                 |         |         |           |           |            |            |            |            |            |
| New Power Supply Agreements                                                                           |     |                 |         |         |           |           |            |            |            |            |            |
| Name of Supplier                                                                                      | KW  |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 | 450,000 | 550,000 | 550,000   | 550,000   | 1,550,000  | 1,850,000  | 2,000,000  | 2,300,000  | 2,550,000  |
| Contracted Demand                                                                                     | MWH |                 | 654,899 | 818,624 | 2,203,548 | 3,565,099 | 7,376,760  | 7,712,066  | 8,321,963  | 9,007,667  | 9,638,194  |
| Contracted Energy                                                                                     |     |                 |         |         |           |           |            |            |            |            |            |
| Sub Total (RE-based generating facility)                                                              |     |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 |         |         |           |           |            |            |            |            |            |
| Contracted Demand                                                                                     | KW  |                 |         |         |           |           |            |            |            |            |            |
| Contracted Energy                                                                                     | MWH |                 |         |         |           |           |            |            |            |            |            |
| Total                                                                                                 |     |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 | 450,000 | 550,000 | 550,000   | 720,000   | 2,430,000  | 2,730,000  | 2,880,000  | 3,180,000  | 3,430,000  |
| Contracted Demand                                                                                     | KW  |                 | 654,899 | 818,624 | 2,203,548 | 4,895,314 | 12,686,329 | 13,021,634 | 13,651,531 | 14,317,236 | 14,947,762 |
| Contracted Energy                                                                                     | MWH |                 |         |         |           |           |            |            |            |            |            |
| 13e. Local Private Supply (Embedded Generation)                                                       |     |                 |         |         |           |           |            |            |            |            |            |
| Name of Supplier                                                                                      |     |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 |         |         |           |           |            |            |            |            |            |
| Capacity Used for Own Load                                                                            | KW  |                 |         |         |           |           |            |            |            |            |            |
| Energy Used for Own Load                                                                              | MWH |                 |         |         |           |           |            |            |            |            |            |
| Contracted Demand                                                                                     | KW  |                 |         |         |           |           |            |            |            |            |            |
| Contracted Energy (Surplus of embedded Generators)                                                    | MWH |                 |         |         |           |           |            |            |            |            |            |
| Sub Total (Embedded RE-based generating facility)                                                     |     |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 |         |         |           |           |            |            |            |            |            |
| Firm Contracted Capacity                                                                              | KW  |                 |         |         |           |           |            |            |            |            |            |
| Energy Supply                                                                                         | MWH |                 |         |         |           |           |            |            |            |            |            |
| Total (All Embedded)                                                                                  |     |                 |         |         |           |           |            |            |            |            |            |
| Installed Capacity                                                                                    | KW  |                 |         |         |           |           |            |            |            |            |            |
| Firm Contracted Capacity                                                                              | KW  |                 |         |         |           |           |            |            |            |            |            |
| Energy Supply                                                                                         | MWH |                 |         |         |           |           |            |            |            |            |            |



| Forecast/Planning Results                                    |        | Historical |           |                    |           |           |        |        |        |         |          |         | Forecast |        |        |        |
|--------------------------------------------------------------|--------|------------|-----------|--------------------|-----------|-----------|--------|--------|--------|---------|----------|---------|----------|--------|--------|--------|
|                                                              | Units  | 2010       | 2011      | 2012               | 2013      | 2014      | 2015   | 2016   | 2017   | 2018    | 2019     | 2020    | 2021     | 2022   | 2023   | 2024   |
| Subtransmission Facilities: (Acquisition and Expansion)      |        |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| 15a. Subtransmission lines                                   |        |            |           | (CUMULATIVE TOTAL) |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 230kV                                               | ckt-km | 2,700      | 2,700     |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 138kV and less than 230kV                           | ckt-km |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 115kV and less than 138kV                           | ckt-km | 717,887    | 728,955   | 786,310            | 791,251   | 793,040   | 34,700 | 60,508 | 42,600 | 18,700  | 47,000   | 49,400  | 16,000   | 21,400 | 50,900 | 48,500 |
| Voltage, 69kV and less than 115kV                            | ckt-km | 92,299     | 92,299    | 50,846             | 105,294   | 106,169   | 25,200 | 9,500  | 2,000  | 0,300   | 2,000    | 0,000   | 0,000    | 5,000  | 0,000  | 0,000  |
|                                                              | ckt-km | 813        | 824       | 837                | 897       | 899       | 60     | 70     | 45     | 19      | 49       | 49      | 16       | 26     | 51     | 49     |
| Subtransmission Facilities: (Replacement and Rehabilitation) |        |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| 15b. Subtransmission lines                                   |        |            |           | (CUMULATIVE TOTAL) |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 230kV                                               | ckt-km |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 138kV and less than 230kV                           | ckt-km |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 115kV and less than 138kV                           | ckt-km | 717,900    | 723,900   | 725,500            | 735,600   | 755,000   | 21,810 | 19,000 | 14,500 | 46,600  | 8,700    | 34,900  | 16,300   | 26,400 | 28,800 | 13,000 |
| Voltage, 69kV and less than 115kV                            | ckt-km | 92,300     | 92,800    | 92,900             | 94,500    | 96,300    | 1,800  | 1,000  | 1,100  | 1,400   | 4,800    | 2,000   | 2,100    | 2,300  | 2,500  | 2,500  |
|                                                              | ckt-km | 810        | 817       | 818                | 830       | 851       | 24     | 20     | 16     | 48      | 14       | 37      | 18       | 29     | 31     | 16     |
| Distribution Facilities: (Acquisition and Expansion)         |        |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| 15c. Distribution lines                                      |        |            |           | (CUMULATIVE TOTAL) |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 34.5kV and less than 69kV                           | ckt-km | 11,144.40  | 11,576.68 | 12,079.99          | 12,255.66 | 12,507.72 | 222.40 | 161.05 | 203.77 | 260.50  | 248.84   | 252.24  | 283.48   | 116.70 | 92.40  | 46.30  |
| Voltage, 13.8kV and less than 34.5kV                         | ckt-km | 3,535.01   | 3,615.27  | 3,593.47           | 3,583.65  | 3,601.79  | -20.15 | -19.30 | -62.00 | -101.90 | -86.50   | -105.60 | -168.10  | -32.10 | 8.10   | 0.00   |
| Voltage, 6.2kV and less than 13.8kV (3 Phase)                | ckt-km | 544.36     | 504.72    | 490.40             | 438.58    | 400.43    | -45.85 | -50.77 | -46.99 | -52.06  | -86.40   | -50.24  | -29.28   | -28.90 | 0.00   | -6.10  |
| (V Phase)                                                    | ckt-km |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| (1 Phase)                                                    | ckt-km | 15,224     | 15,697    | 16,164             | 16,278    | 16,510    | 156    | 91     | 95     | 107     | 76       | 96      | 86       | 56     | 101    | 40     |
| Distribution Facilities: (Replacement and Rehabilitation)    |        |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| 15d. Distribution lines                                      |        |            |           | (CUMULATIVE TOTAL) |           |           |        |        |        |         |          |         |          |        |        |        |
| Voltage, 34.5kV and less than 69kV                           | ckt-km | 2,293.00   | 2,438.22  | 2,606.24           | 2,847.95  | 3,116.17  | 270.86 | 607.18 | 760.73 | 927.88  | 1,000.23 | 713.38  | 801.88   | 840.82 | 856.84 | 842.63 |
| Voltage, 13.8kV and less than 34.5kV                         | ckt-km | 903.00     | 926.29    | 960.50             | 1,014.43  | 1,065.52  | 77.27  | 173.83 | 217.53 | 265.17  | 285.86   | 203.93  | 229.26   | 240.35 | 244.91 | 240.86 |
| Voltage, 6.2kV and less than 13.8kV (3 Phase)                | ckt-km | 217.00     | 220.36    | 234.12             | 243.40    | 252.19    |        |        |        |         |          |         |          |        |        |        |
| (V Phase)                                                    | ckt-km |            |           |                    |           |           |        |        |        |         |          |         |          |        |        |        |
| (1 Phase)                                                    | ckt-km | 8,413      | 8,585     | 8,801              | 9,106     | 9,434     | 348    | 781    | 978    | 1,193   | 1,286    | 917     | 1,031    | 1,081  | 1,102  | 1,083  |

| Forecast/Planning Results                         |  |  |  | Units |  | Historical         |        |        |        |        |       |        |        |       |        | Forecast |       |        |        |        |
|---------------------------------------------------|--|--|--|-------|--|--------------------|--------|--------|--------|--------|-------|--------|--------|-------|--------|----------|-------|--------|--------|--------|
|                                                   |  |  |  |       |  | 2010               | 2011   | 2012   | 2013   | 2014   | 2015  | 2016   | 2017   | 2018  | 2019   | 2020     | 2021  | 2022   | 2023   | 2024   |
| 16a. Substation Capacity, MVA (Additional)        |  |  |  |       |  | (CUMULATIVE TOTAL) |        |        |        |        |       |        |        |       |        | (ANNUAL) |       |        |        |        |
| Transformer Capacity, 100 and up                  |  |  |  | MVA   |  | 196.97             | 200.00 | 212.12 | 215.94 | 215.94 |       | 300.00 | 300.00 |       | 300.00 | 250.00   |       | 150.00 | 300.00 | 300.00 |
| No. of Units                                      |  |  |  |       |  | 22                 | 21     | 22     | 23     | 23     |       | 3      | 3      |       | 2      | 3        |       | 2      | 4      | 2      |
| Transformer Capacity, 50 and less than 100        |  |  |  | MVA   |  | 82.68              | 82.40  | 82.16  | 82.20  | 82.49  | 83.00 | 83.00  | 83.00  | 83.00 | 83.00  | 83.00    | 83.00 | 83.00  | 83.00  | 83.00  |
| No. of Units                                      |  |  |  |       |  | 103                | 108    | 114    | 118    | 120    | 8     | 4      | 4      | 4     | 4      | 7        | 6     | 5      | 5      | 6      |
| Transformer Capacity, 25 and less than 50         |  |  |  | MVA   |  | 33.33              | 33.26  | 33.26  | 33.19  | 33.26  |       | 33.00  | 33.00  | 33.00 | 33.00  |          |       | 33.00  | 33.00  |        |
| No. of Units                                      |  |  |  |       |  | 18                 | 18     | 18     | 19     | 19     |       | 1      | 1      | 1     | 2      |          |       | 1      | 1      | 1      |
| Transformer Capacity, 10 and less than 25         |  |  |  | MVA   |  | 15.38              | 15.35  | 15.35  | 15.47  | 15.56  |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  | 61                 | 56     | 56     | 50     | 51     |       |        |        |       |        |          |       |        |        |        |
| Transformer Capacity, less than 10                |  |  |  | MVA   |  | 5.29               | 5.29   | 4.99   | 3.99   | 3.99   |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  | 17                 | 17     | 14     | 10     | 10     |       |        |        |       |        |          |       |        |        |        |
| Total Capacity                                    |  |  |  | MVA   |  | 14,478             | 14,647 | 15,561 | 16,110 | 16,331 | 664   | 1,265  | 1,265  | 365   | 998    | 1,331    | 498   | 748    | 1,648  | 1,098  |
| 16b. Substation Capacity, MVA (Uprating)          |  |  |  |       |  | (CUMULATIVE TOTAL) |        |        |        |        |       |        |        |       |        | (ANNUAL) |       |        |        |        |
| Transformer Capacity, 100 and up                  |  |  |  | MVA   |  | 66.67              | 83.33  | 83.33  | 83.33  | 50.00  |       |        |        |       | 83.00  |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  | 2                  | 1      | 1      | 1      | 1      |       |        |        |       | 1      |          |       |        |        |        |
| Transformer Capacity, 50 and less than 100        |  |  |  | MVA   |  |                    |        |        |        |        |       | 33.00  |        |       |        |          |       |        | 33.00  | 1      |
| No. of Units                                      |  |  |  |       |  |                    |        | 32.00  |        |        |       | 1      |        |       |        |          |       |        |        |        |
| Transformer Capacity, 25 and less than 50         |  |  |  | MVA   |  |                    |        |        |        |        |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  |                    |        | 1      |        |        |       |        |        |       |        |          |       |        |        |        |
| Transformer Capacity, 10 and less than 25         |  |  |  | MVA   |  |                    |        |        | 20.00  |        |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  |                    |        |        | 1      |        |       |        |        |       |        |          |       |        |        |        |
| Transformer Capacity, less than 10                |  |  |  | MVA   |  |                    |        |        |        |        |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  |                    |        |        |        |        |       |        |        |       |        |          |       |        |        |        |
| Total Uprating                                    |  |  |  | MVA   |  | 133                | 83     | 115    | 103    | 50     |       | 33     | 0      | 0     | 83     | 0        | 0     | 0      | 33     | 0      |
| 16c. Substation Capacity, MVA (Retirement/Stanby) |  |  |  |       |  | (CUMULATIVE TOTAL) |        |        |        |        |       |        |        |       |        | (ANNUAL) |       |        |        |        |
| Transformer Capacity, 100 and up                  |  |  |  | MVA   |  |                    | 133.33 | 133.33 | 150.00 |        |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  |                    | 1      | 1      | 1      |        |       |        |        |       |        |          |       |        |        |        |
| Transformer Capacity, 50 and less than 100        |  |  |  | MVA   |  |                    | 83.33  | 83.33  | 83.33  |        |       |        |        |       |        |          |       |        |        |        |
| No. of Units                                      |  |  |  |       |  |                    | 2      | 3      |        |        |       |        |        |       |        |          |       |        |        |        |
| Transformer Capacity, 25 and less than 50         |  |  |  | MVA   |  | 32.00              | 33.33  | 33.33  |        | 32.00  |       |        |        |       | 33.00  | 33.00    |       |        |        |        |
| No. of Units                                      |  |  |  |       |  | 1                  | 1      |        |        | 1      |       |        |        |       | 1      |          |       |        |        |        |
| Transformer Capacity, 10 and less than 25         |  |  |  | MVA   |  | 12.50              | 15.80  |        | 14.3   |        | 15.63 | 12.50  | 16.50  | 12.50 | 12.50  | 16.17    | 15.80 | 16.25  |        |        |
| No. of Units                                      |  |  |  |       |  | 2                  | 5      |        | 6      |        | 8     | 1      | 6      | 2     | 2      | 9        | 5     | 8      |        |        |
| Transformer Capacity, less than 10                |  |  |  | MVA   |  | 0.83               |        |        | 6.46   | 0.83   |       | 4.00   |        |       |        | 5.00     | 7.00  |        |        |        |
| No. of Units                                      |  |  |  |       |  | 3                  |        | 3      | 4      | 1      |       | 1      |        |       |        | 1        | 2     |        |        |        |
| Total Retirement                                  |  |  |  | MVA   |  | 50                 | 215    | 337    | 345    | 33     | 125   | 17     | 59     | 55    | 58     | 160      | 97    | 130    | 0      | 0      |



| Forecast/Planning Results                                |  |      | Units    | Historical         |          |          |          |          |          |           |           |           |           |          | Forecast |           |           |          |
|----------------------------------------------------------|--|------|----------|--------------------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|-----------|-----------|----------|
|                                                          |  |      |          | 2010               | 2011     | 2012     | 2013     | 2014     | 2015     | 2016      | 2017      | 2018      | 2019      | 2020     | 2021     | 2022      | 2023      | 2024     |
|                                                          |  |      |          | (CUMULATIVE TOTAL) |          |          |          |          |          |           |           |           |           |          | (ANNUAL) |           |           |          |
| 17. Reactive Power Compensation Plan                     |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| 17a. Reactive Power Compensation Plan: Substation        |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Reactive Capacity                                        |  | MVAR | 64.80    | 86.40              | 115.20   | 158.40   | 172.80   | 34.5     | 115.20   | 64.80     | 54.00     | 39.60     | 57.60     | 79.20    | 64.80    | 61.20     | 57.60     | 50.40    |
| Rated Voltage                                            |  | kV   | 34.5     | 34.5               | 34.5     | 34.5     | 34.5     | 34.5     | 34.5     | 13.8/34.5 | 13.8/34.5 | 13.8/34.5 | 13.8/34.5 | 34.5     | 34.5     | 13.8/34.5 | 13.8/34.5 | 34.5     |
| Type of Equipment                                        |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Shunt Inductor                                           |  |      | 2 - 14.4 | 1 - 14.4           | 2 - 14.4 | 2 - 14.4 | 1 - 14.4 | 6 - 14.4 | 3 - 14.4 | 3 - 14.4  | 3 - 14.4  | 1 - 14.4  | 2 - 14.4  | 4 - 14.4 | 3 - 14.4 | 3 - 14.4  | 2 - 14.4  | 1 - 14.4 |
| Shunt Capacitor                                          |  |      | 5 - 7.2  | 1 - 7.2            | 4 - 7.2  | 2 - 7.2  |          | 4 - 7.2  | 2 - 7.2  | 2 - 7.2   | 1 - 7.2   | 3 - 7.2   | 3 - 7.2   | 3 - 7.2  | 3 - 7.2  | 2 - 7.2   | 3 - 7.2   | 5 - 7.2  |
|                                                          |  |      |          |                    |          |          |          |          | 2 - 3.6  | 2 - 3.6   | 1 - 3.6   | 1 - 3.6   | 2 - 3.6   | 2 - 3.6  | 1 - 3.6  | 1 - 3.6   | 2 - 3.6   |          |
| Operation Control                                        |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Fixed                                                    |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Variable                                                 |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Automatic                                                |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Manual                                                   |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| 17b. Reactive Power Compensation Plan: Distribution Line |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Reactive Capacity                                        |  | MVAR | 13.20    | 19.20              | 23.40    | 79.80    | 81.00    | 129.00   | 170.40   | 135.00    | 130.20    | 107.40    | 106.80    | 106.80   | 100.80   | 115.20    | 111.60    | 108.60   |
| Rated Voltage                                            |  | kV   | 20/34.5  | 20/34.5            | 20/34.5  | 20/34.5  | 20/34.5  | 20/34.5  | 20/34.5  | 20/34.5   | 20/34.5   | 20/34.5   | 20/34.5   | 20/34.5  | 20/34.5  | 20/34.5   | 20/34.5   | 20/34.5  |
| Type of Equipment                                        |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Shunt Inductor                                           |  |      | 7 - 1.8  | 3 - 1.8            | 2 - 1.8  | 31 - 1.8 |          | 71 - 1.8 | 94 - 1.8 | 74 - 1.8  | 72 - 1.8  | 59 - 1.8  | 59 - 1.8  | 59 - 1.8 | 55 - 1.8 | 64 - 1.8  | 61 - 1.8  | 60 - 1.8 |
| Shunt Capacitor                                          |  |      |          |                    |          |          | 1 - 1.2  | 1 - 1.2  | 1 - 1.2  | 1 - 1.2   | 1 - 1.2   | 1 - 1.2   | 1 - 1.2   | 1 - 0.6  | 1 - 0.6  | 1 - 0.6   | 1 - 0.6   | 1 - 0.6  |
|                                                          |  |      | 1 - 0.6  | 1 - 0.6            | 1 - 0.6  | 1 - 0.6  |          |          |          |           |           |           |           |          |          |           |           |          |
| Operation Control                                        |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Fixed                                                    |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Variable                                                 |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Automatic                                                |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |
| Manual                                                   |  |      |          |                    |          |          |          |          |          |           |           |           |           |          |          |           |           |          |

| Forecast/Planning Results                  | Units | Forecast |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
|--------------------------------------------|-------|----------|------|------|------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
|                                            |       | (ANNUAL) |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
|                                            |       | 2010     | 2011 | 2012 | 2013 | 2014 | 2015      | 2016      | 2017      | 2018      | 2019      | 2020      | 2021      | 2022      | 2023      | 2024      |  |
| *18. Capital Expenditures:                 |       |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| 18a. Network Projects                      |       |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Subtransmission (Acquisition/Expansion)    | Peso  |          |      |      |      |      | 692.61    | 1,670.23  | 700.94    | 795.30    | 1,495.91  | 617.67    | 624.67    | 515.22    | 515.22    | 1,042.55  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 692.61    | 1,670.23  | 700.94    | 795.30    | 1,495.91  | 617.67    | 624.67    | 515.22    | 515.22    | 1,042.55  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Subtransmission (Rehabilitation/Upgrading) | Peso  |          |      |      |      |      | 74.67     | 234.01    | 102.87    | 508.29    | 37.43     | 487.73    | 85.42     | 313.60    | 341.37    | 79.62     |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 74.67     | 234.01    | 102.87    | 508.29    | 37.43     | 487.73    | 85.42     | 313.60    | 341.37    | 79.62     |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Distribution (Expansion)                   | Peso  |          |      |      |      |      | 4,239.27  | 4,898.10  | 4,723.65  | 4,372.28  | 4,391.20  | 4,097.77  | 4,158.61  | 3,999.71  | 3,838.21  | 3,828.04  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 4,239.27  | 4,898.10  | 4,723.65  | 4,372.28  | 4,391.20  | 4,097.77  | 4,158.61  | 3,999.71  | 3,838.21  | 3,828.04  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Distribution (Rehabilitation/Upgrading)    | Peso  |          |      |      |      |      | 2,794.99  | 6,449.22  | 4,849.07  | 5,230.87  | 5,537.49  | 4,313.31  | 4,673.14  | 4,838.61  | 4,850.98  | 4,811.30  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 2,794.99  | 6,449.22  | 4,849.07  | 5,230.87  | 5,537.49  | 4,313.31  | 4,673.14  | 4,838.61  | 4,850.98  | 4,811.30  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Substation (Additional)                    | Peso  |          |      |      |      |      | 3,222.88  | 2,909.54  | 2,889.07  | 1,480.52  | 2,221.81  | 4,297.37  | 2,082.58  | 2,224.39  | 4,575.67  | 2,410.53  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 3,222.88  | 2,909.54  | 2,889.07  | 1,480.52  | 2,221.81  | 4,297.37  | 2,082.58  | 2,224.39  | 4,575.67  | 2,410.53  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Substation (Upgrading)                     | Peso  |          |      |      |      |      |           | 191.52    |           | 77.41     | 248.99    |           |           |           | 64.23     |           |  |
| Local (in Million)                         | Peso  |          |      |      |      |      |           | 191.52    |           | 77.41     | 248.99    |           |           |           | 64.23     |           |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Substation (Retirement/Standby)            | Peso  |          |      |      |      |      |           | 46.44     |           |           |           |           |           |           |           |           |  |
| Local (in Million)                         | Peso  |          |      |      |      |      |           | 46.44     |           |           |           |           |           |           |           |           |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Electrification                            | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Local (in Million)                         | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Other Network Assets                       | Peso  |          |      |      |      |      | 1,566.45  | 2,839.31  | 2,650.40  | 1,748.81  | 2,211.43  | 1,799.00  | 1,634.57  | 1,476.91  | 1,572.28  | 1,769.78  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 1,566.45  | 2,839.31  | 2,650.40  | 1,748.81  | 2,211.43  | 1,799.00  | 1,634.57  | 1,476.91  | 1,572.28  | 1,769.78  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| 18b. Non-network Projects                  |       |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Property/Equipment/Others                  | Peso  |          |      |      |      |      | 2,360.72  | 4,249.37  | 3,561.97  | 3,312.11  | 4,075.28  | 4,119.85  | 3,770.26  | 4,102.37  | 4,353.77  | 3,513.35  |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 2,360.72  | 4,249.37  | 3,561.97  | 3,312.11  | 4,075.28  | 4,119.85  | 3,770.26  | 4,102.37  | 4,353.77  | 3,513.35  |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |
| Grand Total: (18a+18b)                     | Peso  |          |      |      |      |      | 14,951.47 | 23,487.74 | 19,477.97 | 17,525.59 | 20,219.53 | 19,779.14 | 17,029.25 | 17,470.82 | 20,111.74 | 17,455.16 |  |
| Local (in Million)                         | Peso  |          |      |      |      |      | 14,951.47 | 23,487.74 | 19,477.97 | 17,525.59 | 20,219.53 | 19,779.14 | 17,029.25 | 17,470.82 | 20,111.74 | 17,455.16 |  |
| Foreign (in Million)                       | Peso  |          |      |      |      |      |           |           |           |           |           |           |           |           |           |           |  |

Note: Breakdown of 2014 CAPEX per RDWR Asset Category can be found in Appendix 2.

19. Information on Distribution Impact Study Made

|                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Therma Mobile, Inc. (TMO) - 242 MW Diesel Power Plant - Jan 2012 - Navotas Fish Port Complex, North Harbor, Navotas, Metro Manila                                                                        |
| Maibara Geothermal, Inc. (MGI) - 40 MW Steam Turbine - Sep 2012 - Brgy. San Rafael, Sto. Tomas, Batangas                                                                                                 |
| Altenergy Wind One Corporation (AWOC) - 67.5 MW Wind Turbine - Aug 2011 - Sitio Bugarin, Brgy. Halayhayin, Pililla, Rizal                                                                                |
| Calamba Aero Power Corporation (CAPC) - 172 MW Diesel Power Plant - July 2011 - Carmelray Industrial Park II (CIP II), Brgy. Punta, Calamba, Laguna                                                      |
| United Pulp and Paper Co., Inc. (UPPC) - 30 MW Combined Heat & Power PP - April 2011 - km 48 Iba Este, Calumpit, Bulacan                                                                                 |
| JG Summit Petrochemical Corporation (JGSFC) - 81.75 MW Diesel Power Plant - May 2013 - Brgy. Simlong, Batangas City, Batangas                                                                            |
| Nestlé Cabuyao - 15.34 MW - April 2013 - Brgy. Niugan, Cabuyao, Calamba, Laguna                                                                                                                          |
| San Miguel Yamamura Asia Corp. - 8.2 MW - Oct 2012 - km 27 Aguinaldo Highway, Anabu II, Imus, Cavite                                                                                                     |
| Air Liquide Pipeline Utilities Services, Inc. - 13 MW - May 2012 - Calamba Premiere Industrial Park (CPIP), Calamba, Laguna                                                                              |
| Pag-Asa Steel Works, Inc. - 22 MW - March 2012 - Sandoval Ave., Nagpayong, Brgy. Pinagbuhatan, Pasig City                                                                                                |
| Trusty Steel Plant - 55 MW - Feb 2012 - Mountview Industrial Complex, Carmona, Cavite                                                                                                                    |
| Midland Steel Corporation - 20.3 MW - Dec 2012 - St. Anthony Subdivision, Brgy. San Juan, Cainta, Rizal                                                                                                  |
| Metrodragon Steel Corporation - 40 MW - Dec 2011 - MGM Industrial Compound, Caloocan City                                                                                                                |
| Solid Cement - 15.9 MW - Jun 2013 - Teresa, Rizal                                                                                                                                                        |
| Eagle Cement (Part 1) - 6.1 MW - Jul 2013 - Brgy. Akle, San Ildefonso, Bulacan                                                                                                                           |
| Eagle Cement (Part 2) - 60 MW - Nov 2013 - Brgy. Akle, San Ildefonso, Bulacan                                                                                                                            |
| Pilipinas Shell Petroleum Corporation - 44.3 MW Diesel Power Plant - Dec 2013 - Ambulong, Tabangao, Batangas City, Batangas                                                                              |
| LNG Batangas Early Power - 120 MW - Feb 2014 - Bgy. Tabangao, Batangas City, Batangas                                                                                                                    |
| Altenergy Sembrano Wind Corporation - 72 MW - May 2014 - Bgy. Niogan, Pililla, Rizal                                                                                                                     |
| Metrodragon Steel Corporation (MSC) and ANK Steel Corporation - 60 MW - May 2014 - Sitio Gina, Kaybiga, Caloocan City                                                                                    |
| LNG Batangas Early Power (Addendum) - 72 MW - Sep 2014 - Bgy. Tabangao, Batangas City, Batangas                                                                                                          |
| Calamba Aero Power Corporation (CAPC) (Re-study) - 144 MW Diesel Power Plant - Oct 2014 - Carmelray Industrial Park II (CIP II), Brgy. Punta, Calamba, Laguna                                            |
| Millenium Energy, Inc. - 310 MW Diesel Power Plant - Nov 2014 - Navotas Fishport Complex                                                                                                                 |
| Solar Philippines Commercial Rooftop Projects, Inc. - 21 MW Solar Power Plant - Nov 2014 - Asia Brewery, Cabuyao, Laguna                                                                                 |
| Asia Brewery, Inc. - 24 MW Diesel Power Plant - Dec 2014 - Asia Brewery, Cabuyao, Laguna                                                                                                                 |
| Daekyung Enertech, Inc. - 125 MW Combined Heat Power Plant - Feb 2015 - San Pascual, Batangas                                                                                                            |
| Montalban Methane Power Corporation - Montalban Methane Recovery and Electricity Generation CDM Project - May 21, 2007 - Rodriguez, Rizal                                                                |
| IFR Cement Corporation - Synchronization of Priority Loads                                                                                                                                               |
| CIP II Power Corporation - 21 MW Diesel Power Plant - June 23, 2009                                                                                                                                      |
| Bacavalley Energy Inc. - 4 MW San Pedro Landfill Methane Recovery and Electricity Generation Project - April 7, 2010 - Brgy. San Antonio, San Pedro, Laguna                                              |
| Transnational Renewable Energy Corporation - 200 kW NYK - TDG Maritime Academy Solar Power Plant - October 25, 2011 - Canlubang, Calamba City, Laguna                                                    |
| First Philec Solar Solutions - 2 MW PV Power Plant (PV Depot) - August 1, 2011 - Brgy. Maguayan, Silang, Cavite                                                                                          |
| Pangea Green Energy - 1 MW Waste-to-Energy Power Plant - January 24, 2012 - Brgy. Payatas, Quezon City                                                                                                   |
| First Philec Solar Solutions - 3 MW PV System in First Philec Solar Corp. - August 1, 2012                                                                                                               |
| Solid Cement Corporation - 34.5 kV Interconnection Parallel Operation of a 6MW Waste Heat Recovery System - January 29, 2014 - Sitio, Tagbak, Brgy. San Jose, Antipolo City, Rizal                       |
| ATN Philippines Solar Energy Group Inc. (ATN) - 34.5 kV Interconnection 30 MW Solar PV Project - December 26, 2013 - Barangay Macabud, Rodriguez, Rizal                                                  |
| Solar Philippines Commercial Rooftop Projects, Inc. - 700.47 kW Central Mall Binaan (Load Displacement) Solar Generator Project - July 1, 2014 - Malvar St., Corner National Highway, Biñan City, Laguna |
| Solar Philippines Commercial Rooftop Projects, Inc. - 1.22 MW SM North EDSA Solar Project - July 14, 2014 - SM City North EDSA, Quezon City                                                              |
| Royal Cargo Combined Logistics, Inc. - 205 kW Solar PV Project (Load Displacement) - October 2014 - Star Avenue, Laguna International Industrial Park, Mamplasan, Biñan City, Laguna                     |
| Solar Philippines Commercial Rooftop Projects, Inc. - 800 kW SM Dasmariñas Solar Generator Project - December 3, 2014 - SM Dasmariñas, Cavite                                                            |

Solar Philippines Commercial Rooftop Projects, Inc. - 9,720 kW Asia Brewery Inc. Solar Project - February 5, 2015 - Km 43 National Highway, Brgy. Sala, Cabuyao, Laguna  
Solar Philippines Commercial Rooftop Projects, Inc. - 6,080 kW Yazaki-Torres Manufacturing Inc. Solar Project - March 4, 2015 - Brgy. Makiling, Calamba, Laguna  
Solar Philippines Commercial Rooftop Projects, Inc. - 2,215 kW SM Mall of Asia Solar Project - March 4, 2015 - March 4, 2015 - SM Mall of Asia, Pasay City  
Majayjay Hydropower Company, Inc. - 2,760 kW Majayjay Hydropower Project - March 16, 2015 - Brgy. Ilayang Banga, Majayjay, Laguna

20. Supply Demand Highlights

Total energy sales for 2014 reached 33,649 GWh, 2.8% higher than 2013 levels. The main growth driver was the commercial segment. Consumption growth was hampered by lower average temperature in the first quarter of the year, and the weather disturbances that affected the franchise area, specially typhoon Glenda in July. The said typhoon destroyed distribution and transmission facilities that led to extended period of load dropping. The number of Meralco customers increased by 3.9% in 2014. With regards to forecasted sales, average growth rate from 2015 to 2024 is projected at 3.7%, while customers count is forecasted to increase at an average of 3.0%. The supply outlook for MERALCO during the long-term 2015-2024 is the result of its franchise demand growth rate, load contestability implementation by ERC and expiration of its existing PSAs and PPAs power supply contracts. Reduction in MERALCO's contracted capacities starts at around 2017 when its PSA with TMO expires, followed by the termination of its PSA with SEM-Calaca by end of 2018. The remaining PSAs with AES-Masinloc, SMEC-Sual, SPPC-Ilijan and TLI-Pagbilao will all expire by end of 2019, while its PPAs with FGPC-Sta Rita and QPPL will terminate on 2025 and that with FGP-San Lorenzo on 2027. Note that the said PSAs may be extended up to additional term of 3 years upon mutual agreement by parties, otherwise, the supply requirement of MERALCO is expected to increase starting 2017.

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ANNEX 1: CAPEX PROJECTS  
MERALCO  
YEAR 2015 - 2024

| PROJECT TYPE | PROJECT CATEGORY        | NAME                                                                                            | PROJECT DESCRIPTION                                                                                                                                                         | COMPLETION DATE | TOTAL PROJECT COST | TIMELINE      |      |      |      |      |      |      |      |      |      |
|--------------|-------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|---------------|------|------|------|------|------|------|------|------|------|
|              |                         |                                                                                                 |                                                                                                                                                                             |                 |                    | 2015          | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Capacity     | Substation (Additional) | Expansion of Tubbataha 115 kV - 34.5 kV GIS Substation (2nd Bank)                               | Installation of 1-43 MVA power transformer with associated SCADA and protective equipment as well as appurtenant distribution lines.                                        | 2015            | 257,132,874        | 257,132,874   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of Dila 115 kV - 34.5 kV Substation                                                 | Installation of 1-43 MVA power transformer with associated SCADA, communication and protective equipment as well as appurtenant subtransmission and distribution lines.     | 2015            | 316,910,084        | 316,910,084   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of PANGOR-1 115 kV - 34.5 kV GIS Substation (1st and 2nd bank)                      | Installation of 2-43 MVA power transformer with associated SCADA, communication and protective equipment as well as appurtenant subtransmission and distribution lines.     | 2015            | 1,556,903,717      | 1,556,903,717 |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Expansion of PANGOR-1 115 kV - 34.5 kV GIS Substation (2nd Bank)                                | Installation of 1-43 MVA power transformer with associated SCADA and protective equipment as well as appurtenant distribution lines.                                        | 2015            | 253,520,269        | 253,520,269   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of Buraen 115 kV - 34.5 kV GIS Substation                                           | Installation of 1-43 MVA power transformer with associated SCADA, communication and protective equipment as well as appurtenant subtransmission and distribution lines.     | 2015            | 577,155,120        | 577,155,120   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Installation of 34.5 kV Metalclad Switchgear at Dismalinas 183 MVA Transformer owned by Meralco | Installation of 34.5 kV metalclad switchgear, 7.2 MVAR capacitor bank with associated SCADA and protective equipment as well as construction of two (2) additional feeders. | 2015            | 68,161,085         | 68,161,085    |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Installation of 34.5 kV Metalclad Switchgear at LIP 3rd BOMVA Power Transformer                 | Installation of 34.5 kV metalclad switchgear, 7.2 MVAR capacitor bank with associated SCADA and protective equipment as well as construction of two (2) additional feeders. | 2015            | 48,085,691         | 48,085,691    |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Expansion of Marikina 115 kV - 34.5 kV Substation (2nd Bank)                                    | Installation of 1-43 MVA power transformer with associated SCADA and protective equipment as well as appurtenant distribution lines.                                        | 2015            | 214,620,971        | 214,620,971   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Expansion of Baguio 115 kV - 34.5 kV Substation (2nd Bank)                                      | Installation of 1-43 MVA power transformer with associated SCADA and protective equipment as well as appurtenant distribution lines.                                        | 2015            | 162,580,219        | 162,580,219   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of Silo Giza 115 kV Switching Station                                               | Installation of 115 kV subtransmission lines with associated SCADA and protective equipment.                                                                                | 2015            | 154,081,344        | 154,081,344   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of Malabang 115 kV - 34.5 kV GIS Substation                                         | Installation of 1-43 MVA power transformer with associated SCADA, communication and protective equipment as well as appurtenant subtransmission and distribution lines.     | 2016            | 435,788,535        | 435,788,535   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Installation of 34.5 kV Metalclad Switchgear at MCCP-San Jose 63 MVA Power Transformer          | Installation of 34.5 kV metalclad switchgear, 7.2 MVAR capacitor bank with associated SCADA and protective equipment as well as construction of two (2) additional feeders. | 2016            | 63,122,598         | 63,122,598    |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Expansion of Tabang 69 kV - 13.8 kV Substation (2nd Bank)                                       | Installation of 1-33 MVA power transformer with associated SCADA and protective equipment as well as appurtenant distribution lines.                                        | 2016            | 162,082,948        | 162,082,948   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Development of Lucena 115 kV - 34.5 kV Substation                                               | Installation of 1-43 MVA power transformer with associated SCADA, communication and protective equipment as well as appurtenant subtransmission and distribution lines.     | 2016            | 478,911,544        | 478,911,544   |      |      |      |      |      |      |      |      |      |
| Capacity     | Substation (Additional) | Upgrading of San Miguel 20 MVA Power Transformer Bank no. 1 to 33 MVA Power Transformer         | Installation of 1-33 MVA power transformer with associated SCADA and protective equipment.                                                                                  | 2016            | 58,348,803         | 58,348,803    |      |      |      |      |      |      |      |      |      |

# ANNEX " DD "

## **Demand-Side Management Plan**

*submitted to*

***Energy Regulatory Board***

***Philippines***

*by*

***MERALCO***

***PASIG CITY, MANILA***

*with assistance from*

***Resource Management International***

*and*

***SRC International Pty Ltd***

***December 1997***

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## EXECUTIVE SUMMARY

5 (i) 3

### Introduction

In December 1996, the Energy Regulatory Board (ERB) approved the Framework for Demand Side Management (DSM) in the Philippines, in compliance with Section III of the Department of Energy (DOE) Circular No: 95-08-007 as amended per ERB Case No: 96-25. Under the framework, each distribution utility was required to submit a DSM Plan within one year from the effective date. This DSM Plan by Manila Electric Company (MERALCO) is in compliance with the requirements of the DSM framework.

MERALCO was one of the four utilities selected, under the USAID funded Philippines Demand Side Management Project, for case study DSM Plans with external assistance. This DSM Plan was prepared by MERALCO with assistance from the consultants appointed for the task, SRC International (SRCI) from Melbourne, Australia as sub-consultants to Resource Management International (RMI).

### Utility Overview

MERALCO is the largest electricity distribution company in the Philippines. Its sales account for approximately 60% of national electricity consumption. It has a franchise area covering 9 328 km<sup>2</sup>, including 14 cities and 97 municipalities in Metro Manila, Bulacan, Rizal, and Cavite, parts of Laguna, Quezon, and Batangas, and 14 barangays in Pampanga. This franchise area is responsible for 50% of the national Gross Domestic Product (GDP), 30% coming solely from Metro Manila. It has approximately 8 000 employees spread throughout its 35 branches and operating centers.

At present, MERALCO has just over 3 million customers, growing at a compounded annual rate of 6%. The residential sector is by far the largest accounting for 90.5% in 1996. The remaining 10% consists of commercial, industrial and street lighting customers. Of MERALCO's total energy sales, industrial customers, even though small in number, account for one-third of total sales. The remaining two thirds are shared almost equally by commercial and residential customers. Electrification level in the franchise area is 92 percent.

In February, 1995, the Energy Regulatory Board (ERB) authorized the National Power Corporation (NPC) to implement a new power rate schedule in the Luzon grid. This Order also directed all NPC utility customers to restructure their rates based on NPC's approved rate schedule. MERALCO's application for rate restructuring was granted a provisional approval in March, 1997. The subsequent effect on its customers' billings were made starting April 1, 1997. The new rate structure now provides an incentive for more efficient energy

utilization not only on the bulk sale or generation level but as well as on the retail level.

The new rate structure provides incentives for customers to improve load factor. Only those with demand meters, namely, the Industrial and Non-Industrial customers which accounted for more than 60% of total sales felt the impact of the restructuring. A customer with a load factor higher than 36.6% will experience a decline in the average rate while a customer with a load factor lower than 36.6% will be adversely affected with an increase in its rate. Demand-Side Management programs directed to this group of customers will also help cushion the impact of the restructuring.

#### *DSM Objectives*

The proposed Omnibus Electric Industry Bill will create fundamental changes in regulation of electric utilities as well as the industry structure itself. Initially, there will be competition in the wholesale market and will eventually move towards retail competition.

In order to face the challenges and new market conditions, MERALCO will focus on the needs of its customers. Our mission is to serve our customers by providing efficient, adequate and reliable electric service at reasonable cost. Improving customer service is considered to be MERALCO's primary objective of Demand Side Management (DSM).

It has established the "account management" approach and taken more aggressive DSM activities with its customers. It is within this environment that DSM can be offered to customers as a package of services aimed at providing solutions to customers' needs.

MERALCO has undertaken a program of continuous system upgrading to improve the quality and reliability of the electricity delivered to the customers. It believes that through efficiencies and productivity gains, lower price of electricity can also be achieved.

#### *Programs and Activities Selected*

A total of eight programs and supporting activities were selected for implementation over the first two years of the Plan. Most programs will be undertaken initially on a pilot scale and cover all the customer sectors. The following programs have been selected:

1. Compact Fluorescent Lighting Program — promotion of CFLs through trade allies and offering incentives for repayment in instalments through electricity bills;
2. Green Buildings Program — pilot energy efficiency project in a shopping mall and an office building using an E&O;
3. Industrial Efficiency Program — customized value added services through an E&O to discourage wasteful consumption.

4. Industrial Demonstration Program — demonstration of high efficiency motors, variable speed drives and efficient lighting;
5. Power Factor Correction Program — installation of capacitor banks to improve power factor;
6. Load Factor Improvement Program — promotion of cost-effective opportunities for load management and energy efficiency improvement, regardless of the end use; and
7. Streetlight Conversion Program — replacement of Mercury Vapor (MV) lamps with High Pressure Sodium (HPS) vapour lamps.

In addition, the following supporting activity was selected:

8. Load Research — to develop an end-use load shape database for estimating end-use demand and designing and evaluating DSM programs.

Several programs have already been commenced by MERALCO, namely the Green Buildings, Industrial Efficiency and Street Lighting Programs.

#### *Cost Effectiveness*

#### *Proposal for Cost Recovery*

#### *Implementation*

Considering the available resources, of the eight programs that have initially been identified, MERALCO proposes to undertake seven DSM programs in the first year (1998) and the remaining program will commence in the second year (1999). The second year (1999) would also include continuation of some of the programs undertaken in 1998.

The following programs have been scheduled to be implemented in 1998:-

- . Compact Fluorescent Lighting Program
- . Green Buildings Program
- . Industrial Efficiency Program
- . Industrial Demonstration Program
- . Power Factor Correction Program
- . Load Factor Improvement Program
- . Streetlight Conversion Program

The Green Buildings and Industrial Efficiency Programs will be

ESCO has been included in the schedule. The programs will be subject to an evaluation at the end of the year and based on the outcomes, a decision to cease, modify or continue the programs will be made.

In addition to programs from 1998 that continue, the following activities are scheduled to be implemented in 1999 :-

- . Load Research
- . Major Program Review

The major program review would include all nine programs and the outcomes will be included in the revised plan to be filed for 2000 onwards.

#### *Monitoring and Evaluation*

All programs will be monitored throughout and evaluated upon completion, except in the case of the CFL Program which would be also evaluated midway when any revisions to program delivery would be made. As required by the DSM Framework the programs will also be subject to an annual evaluation.

The outcome of the major program review will be included in the revised plan for 2000 onwards.

# 1. UTILITY SITUATION / BACKGROUND

## 1.1 Overview of the Company

### *History*

The Manila Electric Railroad and Light Company, forming the acronym "MERALCO", was established in 1903. That year, the Municipal Board of Manila granted to Charles M. Swift of Detroit a franchise "to operate an electric street railway service and to furnish electric current for light, heat and power in the city and its suburbs for a period of fifty years." The MERALCO tranvia or electric streetcar was inaugurated in 1905.

Although better known in earlier years for its transportation service, MERALCO also established its electric service. It bought the La Electricista in 1904. In 1919, the Manila Electric Railroad and Light Company and its affiliate, the Manila Electric Suburban Railways Company, merged to form the Manila Electric Company. Although the acronym MECO was more accurate, MERALCO was what the Company was called and continues to be called to this day.

When MERALCO became part of the US-based giant Associated Gas and Electric System in 1925, the Company expanded services to municipalities in Rizal and other parts of Luzon mainly by purchasing the franchises and plants of the small provincial electric companies.

The Botocan hydrostation in Majayjay, Laguna was built by MERALCO and added to the generating system in 1930 to meet the growing demand. It was the country's first hydroelectric plant and was probably the largest construction project in the country of its time. The 55-mile long 115 000-volt transmission line linked the new plant with the equally new substation in Sta. Mesa.

MERALCO's electric service area eventually covered, aside from Manila, 94 municipalities in 13 provinces in Luzon: Rizal, Bulacan, Laguna, Cavite, Tayabas, Pangasinan, Tarlac, Nueva Ecija, La Union, Batangas, Camarines Sur, Albay and Sorsogon. Except for the towns in the first five provinces which were linked to the integrated "Manila system" fed by Blasdel and Botocan stations, the provincial areas were served by separate relatively small diesel plants.

In October 1945, just after the war, the 10 000 kW unit at the Caliraya hydroelectric station was in operation and connected to the Manila system. On November 1, 1945, MERALCO resumed operations after the US Army returned all its property. Over the next few years, the

the provincial areas served by isolated diesel generating plants and concentrating on the integrated Manila system. This system over the next few years included 40 cities and municipalities from as far north as Malolos to as far south as Lucena in Quezon province.

In May 1948, the Company sold its 122 buses to Fortunato Halili. This brought to a close four decades of MERALCO's transportation service.

MERALCO's efforts at rebuilding and expanding its electric system made the country's postwar and post-independence industrialization efforts possible. In 1959, MERALCO was supplying all its customers with more than four times as much electric energy as 1949. Residential and commercial customers were consuming about three times as much, but the industrial sector was consuming about 13 times as much.

During the Martial Law regime, Presidential Decree No. 40 declared it an ultimate objective of the state that the government-owned NPC should own and operate a single integrated system of all generating facilities supplying power to the entire area embraced by any grid set up by NPC. Eventually by 1979, MERALCO sold all its generating plants to NAPOCOR, with the exception of Rockwell Station. From then on, MERALCO became mainly a distributor of electricity purchased in bulk from NAPOCOR. A newly established MERALCO Foundation eventually became the sole owner of MERALCO common stock in 1977.

A revival of the MERALCO tranvia took place in 1984 when Manila's elevated Light Rail Transit (LRT) began plying its first route from Caloocan City to Baclaran.

After the Edsa Revolution, control of the company was regained by the Lopezes. Mr. Manuel Lopez, son of Don Eugenio was appointed president of the company and remains in that position up to the present.

#### *MERALCO Today*

Today, MERALCO is the largest electricity distribution company in the Philippines. Its sales account for about 60% of national electricity consumption. It has a franchise area covering 9 328 km<sup>2</sup>, including 14 cities and 97 municipalities in Metro Manila, Bulacan, Rizal, and Cavite, parts of Laguna, Quezon, and Batangas, and 14 barangays in Pampanga. This franchise area is responsible for 50% of the national Gross Domestic Product (GDP), 30% coming solely from Metro Manila.

At present, MERALCO has 3 million customers, growing at a compounded rate of 6% annually. About 90% of these customers belongs to the residential sector. The remaining 10% consists of commercial and business establishments, industries, and street-light customers. Of MERALCO's total energy sales, industrial customers, even though small in number, account for one-third of total sales. The

remaining two thirds are shared almost equally by commercial and residential customers. Electrification level in the franchise is 92 percent.

In 1996, MERALCO ranked as the second biggest company in the country, next only to the National Power Corporation, in terms of gross revenues. During this year, it was also awarded as the Best Managed Company in the Philippines by the Asiamoney Magazine.

Through strategic alliances and subsidiaries, the Company has diversified into power generation, business reengineering and information technology consultancy, and real estate development. Its core business, however, remains to be electric distribution. It has approximately 8 000 employees spread throughout its 35 branches and operating centers.

## 1.2 Overview of Operational Issues

### *Rate Restructuring*

In an order dated February 27, 1995, the Energy Regulatory Board authorized the National Power Corporation to implement a new power rate schedule in the Luzon grid. This Order also directed all NPC utility customers to restructure their rates based on NPC's approved rate schedule.

MERALCO's application for rate restructuring followed NPC's restructuring and was granted a provisional approval in March 26, 1997. The subsequent effect on its customers' billings were made starting April 1, 1997.

Prior to the implementation of the new rate structure, NPC's billing to MERALCO was on a straight energy basis which did not provide any signal on the expensive nature of generation capacity nor any incentive for higher capacity utilization. Consequently, MERALCO's Generation Charge, that component of the bill which recovers purchased power cost, was also purely energy charge. Thus, MERALCO's previous generation charge hardly provided any incentive towards economic efficiency through the promotion of high load factor.

With the rate restructuring, MERALCO's bill also shifted to a simpler format consisting of the following components: Basic Charge, Currency Exchange Rate Adjustment and the Purchased Power Adjustment (PPA). The Basic Charge incorporates the Generation and Distribution Charges, the portion of the bill which recovers MERALCO's cost of operating and maintaining its distribution system. The PPA will capture any change in the purchased power cost incorporated in the basic charge.



The impact of MERALCO's rate restructuring differed depending on the customer's load factor. However, customers with no demand meters were not affected by the restructuring. Only those with demand meters, namely, the Industrial and Non-Industrial customers which accounted for more than 60% of total sales felt the impact of the restructuring. A customer with a load factor higher than 36.6% will experience a decline in his average rate while a customer with a load factor lower than 36.6% will be adversely affected with an increase in its rate.

Taking note of the implication of the restructuring on low load factor customers, the restructuring was undertaken in three steps over a period of 18 months, with the full impact to be felt on April 1, 1998. Demand-Side Management programs directed to these group of customers will also help cushion the impact of the restructuring.

The new rate structure now provides an incentive for more efficient capacity utilization not only on the bulk sale or generation level but as well as on the retail level.

### 1.3 Customer Mix

In 1996, MERALCO had a total of 2 869 532 consumers. The consumers are categorised into six customer segments, namely, Residential, Commercial, Industrial, Government Hospitals & Metered Streetlighting and Flat Streetlighting Service. The Residential segment is by far the largest segment and account for 90.5% of the total consumers. The Commercial category is the second largest accounting for 8.9% of the total consumers, followed by Industrial consumers (0.5%) and Other (0.1%). Shown below in Table 1 is the actual number of connections per customer classification and its corresponding kWh consumption for 1996.

| Customer Classification | No. of Connections | % of Total | MWh Consumption   | % of Total |
|-------------------------|--------------------|------------|-------------------|------------|
| Residential Customer    | 2 596 687          | 90.5%      | 5 975 800         | 33.8%      |
| Commercial Customer     | 255 640            | 8.9%       | 5 805 100         | 32.6%      |
| Industrial Customer     | 13 073             | 0.5%       | 5 909 200         | 33.2%      |
| Others                  | 4 132              | 0.1%       | 120 400           | 0.7%       |
| <b>TOTAL</b>            | <b>2 869 532</b>   |            | <b>17 810 400</b> |            |

Table 1 Customer Numbers and Consumption by Customer Class

### 1.4 Trends

#### 1.4.1 Customers

The number of MERALCO customers has increased steadily over the past ten years at an averaging rate of 6% per year. This reflects successive franchise acquisitions as well as customer growth in the older franchise areas. Residential customers remained the fastest growing customer class, followed by the commercial segment. In 1996, a reduction in

from commercial to industrial service was made, thus the 137.8% increase in industrial customers in that year. Figure 1 below shows the trend in customer numbers since 1987.

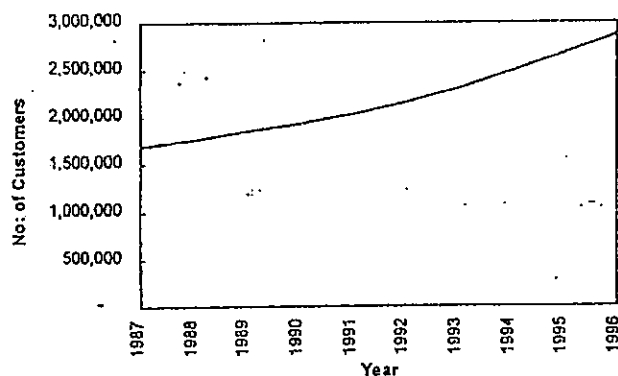


Figure 1 Historical Growth in Customer Numbers

### 1.4.2 Energy Sales

Energy sales have grown consistently at an average rate of 8.1% per year for the past ten years. However, growth in earlier years was only minimal, and exceptional growth had been registered only during the past three years. In 1994, total sales exhibited a high growth rate of 18.8%, due to recovery from the 1993 power crisis. The trends in historical sales is shown in Figure 2.

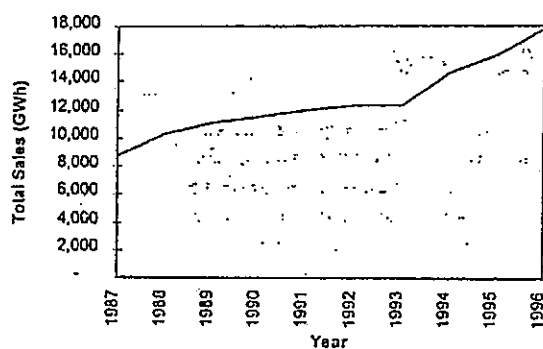


Figure 2 Historical Energy Sales

### 1.4.3 Peak Load

Peak load grew at an average of 6% every year. However, an exceptional increase of 12.4% was noted in 1994, again, because of the recovery from the power crisis. In 1996, another big increase, this time 10%, was noted, reflecting the bullish economy experienced in 1996.

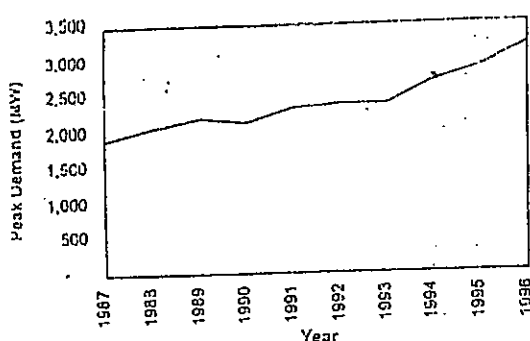


Figure 3 Historical Peak Load

6 d (i)-(iii)

## 2. LOAD FORECAST

Number of customers is forecast to increase by 8.3% in 1997, but after this, the customer count will slow down significantly to average about 1.7% per year growth rate. The slump is attributed to the end of the DAEP/REP<sup>a</sup> program of the company, which was actually the main source of significant growth rates in customer count in the past years. Consequently, the residential customer class will only grow by around 1.6% after 1997. Commercial customers are projected to show a tapered growth rate averaging 2.6% per year, while industrial customers are expected to increase by 3.9% per year as a result of the intensive campaign to industrial customers. The sales and demand forecasts are based on these customer growth projections.

5 (i) 1 b

### 2.1 Energy Sales and Demand

Energy sales is forecast to grow at an average of 8.5% every year for the next 15 years. As a consequence of the restructured rates, the industrial customer class is expected to grow faster compared to previous years. Commercial sales is also expected to grow faster at an average of 8.7% per year. In contrast, residential sales will only achieve minimal growth due to the poor incentives accorded by the restructured rates. As a result of these major developments, the share of residential sales to total sales is expected to decline to slightly below 30%, the excess being picked up mostly by industrial sales whose share is expected to increase to close to 40%.

Details of forecast energy sales in each customer class are given in the Appendices (Section 8.1) and shown in Figure 4 below.

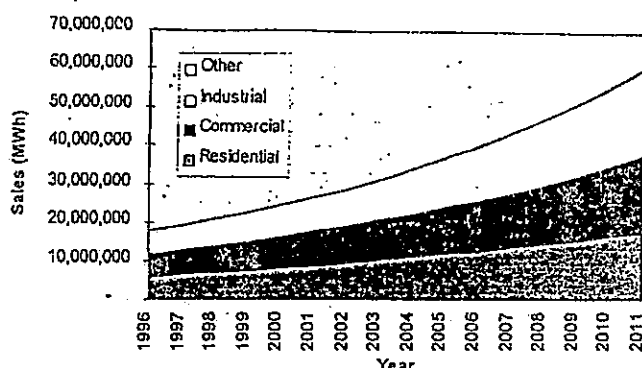


Figure 4 Electricity Sales Forecast (SJW2)

Peak demand is projected to grow by an average of 8.2% per year. Hopefully, with load management efforts, the 10% growth rate in 1997 will slowly taper off to about 8% growth per year. In the year 2011, peak demand is projected to reach 10 554 MW.

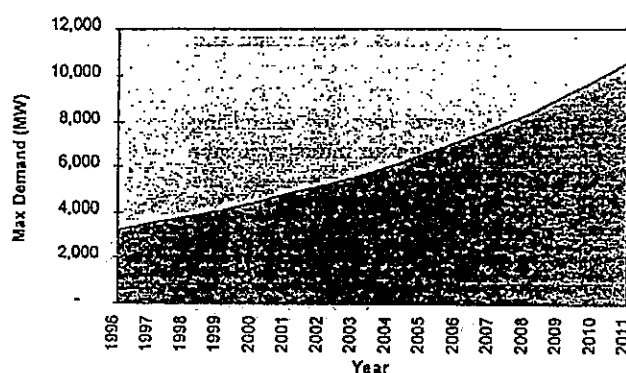


Figure 5 Electricity Demand Forecast

## 2.2 Overview of Alternative Forecasts (SJW3)

5 (i) 1 b  
6 d (i)

This document proposes a set of pilot DSM programs before full-scale implementation, which is consistent with the DSM framework. Future loads which differ from the load forecast will have no effect on the pilot stage of the DSM programs. The main effect of future loads being different from those forecast is in the total magnitude of energy and demand savings available. Provided a DSM program can achieve a high enough level of participation to cover its fixed costs, variation of future loads from those forecast is not likely to be a significant problem. Alternative forecasts have therefore not been considered in this document.

### 3. OBJECTIVES

5 (i) 1 a  
6 a

#### 3.1 Corporate Objectives

##### *Company Philosophy*

Service With Integrity

##### *Company Vision*

MERALCO aims to be a world class electric utility firm by year 2000 and to be among the best, if not the best, in the Asian region.

MERALCO is undergoing a self-initiated complete transformation of business processes, organization, corporate culture, information technology, telecommunications and facilities to be more customer-focused.

For its investors and shareholders, MERALCO will remain a blue-chip company of viable, long term investment. For employees, it will continue to be the best employer where opportunities for personal and professional growth thrive.

For customers, MERALCO is changing to serve best by delighting consumers. For the country, MERALCO will remain an industry leader and a responsible corporate citizen that fuels progress as the Philippines emerges as Asia's newest tiger economy.

##### *Changes in Utility Regulation*

The proposed Omnibus Electric Industry Bill pending in both Houses of Congress will create fundamental changes in regulation of electric utilities as well as the industry structure itself. Initially, there will be competition in the wholesale market, meaning competition among various sources of generation. This means distributors will have a choice of where to source their power requirements. The market will eventually move towards retail competition, which basically means that customers will have a choice of which provider they wish to source their power.

The basic directions of tariff regulations will be toward cost-reflective rates which will eliminate cross-subsidies. Charges will be unbundled. Meanwhile, wire charges and other charges for captive customers will continue to be regulated.

Being aware of the challenges and now continuous unfolding in the Company's environment, MERALCO is getting ready for competition by focusing in what it considers the most important dimension — the customer.

The focus is evident in the strategies the Company has been taking in all these years. First, is the continuous system upgrading to improve the quality and reliability of the electricity delivered to the customers. It is believed that through efficiencies and productivity gains, lower price of electricity can also be achieved.

The Company has been taking not only a very proactive stance but also a most innovative approach to this emerging market conditions. Aside from the system upgrading, it has established the "account management" approach and taken more aggressive demand-side management activities with its customers. It is within this environment that Demand-Side Management programs can be offered to customers as a package of services aimed at providing solutions to customers' needs. Through these value-added services, MERALCO is moving towards its vision of becoming a electric utility of the future: focused on service rather than the commodity or kWh, solutions-focused and dynamic in the development of new products and services.

#### *Company Mission*

Our mission is to serve our customers by providing efficient, adequate and reliable electric service at reasonable cost

#### *Company Objectives*

In fulfilment of this mission and guided by the Company philosophy, we shall pursue the following objectives:

1. We shall provide a quality of service within standards acceptable internationally.
2. We shall strive to bring the benefits of electrification to the greatest possible number of people and businesses within our franchise area.
3. We shall strive to seek and adopt a reasonable rate structure that would truly reflect the cost of providing the desired level of electric service.
4. We shall maintain adequate return to ensure our financial viability and standing in the business community.
5. We shall remain steadfast in our commitment to enhance the productivity of our resources.
6. We shall provide our employees with opportunities for professional growth and advancement on the basis of performance, integrity and loyalty to the Company

7. We shall provide our employees with just and reasonable compensation and benefits and attend to their personal well-being.
8. We shall uphold and maintain at all times high standards of business ethics. In our endeavors, we shall be guided primarily by the basic principle that the Company's interests and those of the public are complementary and inseparable.
9. We shall fulfil with dedication and commitment our social responsibilities.
10. We shall undertake, by ourselves and through subsidiaries, activities which support and complement our operations, enhance the use of our resources and contribute to the economic and social development of our country.

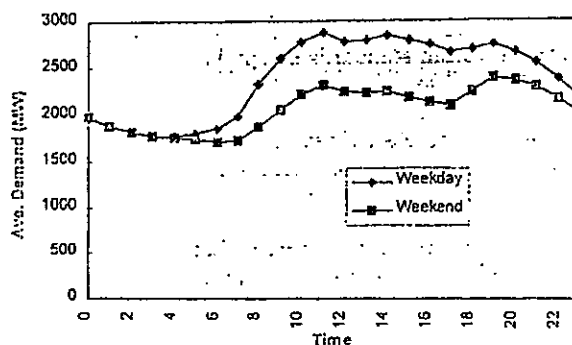
5 (i) 1 d  
5 (i) 2 c

## 3.2 DSM Objectives

### 3.2.1 Load-Shape Related Objectives

Typical system daily load profiles for the year 1996 is shown in Figure 6 below. The profile indicates a base load of around 1 600 MW and a peak period starting around 10 am and extending to around 9 pm.

Figure 6 Typical Daily Load Profiles in 1996



There are several DSM options that address specific load shape objectives. These include:

- peak clipping — the reduction of utility load primarily during periods of peak demand;
- valley-filling — the improvement of system load factor by building load in off peak periods;
- load shifting — the reduction of utility peak demand while at the same time building load in off peak periods.

periods. Load shifting typically does not substantially alter total electricity sales;

- conservation — the reduction of utility loads, more or less equally, during all or most hours of the day;
- load building — the increase of utility loads, more or less equally, during all or most hours of the day; and
- provision of a more flexible utility load shape - programs that set up utility options to alter customer energy consumption on an as-needed basis, as in interruptible / curtailable arrangements.

The DSM load shape objectives that are most appropriate for MERALCO in the short term are peak clipping and strategic conservation. Valley filling, load shifting, and flexible utility load shape may also be applicable to MERALCO as DSM load shape objectives in the medium term.

### 3.2.2 Non-Load-Shape Related Objectives(SNW4)

MERALCO's non-load-shape related objectives for DSM are consistent with the general corporate objectives. They include improving customer satisfaction by improving the quality of service to customers and improving the value for money that customers receive from their electricity service. In addition, DSM will help meet the objective of reducing the impact that electricity services have on the environment.

MERALCO's DSM strategies focus on the enhancement of customer service to manifest the Company's concern by providing service beyond the customers' electricity meter. Activities include visits to customers' sites to educate them on basic energy management and energy efficiency. The customer contact is also used to reach out to meet customers' needs and solve their problems. Eventually, DSM can be transformed into the provision of energy services tailored to customers' needs. MERALCO will be able to use Demand-Side Management programs to develop customer loyalty and thereby help the Company retain valuable customers as competition is introduced to the power industry. By showing genuine customer care, the Company is able to foster better relationships and consequently customer loyalty.

As an alternative to supply-side resources, DSM measures promoting energy efficiency have great potential for the reduction of greenhouse gas emissions. By helping customers to be more efficient in their energy use, less power generation is needed, leading to decreased or avoided emissions of carbon dioxide and other environmental externalities. In this way, MERALCO is able to contribute its share to preserving the natural environment and promoting sustainable development.



## 4. RECOMMENDED DSM OPTIONS, PROGRAMS & PLAN

### 4.1 Options / Technologies

5 (i) 1 f  
5 (i) 2 f & h  
6 c

The system load profile indicates three peaks - two during daytime (11am and 2pm) caused by industrial / commercial sector activity and an evening peak with the residential sector being the main contributor. The daytime peak could be attributed primarily to the air conditioning load while the evening peak primarily due to lighting.

### 4.2 Rationale for selection of customer groups targeted

In order to achieve the DSM objectives, programs in all customer segments have to be targeted as their contribution to the system peak are at different periods. At present, there is only about 5% difference between the two peaks with the daytime peak being the greater in the weekdays and the evening peak being greater in the weekends. The large industrial customers appear to be the major contributors to the system base load considering their relatively flat load profile and 24 hour operation. Programs in this sector, primarily in efficient end use technologies, would also make a major contribution towards achieving the DSM objectives.

6 i

### 4.3 Programs

#### 4.3.1 Overview

The following programs and activities have been selected and included in the Plan:

1. Compact Fluorescent Lighting Program
2. Green Buildings Program
3. Industrial Efficiency Program
4. Industrial Demonstration Program
5. Power Factor Correction Program
6. Load Factor Improvement Program
7. Streetlight Conversion Program
8. Load Research

### Overview of Load Shape Objectives

The load shape objective/s of each of the proposed programs are outlined in Table 2. The detailed program descriptions in subsequent sections

| Program                              | Load Shape Objective/s                                | Comments                                                                                                                                                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compact Fluorescent Lighting Program | Peak Clipping                                         | The residential lighting end use load shape is highly coincident with the utility system peak, so improving the efficiency of this particular end use tends to reduce the system peak                                                                                              |
| Green Buildings Program              | Peak Clipping & Strategic Conservation                | Most commercial end uses are highly coincident with the daytime peak, so improving the efficiency of primarily air conditioning and lighting tends to reduce the system peak                                                                                                       |
| Industrial Efficiency Program        | Peak Clipping, Load Shifting & Strategic Conservation | Most Industrial customers operate 2 or 3 shifts and are major contributors to the system base load.. Improving the efficiency of end uses primarily motors and drives, and load management will assist in reducing system peak.                                                    |
| Industrial Demonstration Program     | Peak Clipping & Strategic Conservation                | The end uses demonstrated are motors and lighting which contribute to the system peak                                                                                                                                                                                              |
| Power Factor Correction Program      | Peak Clipping (kVA)                                   | This program reduces apparent power (kVA) therefore reducing transformer capacity requirements and hence network capital costs for the same real power (kW) and therefore level of energy service.                                                                                 |
| Load Factor Improvement Program      | Peak Clipping and Load Shifting                       | The introduction of more cost-reflective pricing will provide customers with low load factors to improve them. This program will help provide those customers with ways to respond to the price signal by decreasing their peak demand or increasing loads at other times or both. |
| Streetlight Conversion Program       | Strategic Conservation                                | The street lighting end use load shape is highly coincident with the utility system peak, so improving the efficiency of this particular end use tends to reduce the system peak                                                                                                   |

Table 2 Customer Segments Targeted by the Programs

### Overview of End Use Technologies

The end use technologies promoted by the programs are outlined in Table 3.

| Program                              | End Use                        | "Base" Technology                        | "Peak" Technology                                                 | Table 3 Customer Segments Targeted by the Programs |
|--------------------------------------|--------------------------------|------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|
| Compact Fluorescent Lighting Program | Lighting                       | incandescent lamp                        | compact fluorescent lamp                                          |                                                    |
| Green Buildings Program              | All considered – site specific | Standard technologies and practices      | Energy efficient technologies and improved practices              |                                                    |
| Industrial Efficiency Program        | All considered – site specific | Standard technologies and practices      | Energy efficient technologies and improved practices              |                                                    |
| Industrial Demonstration Program     | Motors and lighting            | Standard motors and Mercury Vapor lamps  | High efficiency motors, variable speed drives and HP Sodium lamps |                                                    |
| Power Factor Correction Program      | All                            | Financial penalties for low power factor | Capacitor banks to improve power factor                           |                                                    |
| Load Factor Improvement Program      | All considered – site specific | Standard operation practices             | Improved operation practices                                      |                                                    |
| Streetlight Conversion Program       | Lighting                       | High Pressure Mercury lamps              | High Pressure Sodium lamps                                        |                                                    |

#### Overview of Customer Segments

The programs apply to the customer segments as indicated in Table 4.

| Program                              | Residential | Commercial | Industrial | Other | Table 4 Customer Segments Targeted by the Programs |
|--------------------------------------|-------------|------------|------------|-------|----------------------------------------------------|
| Compact Fluorescent Lighting Program | ✓           |            |            |       |                                                    |
| Green Buildings Program              |             | ✓          |            |       |                                                    |
| Industrial Efficiency Program        |             |            | ✓          |       |                                                    |
| Industrial Demonstration Program     |             |            | ✓          |       |                                                    |
| Power Factor Correction Program      |             | ✓          | ✓          |       |                                                    |
| Load Factor Improvement Program      |             | ✓          | ✓          |       |                                                    |
| Streetlight Conversion Program       |             |            |            | ✓     |                                                    |
| Load Research                        | ✓           | ✓          | ✓          |       |                                                    |

#### 4.3.2 Compact Fluorescent Lighting Program

##### Customer Segment Targeted

This program will be offered to residential and commercial customers

### *End Use and Technology*

This program targets the lighting end use, which is a significant contributor to the MERALCO system peak during the evening. Compact Fluorescent lamps (CFLs) are able to provide the same light output as an incandescent lamp with considerably less energy input.

### *Key Barrier/s*

In the medium term the energy savings from using a CFL in place of an incandescent lamp are greater than the higher cost of the incandescent lamp. However, not all residential customers who could use CFLs in place of incandescent lamps do so. Perhaps the main barrier to the use of CFLs is their high cost compared with the cost of a standard incandescent lamp. Other barriers may include:

- lack of customer awareness of the energy- and money-saving potential of CFLs;
- mistrust of the energy-saving and extended life information on the lamp packaging; and
- not "getting around to" purchasing a lamp.

### *Program Objective*

This program aims to encourage customers to install compact fluorescent lamps (CFLs) to replace existing incandescent lamps, by providing customers with the lamp(s) and the opportunity to pay in instalments. One of the main barriers to the installation of CFLs is their high cost, compared with the cost of a standard incandescent lamp. Allowing customers to pay for the lamp in instalments, will help to overcome this barrier.

### *Program Description*

A CFL uses approximately one-quarter the energy of a standard incandescent lamp, while providing equivalent lighting output. In addition, the life expectancy of a CFL is about eight times as that of a standard incandescent lamp. CFLs come in two types of ballasts - electro-magnetic and electronic. The electro-magnetic lamps are heavier but more robust and can withstand voltage fluctuations than the electronic lamps. This is an important consideration in the Philippines where power quality is an issue in most utilities.

There are several brands of electro-magnetic CFLs available in the Philippines, the most common being the Philips SL2000 series (13 W, 15 W, 21 W and 25 W) which are manufactured locally. In fact, the 21 W lamp is designed for a wide voltage tolerance (180 V to 260 V).

This program has been modelled on the basis that the customer purchases the CFLs from approved retailers and pay for the lamps.

a period of 18 months. MERALCO will reimburse the retailers at regular intervals.

The main features of the program are as follows:

- Lamp manufacturers will be requested to provide details of their range of CFLs - technical specifications, program price and warranty periods.
- MERALCO will prepare a list of CFLs that they wish to promote - based on power factor, suitability under supply conditions, cost and warranty provided. The warranty period need to be at least the duration of the repayment period.
- MERALCO will call for registration of interest from retailers wishing to participate in the program and select the retailers. Advice from the lamp manufacturers will be sought during this process.
- Agreement is reached with the retailers on the selling price of the selected CFLs - the aim will be to have the same selling price for all the CFLs under the program. The selling price would include MERALCO's administration and finance costs.
- The participating retailers will be briefed on the program elements - responsibilities, program duration, reimbursement procedures etc.
- Program details will be publicised in the media and formally launched. Co-financing of advertising by the lamp manufacturers will be considered.
- Customers will purchase CFLs from the approved retailers and sign an agreement to pay in instalments. Customers will be required to produce a copy of their electricity bill at the time of purchase for verification and inclusion of account details in the agreement. There will be a limit of 3 lamps per customer.
- The retailers will send the details of sales and copies of the customer agreements to MERALCO at regular intervals (once a month) for processing.
- MERALCO will send a letter of confirmation to the customer of the purchase and the date of inclusion of the first instalment in the customer's electricity bill.
- MERALCO will reimburse the retailers on the conditions specified under the MERALCO Retailer Agreement.

- The program will initially run for a period of 3 months and evaluated. The program will then continue for another 3 months following any revisions to the original approach.

The costs associated with this program include:

- Set-Up Costs - Financing costs, Billing system modifications, retail staff training.
- Advertising - posters, media advertising
- Administration - coordination with lamp manufacturers and retailers, processing payments, monitoring, evaluation

#### 4.3.3 Green Buildings Program

##### *Customer Segment Targeted*

This program targets large commercial buildings, including office buildings, retail shopping malls, hotels, hospitals and university campuses.

##### *End Use and Technology*

The program is aimed at all cost-effective opportunities for energy efficiency improvement, regardless of the end use.

##### *Key Barrier/s*

Opportunities for energy efficiency improvement exist because:

- customers are not aware of the opportunities;
- customers are too busy with the day-to-day business to make changes;
- customers do not have available capital for non-core business investments;
- customers do not have the resources to project manage energy efficiency improvement projects through the long process from the identification of opportunities through obtaining finance to installing the equipment and measuring the results; and
- customers are not prepared to take the risk of savings not eventuating.

ESCO services are designed to overcome all of these barriers to energy efficiency improvements by providing a full service from identification of opportunities to arranging off-balance sheet financing; managing the installation of equipment and bearing the risk by a performance guarantee on the savings.

##### *Program Objective*

The objective of this program is to implement energy efficiency

called Green Malls, will involve a shopping mall and is aimed at demonstrating high efficiency, mainly lighting and air conditioning, technologies in the shopping malls of Metro Manila

#### *Program Description*

In 1996, the commercial sector accounted for 33% of the total sales and offer significant potential for cost effective energy conservation. Shopping Malls because of its sheer size are one of the most energy intensive segments in the commercial sector. Since 1985 the power demand of the shopping malls sub-sector in Metro Manila alone has increased by 15% per year and accounted for 7.5% of the entire commercial sector's consumption in 1996. It was on this basis that a shopping mall was selected for the first pilot project.

The pilot project (Green Malls) will be implemented in association with the International Institute for Energy Conservation (IIEC). Preparatory work on this project commenced in April 1997 and the following milestones have been achieved to date:

- Completion of preliminary energy surveys in three shopping malls
- A five day Green Malls Seminar conducted for shopping mall management/ owners.
- Selection of the site for the pilot project and a letter of intent for participation obtained from the owners.

The next step would be the selection of an ESCO to undertake the implementation of the project and finalising the financing and implementation agreements. Upon finalization of this project it is proposed to implement a similar project in an office building for evaluation. The MERALCO Headquarters building has been earmarked for this project.

Following the completion of the two pilot projects and upon establishment of a credible ESCO(s), the program will be promoted on a large scale (Green Buildings Program) to the relevant segments in the commercial sector.

### **4.3.4 Industrial Efficiency Program**

#### *Customer Segment Targeted*

This program targets large industrial customers of more than 1 MW peak demand.

#### *End Use and Technology*

The program is aimed at all cost-effective opportunities for energy conservation in the industrial sector.

### *Key Barrier/s*

In the industrial sector it is normal to focus efficiency gains on process related improvements rather than energy. In most cases, the cost of energy is only a minor component of the overall costs. As a result there is a tendency to divert scarce capital resources towards process improvements rather than on energy.

In addition, most industries have limited technical resources who are normally preoccupied in plant operation and maintenance that they have little time spend on improvements outside the core business.

### *Program Objective*

The objective of this program is to provide value added services to large industrial and commercial customers to ensure that they are operating at maximum cost-effective efficiency levels. The main objective is to minimize electricity costs. However, opportunities to improve quality and reliability of supply will also be considered. The value added services would include load management, energy audits, power quality / reliability audits and assistance with implementation through ESCOs.

### *Program Description*

This program aims to increase the level of services to MERALCO's customers. A recent survey amongst the large industrial and commercial customers has identified several key areas where the service could be improved. The three main areas were :

- . electricity costs;
- . reliability.

MERALCO proposes to take a customized approach with its customers in addressing these issues because the priorities and requirements vary from one customer to another.

MERALCO proposes to conduct load management studies and energy audits in order to minimize the customer's energy costs through the implementation of energy efficiency measures. In addition, it is proposed to conduct interviews with selected customers to determine their level of satisfaction with MERALCO's service and identify areas where they think the service could be improved. This would be followed up with an in depth technical evaluation to determine the causes, the solutions and costs to rectify any service problems such as power quality and reliability.

It is proposed that the improvements be made under an ESCO arrangement which would address the key barriers - lack of capital and internal staff resources to undertake projects outside a company's core business.



#### 4.3.5 Industrial Demonstration Program

##### *Customer Segment Targeted*

This program is focused on four customers in the Industrial sector

##### *End Use and Technology*

The end uses are motor drives and lighting. The technologies to be demonstrated are High Efficiency Motors (HEM), Variable Speed Drives (VSD) and High Pressure Sodium (HPS) lamps.

##### *Key Barrier/s*

The hardware is funded by the Philippines DSM Project and it is the responsibility of the Companies to meet the installation costs. The only barrier appears to be the agreement by the recipients to meet the installation costs.

##### *Program Objective*

Under the Philippine Demand Side Management Project, several demonstration projects have been identified for implementation in 1998. The objective of this program is to monitor the performance of the technologies following implementation. The results of this program will be used in the promotion of HEMs and VSDs in 1999 / 2000.

##### *Program Description*

The following projects have been identified in MERALCO's service territory:

1. Vitarich Corporation : Installation of Variable Speed Drives in the hammer mill and the pellet mill to regulate the speed of a 125 hp and 220 hp motors respectively. In addition, the installation of a central air plant with station control to operate 3 base load units, 1 swing load and 1 stand-by unit during periods of high load.
2. AZKON Group of Companies : Replacement of an existing rewound motor with an high efficiency motor; installation of pressure control device in the air compressor plant to provide effective load control and discharge pressure; an retrofit of the hot face of an electric oven with ceramic fiber blanket to reduce heat-up time.
3. Filtex Manufacturing Corporation : Installation of a Variable Speed Drive for a circulation pump and also replace the 40 hp motor with a high efficiency motor of a water supply system. and installation of an Ogden pump for efficient conveying of

4. Continental Steel Corporation : Replacement of existing Mercury Vapour (MV) lamps with High Pressure Sodium (HPS) lamps.

MERALCO is intending to install equipment for pre installation monitoring. The monitoring will be continued for at least six months after installation prior to evaluating the results.

The costs associated with this program are as follows:

- . Equipment - monitoring equipment
- . Administration - co-ordination, monitoring and evaluation

#### 4.3.6 Power Factor Correction Program

##### *Customer Segment Targeted*

This program is focused on MERALCO's large industrial and commercial customers

##### *End Use and Technology*

Power factor is improved through the installation of capacitor banks at customer's load sides.

##### *Key Barrier*

Although MERALCO is initially intending to meet the up front costs of 20 pilot projects which would be repaid by the customer by twelve monthly instalments, there is still likely to be customer doubt if savings can be realized. The other barriers include:

- . Lack of technical information
- . Lack of customer resources to undertake or manage installation.

##### *Program Objective*

The program objectives are:

- . to improve the average power factor of Industrial Service (IS) and Non-Industrial Service (NIS) accounts to 96%;
- . provide for a rapid implementation of the capacitor installation program to reduce MERALCO's capital requirement in the upgrading of its distribution facilities; and
- . to improve customer service and customer relations through better utility-facility owners co-operation.

### Program Description

The program is directed at power factor metered customers whose billing demand is in excess of 100 kW. In August 1997, 1353 customers registered power factors of less than 85%. MERALCO's tariff structure levies a surcharge on accounts with registered average monthly power factors of less than 85% while discounts are given to those accounts with registered demands of more than 85%.

The regional Sales offices of MERALCO are already advising customers of the merits of improving their power factors to more than 85%. In 1996, out of a total of 924 accounts that were advised only 16% of the accounts were convinced to install capacitors on their load sides. The installation was carried out by contractors on a performance contract for improvement of power factor to 96%.

The program will be implemented in two phases. Phase 1 will be a pilot program which would include two seminars for representatives of 200 accounts. The participants for the seminars will be selected on the basis of the lowest power factor but with high registered demands. Twenty participating companies will be selected for a pilot capacitor installation program. The supply and installation will be carried out by performance contractors who will be compensated on the basis of the measured results. The customers will pay for the installations in twelve monthly instalments through their electricity bills.

Phase 2 will be a full scale program based on the results of the pilot program and will cover the rest of the targeted customers.

### 4.3.7 Load Factor Improvement Program

#### Customer Segment Targeted

Industrial and commercial customer segments — particularly those with load factors less than 37% who will experience a bill increase under the restructured rates explained below if they do not improve their load factor — are targeted in this program.

#### End Use and Technology

The program is aimed at all cost-effective opportunities for load management and energy efficiency improvement, regardless of the end use.

#### Key Barrier/s

The main barrier appears to be the capital costs associated with any recommended energy efficiency improvements. In the industrial sector it is normal to focus efficiency gains on process related improvements rather than energy. In most cases, the cost of energy is still a minor component of the overall cost of a product. The cost of energy is still a minor component of the overall cost of a product.

source capital resources towards process improvements rather than on energy.

In addition, most industries have limited technical resources who are normally preoccupied in plant operation and maintenance that they have little time spend on improvements outside the core business.

Load Management most often involve changes to plant operation procedures that have been used for a long period and convincing the employees requires a lot of effort.

#### *Program Objective*

The program is aimed at assisting customers with low load factors to better manage electrical loads to benefit from the rate restructure incentives.

#### *Program Description*

Last March 26, 1997, the Energy Regulatory Board (ERB) provisionally approved MERALCO's petition to restructure its rates. MERALCO is restructuring its rates to take into account changes in the National Power Corporation's (NPC) Luzon Grid rate structure. Before April 1995, NPC billings to MERALCO were computed using a straight energy charge of ₱ 1.8435 /kWh. Starting April 1995, the NPC billed MERALCO on a demand and energy rate system, charging ₱ 290.14 /kW of maximum demand and ₱ 1.2829 /kWh of energy consumption. Consequently, the ERB ordered "all NPC utility customers (in Luzon) to cause the restructuring of their rates based on NPC's approved (Luzon Grid) rate structure".

Complying with the ERB order, MERALCO proposed to restructure its Generation Charge, from a straight energy rate of ₱ 2.33 /kWh to a demand and energy rate of ₱ 195.00 /kW and ₱ 1.60 /kWh, respectively.

With ERB's approval, there will be an increase in the demand charge of non-residential customers with monthly demand greater than 5 kW, from the previous ₱ 25.00 /kW in the Distribution Charge to ₱ 220.00 /kW (₱ 25.00 + ₱ 195.00) in the Basic Charge. In turn, there will be a corresponding reduction in the energy charge of these customers. This new rate structure is intended to give customers a better appreciation of the costs associated with providing electrical power for the end-user by providing: (1) a price signal at least partly reflecting the cost of generating capacity, and (2) an incentive to improve their electricity utilization rates, as measured through their load factors.

The rate restructuring will have its impact specifically on MERALCO's Non-Industrial Service (NIS) and Industrial Service (IS) customers. The rate restructuring is designed to be revenue-neutral, which will ensure

customers. However, depending on their load factors, these customers may be adversely affected by or benefit from the rate restructuring. Load factor refers to the ratio of the average demand within a specific period to the highest demand registered within the same period. Since connection capacity is usually based on the peak demand of a facility, it describes the efficiency of capacity use. If the customers load factor is below 37%, then under the rate restructuring they will experience an increase in average electricity rates (P/kWh). Conversely, if their load factor is above 37%, they will experience a decline in electricity rates.

Because MERALCO recognizes the potentially adverse effect of the rate restructuring on its low load factor NIS and IS customers, MERALCO will phase-in the new rate structure to these customers over a period of twelve months. The first phase began last April 1997, the second on October 1997, and the final phase on April 1998, with the demand charge increasing to 90 P/kW, 155 P/kW, and 220 P/kW, respectively.

Among MERALCO's customers, manufactures of food, beverages, textiles, paper, plastics, cement, glass and electronics; private hospitals and hotels will benefit from the restructuring because of their typically high load factors. On the other hand, low load factor customers will have to manage their electrical consumption to avail themselves of the new incentives (SJWs) that are provided in the restructured rates. For its part, MERALCO will direct Demand Side Management (DSM) programs to these customers to help cushion the impact of the restructuring. With DSM, all customers have the potential to improve their energy efficiencies and bring up their load factors. (SJWs)

The program will initially include a pilot program covering about 40 customers in various industrial and commercial segments with load factors below 37% and would include workshops, seminars, replacement of existing kWh meters with digital meters, walk-through audits and assistance with implementation. A full scale program will be designed based on the lessons learnt from the pilot project.

#### 4.3.8 Streetlight Conversion Program

##### *Customer Segment Targeted*

The customer group targeted is local government units.

##### *End Use and Technology*

The program would replace existing MERALCO-owned high pressure mercury vapour street lights with high pressure sodium street lights and develop a standard design for street lighting in the franchise area applicable to all existing and new installations.

### *Key Barrier/s*

The street lights are owned by MERALCO. The lighting is paid for by local governments on a flat fee basis. This is known as a "chaufage" arrangement: the customer is buying an energy service from the utility — which provides both the energy and the equipment — rather than buying units of energy. Under this program MERALCO will provide the same (or better) energy service with high capital cost, low energy consumption lamps rather than low capital cost, high energy consumption lamps.

### *Program Objective*

The program aims to:

- optimise the energy efficiency of street lighting;
- to contribute to a reduction of the evening peak;
- to minimise the cost of street lighting inventory and installation costs (via use of a standard design); and
- to provide a standard level of lighting service (via use of a standard design).

### *Program Description*

There are currently around 178 000 high pressure mercury (HPM) street light installations in MERALCO's franchise area. The program proposes to replace these lamps with energy efficient high pressure sodium (HPS) lamps over a 10 year period. For the first seven years of the program priority will be given to streetlights within Metro Manila covering 97 142 installations.

The cost of installation per streetlight varies depending on the road classification, type of construction and lamp wattage. The maintenance costs of the HPS lamps are higher than the existing HPM lamps primarily due to higher costs of some parts of the HPS fixture. The effectiveness of the program will be monitored and evaluated during the program period.

In addition to the demand and energy savings the program offers other non quantifiable benefits to society, primarily in reduction of night time road accidents and crime.

A pilot program was implemented from 1993 to 1995 covering a total of 3 925 70 W HPS fixtures.

MERALCO also intends to standardise the design for street lighting for both existing and new installations.

The costs associated with this program are as follows:

- monitoring and evaluation

#### 4.3.9 Load Research

##### *Customer Segment Targeted*

All customer segments will be targeted

##### *End Use and Technology*

Most end uses especially lighting, air conditioning and motor drives.

##### *Key Barrier/s*

This is not a DSM program as such, it is a research activity to support DSM programs.

##### *Research Objective*

To develop an end-use load shape database for estimating end-use demand and designing and evaluating DSM programs.

##### *Research Description*

Load research is the measurement and evaluation of the utility's electric load characteristics. Data used to characterize loads can be gathered by metering, conducting energy-use surveys and reviewing billing information. Load research parameters that are determined usually include system peak and average loads, customer's coincident and non-coincident demand and the simultaneous demand of a customer group. Factors that characterize loads can then be derived for a system or specified subsystem.

The main objective of a load research project is to produce cost-effective, statistically sound, detailed databases necessary for resource planning, DSM program design and evaluation, cost allocation and tariff design, and load forecasting. Specifically, from the load research results, load profiles will be created and broken down into identifiable end-uses. This is essential for determining the patterns of energy usage and maximum demand of individual customer groups. Load research data also aid in the development of a daily, weekly or monthly pattern of consumption which will be able to pinpoint how specific end-uses contribute to this pattern. Thus, the vital information collected from load research becomes a valuable input not only in the planning, designing and evaluation of DSM programs but in the forecasting of customer's load as well.

Load research can be a complex and expensive undertaking because of the costly equipment, large sample sizes, extensive data processing, and intense analysis effort it requires. The scope of work may include six major tasks, namely:

- assessment of data requirements

- preparation of sampling and metering plan;
- field installation and data collection;
- database development and analysis of researched data;
- development of end-use forecasting model/s and
- preparation of demand projections; and documentation.

The methodology may employ a combination of statistical and engineering techniques using customer billing data and the more expensive metered end-use data. Another option is to consider a combination of whole building metering and simple end-use techniques using end-use loggers. This can provide levels of confidence and precision without complicated and intrusive comprehensive end-use metering methods.

Initial activities of MERALCO will be mostly in support of load research efforts of organizations such as the APEC Inter-Utility DSM Liaison Working Group and the National Load Research Association of the Philippines which is being organized under the leadership of National Power Corporation. In the medium-to-long term, MERALCO may consider adopting a phased approach and to hire a competent consulting firm to ensure effective project planning and implementation. Under this approach, load research will be first conducted on a specific customer group. Preliminary results shall serve as reference in proceeding with a class-wide (industrial, commercial, residential classes of customers) to a franchise-wide load research. In essence, experience gained from the initial phase will be leveraged for the succeeding load research activities on the rest of the customers.

## 4.4 Avoidable Costs and Externalities

### *Energy and Demand Avoidable Costs*

NPC is MERALCO's marginal supplier.<sup>(SJW7)</sup> This means that if MERALCO's customers reduce energy consumption, then MERALCO reduces its purchases from NPC.

The analysis in this submission uses the NPC contract charges to MERALCO as a proxy for the true total resource or societal avoidable costs of energy and generation capacity. The true values would be the energy and generation costs that would be avoided by NPC due to marginal reductions in energy and demand at the MERALCO bulk supply points. These numbers were not available to MERALCO within the time and resource constraints of this submission.

The "avoidable costs" used in this DSM analysis represent the value of those costs that would be avoided by MERALCO due to energy and demand savings from the equipment and behaviour changes promoted by the proposed DSM programs. Energy and demand savings achieved



MERALCO makes to the National Power Corporation (NPC) under its energy supply contract, provided that those savings do not take MERALCO's total purchases below the take-or-pay "contract demand" threshold for energy and/or demand. The current MERALCO contract with NPC is structured to:[SJW9]

- avoid paying for unused supply via a margin for demand and energy being below what is projected; and to
- avoid penalty maximum demand payments via a margin for maximum demand going above what is projected; as well as to
- provide some flexibility by allowing two alterations to the "contracted demand" level in each calendar year.

The analysis in this document assumes that DSM impacts will not take MERALCO below the take-or-pay contracted threshold. In other words, it is assumed that adjustments to the contract demand could always be made in time to avoid this so the end use savings would always provide bulk supply savings to MERALCO on their monthly NPC bill.

| Type   | Avoidable Cost        | Units                               |
|--------|-----------------------|-------------------------------------|
| Energy | 1.2829                | P.kWh <sup>-1</sup>                 |
| Demand | 12 * 290.12 = 3481.68 | P.kW <sup>-1</sup> .y <sup>-1</sup> |

Table 5 MERALCO's NPC Contract Charges used as Avoidable Costs in the Analysis[SJW9]

Table 3 shows the marginal energy charge from NPC. Note that it is a conservative value, as it does not include the "Fuel and Purchased Power Adjustment" (FPCA) nor does it include the "Foreign Exchange Adjustment" (ForEx).[SJW10]

#### Network Avoidable Costs

The analysis does not assign any avoidable cost values to the sub-transmission and distribution network. This would require very detailed, time-consuming and costly work treating each small local area separately and is not appropriate for first-time pilot DSM programs as proposed here. Moreover, experience elsewhere suggests that the avoidable costs available in the local network are usually small compared with the avoidable costs of energy and generation capacity.

#### Avoidable Environmental Externality Costs

This analysis does not use avoidable externality costs. A collaborative process is underway to determine a set of avoidable externality costs for DSM planning in the Philippines, but it has not yet produced a set of numbers for use. The addition of avoidable externality cost data to the analysis would only make the proposed DSM programs more cost-effective under the societal test than they are as presented below

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 6 e (ii) & (iii)

## 4.5 Technology Cost-Effectiveness

For a DSM program to be cost-effective against the societal test, as required in the Philippines DSM framework, the proposed DSM technology must be cost-effective at the unit technology level. That is, the costs saved by the DSM technology must be greater than the cost of the DSM technology. This comparison is essentially the application of the total resource cost test or (if reduced externality costs are used in the comparison) the societal test at the individual technology or individual market unit level without including program costs.

### 4.5.1 Compact Fluorescent Lighting Program [SJW11]

Table 6 shows the step-by-step calculation approach to the technology-level cost-effectiveness analysis. For both energy and demand, the process involves subtracting the DSM technology data from the base technology data; allowing for marginal system losses and multiplying by the avoidable costs (from the power purchase contracts). This provides the benefits, which can then be compared with the incremental technology costs to determine the overall cost-effectiveness.

Table 6 shows that the substitution of two 21 W compact fluorescent lamps for two (average) 50 W incandescent lamps that are used for three hours each evening every night of the year will deliver benefits of ₱ xxx[SJW12] to MERALCO and its customers as a whole at an incremental technology cost of ₱ yyy[SJW13] for a net benefit of ₱ zzz[SJW14] at a benefit / cost ratio of BCR[SJW15].

With such a high benefit / cost ratio, the net benefit from the program as a whole should easily be large enough to cover the costs of running the program and still have a pool of benefits significantly larger than the costs.

Technology

|                 |                                  |
|-----------------|----------------------------------|
| Base Technology | 2 x 50W Incandescent Lamp        |
| DSM Technology  | 2 x 21W Compact Fluorescent Lamp |
| Service Life    | 6 years                          |

Table 6 Technology

Cost-Effectiveness of Compact Fluorescent Lighting Program

Energy

|                                                   |                    |
|---------------------------------------------------|--------------------|
| Base Annual Energy <sup>1</sup>                   | kWh                |
| DSM Annual Energy <sup>2</sup>                    | kWh                |
| Delta Annual Energy                               | kWh                |
| Marginal System Losses <sup>3</sup>               |                    |
| System Annual Energy Impact                       | kWh                |
| Present Value Avoidable Energy Costs <sup>4</sup> | P/kWh <sup>4</sup> |
| Present Value Reduced Energy Supply Costs         | P                  |

Demand

|                                                   |                   |
|---------------------------------------------------|-------------------|
| Base Peak-Coincident Demand <sup>5</sup>          | kW                |
| DSM Peak-Coincident Demand                        | kW                |
| Delta Peak-Coincident Demand                      | kW                |
| System Losses                                     |                   |
| System Peak-Coincident Demand Impact              | kW                |
| Present Value Avoidable Demand Costs <sup>4</sup> | P/kW <sup>4</sup> |
| Present Value Reduced Demand Supply Costs         | P                 |

Equipment Cost

|                                  |   |
|----------------------------------|---|
| DSM Equipment Cost <sup>7</sup>  | P |
| Base Equipment Cost <sup>8</sup> | P |
| Net Participant Costs            | P |

Total

|                                     |   |
|-------------------------------------|---|
| Present Value Reduced Supply Costs  | P |
| Present Value Net Participant Costs | P |
| Present Value Net Benefit           | P |
| Benefit / Cost Ratio                |   |

Notes:

1. Assuming 2 lamps \* 0.05 kW \* 3 hours \* 365 days. [SJW16]
2. Assuming 2 lamps \* 0.021 kW \* 3 hours \* 365 days. [SJW17]
3. The average system energy losses as a percent of consumption are x% [SJW18]. The marginal losses are equal to twice the average losses, and are therefore 2x%. [SJW19]
4. The MERALCO avoidable energy cost is 1.2529 P/kWh. Avoiding 1 kWh for six years (the life of the CFL) delivers MERALCO a stream of savings with a present value P [SJW20] when discounted at the total resource cost discount rate of 4%.
5. The peak-coincident demand figures are calculated as the wattage for two lamps with a 90% coincidence factor meaning that 90% of the lamps are on during the peak. [SJW21]

6. The MERALCO avoidable demand cost is 290.14 P/kW.month or 3,481.68 P/kW<sup>2</sup>.y<sup>-1</sup>. Reducing the system peak by 1 kW throughout the year for six years (the life of the CFL) saves MERALCO P. [SJW22]
7. Based on [SJW23]
8. This assumes the purchase of 6 incandescent lamps at P 15 over a period of 6 years, discounted at 10%pa. [SJW24]

#### 4.5.2 Green Buildings Program

As described above, this program is about ESCO implementation of energy saving measures in commercial buildings. An ESCO will only implement a package of measures that are cost-effective to the building operator. In other words, the value of savings from installing an energy efficiency measure must be sufficiently greater than the cost of the measure to justify the investment.

Now, allowing that the avoidable costs of energy and demand are slightly less than the tariff levels and assuming that the fixed / capacity / energy structure of the avoidable costs is not greatly different from the fixed / demand / energy structure of the tariff; any measure that passes the financial test applied by the ESCO will also pass the societal economic test as required by the Philippine DSM Framework.

#### 4.5.3 Industrial Efficiency Program

This program will be implemented by an ESCO mechanism, so the same logic as to the cost-effectiveness applies as in the case of the Green Buildings Program.

#### 4.5.4 Industrial Demonstration Program

The cost-effectiveness analysis for these demonstration projects has been conducted under the USAID Philippine Demand-Side Management project. The analyses are attached as appendices to this document. [SJW25]

#### 4.5.5 Power Factor Correction Program

Technology cost-effectiveness analysis will be conducted on a site-by-site basis. Power factor correction equipment will only be installed in customers facilities where it avoids greater transformer costs in the MERALCO network. [SJW26]

#### 4.5.6 Load Factor Improvement Program

As noted in the general program description above, in compliance with an order from ERS, MERALCO has restructured its Generation Charges, from a straight energy rate of P 2.33 /kWh to a demand and energy rate of P 1.05 /kW month and P 1.00 /kWh month.

There are an average of 730 hours per month.<sup>7</sup> Under the old rate structure, a customer who operated a 1 kW load constantly for 730 hours throughout a month so that it consumed 730 kWh would pay the same as a customer who operated a 730 kW load for one hour.

Using this example of 730 kWh of consumption, equivalent to a 1 kW load operated constantly for a month or a 730 kW load operated for one hour, Figure 7 shows that the load factor break-even point above which customers will experience a reduced bill under the new system and below which they will experience an increased bill is 37%.

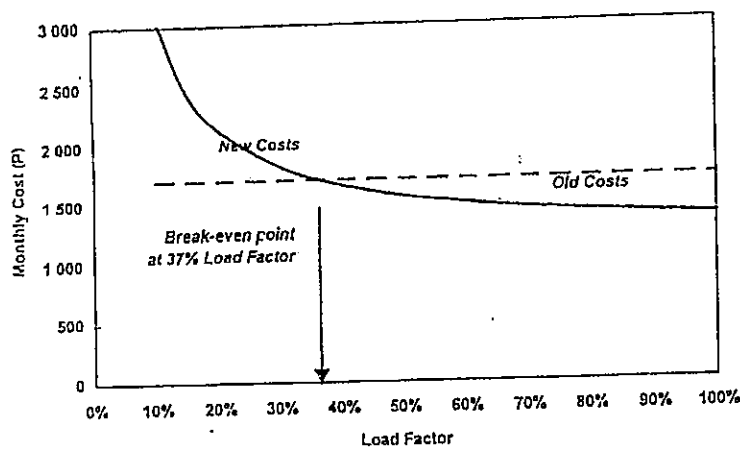


Figure 7 Comparison of New with Old Costs for as a Function of Load Factor

The pilot program will look for opportunities in each specific site to shift or peak clip loads where the cost of doing so is less than the value of the stream of bill savings that it provides. The results of the pilot activities will be used to develop the full program design.

#### 4.5.7 Streetlight Conversion Program<sup>13,14,27</sup>

<sup>7</sup> There are 365 x 24 = 8760 h per year divided by 12 months = 730 h per month.

|                                                   |                    |
|---------------------------------------------------|--------------------|
| <b>Technology</b>                                 |                    |
| Base Technology                                   |                    |
| DSM Technology                                    |                    |
| Service Life                                      | years              |
| <b>Energy</b>                                     |                    |
| Base Annual Energy <sup>1</sup>                   | kWh                |
| DSM Annual Energy <sup>2</sup>                    | kWh                |
| Delta Annual Energy                               | kWh                |
| Marginal System Losses <sup>3</sup>               |                    |
| System Annual Energy Impact                       | kWh                |
| Present Value Avoidable Energy Costs <sup>4</sup> | P/kWh <sup>1</sup> |
| Present Value Reduced Energy Supply Costs         | P                  |
| <b>Demand</b>                                     |                    |
| Base Peak-Coincident Demand <sup>4</sup>          | kW                 |
| DSM Peak-Coincident Demand                        | kW                 |
| Delta Peak-Coincident Demand                      | kW                 |
| System Losses                                     |                    |
| System Peak-Coincident Demand Impact              | kW                 |
| Present Value Avoidable Demand Costs              | P/kW <sup>1</sup>  |
| Present Value Reduced Demand Supply Costs         | P                  |
| <b>Equipment Cost</b>                             |                    |
| DSM Equipment Cost <sup>6</sup>                   | P                  |
| Base Equipment Cost <sup>7</sup>                  | P                  |
| Net Participant Costs                             | P                  |
| <b>Total</b>                                      |                    |
| Present Value Reduced Supply Costs                | P                  |
| Present Value Net Participant Costs               | P                  |
| Present Value Net Benefit                         | P                  |
| Benefit / Cost Ratio                              |                    |

Table 7 Technology Cost-Effectiveness of Street Lighting Program

Notes:

1. Assuming kW \* hours \* 365 days.[SJW28]
2. Assuming kW \* hours \* 365 days.[SJW29]
3. The average system energy losses as a percent of consumption are x%.[SJW30]. The marginal losses are equal to twice the average losses, and are therefore 2x%.[SJW31]
4. The NERALCO avoidable energy cost is 1.2829 P/kWh. Avoiding 1 kWh for x[SJW32] years (the life of the CFL) delivers NERALCO a stream of savings with a present value P [SJW33] when discounted at the total resource cost discount rate of 4%.
5. Street lamps are not coincident with the NERALCO peak, therefore this value is zero.
6. Based on [SJW34]
7. Based on [SJW35]

#### 4.5.8 Load Research

Technology cost-effectiveness analysis does not apply to this particular research activity.

### 4.6 Market Size and Participation Projections

#### 4.6.1 Compact Fluorescent Lighting Program

[S:W36]

#### 4.6.2 Green Buildings Program

ESCO projects have relatively high transaction costs and therefore require fairly large sites to be viable. As a rough guide, customers spending more than about ₱ 12.5 million per year may be candidates for ESCO projects. There are around 150 MERALCO commercial accounts of this magnitude. They consume in total about 1 500 GWh per year, which is just over one quarter of all commercial consumption.

The pilot program will first demonstrate large building energy efficiency retrofits in the MERALCO head office and will pilot an actual ESCO project in a major shopping mall.

A more detailed market potential assessment study will be conducted prior to the establishment of full-scale commitment to ESCO projects and submitted to ERB at that time.

#### 4.6.3 Industrial Efficiency Program

[S:W37] This program is for the group of industrial customers with greater than 1 MW demand. There are \_\_\_ of these customers. The pilot phase of this program aims to implement \_\_\_ projects in these large industrial facilities.

#### 4.6.4 Industrial Demonstration Program

Four companies have already been selected for this program. They are:

- Vitarich Corporation;
- AZKON Group of Companies;
- Filtex Manufacturing Corporation;
- Continental Steel Corporation.

#### 4.6.5 Power Factor Correction Program

The pilot phase of this program will target twenty customers. The full market potential will be assessed during this period.

#### 4.6.6 Load Factor Improvement Program

The program will initially include a pilot program covering about 40 customers in various industrial and commercial segments with load factors below 37%. Full scale market potential estimates will be based on the lessons learnt from the pilot project in conjunction with customer data. [SJW:18]

#### 4.6.7 Streetlight Conversion Program

[SJW:19]

#### 4.6.8 Load Research

This is a research activity, rather than a program, so there is no market potential as such. Results from the load research will be used to identify areas of further market potential for DSM.

### 4.7 Energy and Demand Effects

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6 e (iii)

#### 4.7.1 Compact Fluorescent Lighting Program

Table 8 shows the projected annual energy and demand savings for this program under the following assumptions:

- the program acceptance numbers are as indicated above; and
- the end use energy and demand savings and the utility losses are as described in Table 6.

[SJW:40]



| Year | End Use       | Peak-Coincident |
|------|---------------|-----------------|
|      | Energy Saving | Demand Saving   |
|      | kWh           | kW              |
| 1998 | Pilot         | Pilot           |
| 1999 |               |                 |
| 2000 |               |                 |
| 2001 |               |                 |
| 2002 |               |                 |
| 2003 |               |                 |
| 2004 |               |                 |
| 2005 |               |                 |
| 2006 |               |                 |
| 2007 |               |                 |
| 2008 |               |                 |
| 2009 |               |                 |

Table 8 Projected Energy and Demand Savings

#### 4.7.2 Green Buildings Program

The energy and demand results for the full program implementation will be achieved using the monitored results from the pilot stage of the program. [SOW-11]

#### 4.7.3 Industrial Efficiency Program

[SOW-12]The \_\_ industrial customers over 1 MW collectively consume \_\_ MWh annually. ESCO efficiency improvements can typically achieve 10% to 20% energy savings. If we assume that 15% savings are actually achievable, then the total potential for energy savings is as shown in Table 9.

| Year | Projected Energy Consumption | Estimated Potential Energy Savings (15%) | Target ESCO Energy Savings |
|------|------------------------------|------------------------------------------|----------------------------|
|      | MWh                          | MWh                                      | MWh                        |
| 1998 |                              | Pilot                                    | Pilot                      |
| 1999 |                              |                                          |                            |
| 2000 |                              |                                          |                            |
| 2001 |                              |                                          |                            |
| 2002 |                              |                                          |                            |
| 2003 |                              |                                          |                            |
| 2004 |                              |                                          |                            |
| 2005 |                              |                                          |                            |
| 2006 |                              |                                          |                            |
| 2007 |                              |                                          |                            |
| 2008 |                              |                                          |                            |
| 2009 |                              |                                          |                            |

Table 9 Projected Industrial Efficiency Energy and Demand Savings

#### 4.7.4 Industrial Demonstration Program

The projected energy and demand effects for these demonstration projects has been conducted under the USAID Philippine Demand-Side Management project. The analyses are attached as appendices to this document.[SJW43]

#### 4.7.5 Power Factor Correction Program

This program will not save any energy, nor will it reduce demand measured in kW. This program is designed to reduce apparent power[SJW44] (measured kVA), therefore reducing transformer capacity requirements and hence network capital costs for the same level of power (kW) and therefore the same level of energy service.

#### 4.7.6 Load Factor Improvement Program

This program is a load shifting and peak clipping program. It is primarily designed to reduce the peak load of customers so that they save on their newly increased demand charges. Customer demand savings that are coincident with the MERALCO peak will save on MERALCO's peak demand. If customers reduce their peak demand by making end-uses that are in operation during their peak more efficient, then some energy savings will result.

The monitored results from the approximately 40 customers that participate in the pilot stage of the program will be used to develop estimates of the energy and demand savings from the full program if it is implemented.

### 4.7.7 Streetlight Conversion Program

[SJW-13]

### 4.7.8 Load Research

This is a research activity, rather than a program, so there will be no energy and demand effects as a direct result of the load research. Results from the load research will be used to identify areas where DSM can make energy and demand savings.

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 6 e (iii)

## 4.8 Externalities

This submission does not place monetary values on reduced external costs, for the reasons discussed under *Avoidable Environmental Externality Costs* on page 28. Nevertheless, Table 10 briefly summarises the externality effects of the proposed programs. Programs that reduce total energy consumption will also reduce those marginal external costs associated with each units of energy generated. The residential compact fluorescent lighting program is indicated as producing "some reduction" in peak demand because the end use is only partly coincident with the Meralco peak.

| Program                      | Peak Demand       | Total Energy | Environmental Costs |
|------------------------------|-------------------|--------------|---------------------|
| Compact Fluorescent Lighting | Some kW Reduction | Reduced      | Reduced             |
| Green Buildings              | kW Reduced        | Reduced      | Reduced             |
| Industrial Efficiency        | kW Reduced        | Reduced      | Reduced             |
| Industrial Demonstration     | kW Reduced        | Reduced      | Reduced             |
| Power Factor Correction      | kVA Reduced       | No change    | No change           |
| Load Factor Improvement      | kW Reduced        | No change    | No change           |
| Streetlight Conversion       | No change         | Reduced      | Reduced             |
| Load Research                | No change         | No change    | No change           |

Table 10 Externality Effects of Proposed Programs

## 4.9 Expected Costs

5 (i) 1 g & j  
 6 e (ii) & (iii)

The costs outlined in this Section are the estimated costs associated with the implementation of the eight programs over a two year period (1993 and 1999). However, it does not include costs associated with programs that are implemented in 1998, which after initial evaluation, is continued in 1999. These costs will be incorporated in the revised Plan that will be submitted at the end of 1996.

### 4.9.1 Program Costs

Table 11 summarises the estimates of program costs for each of the programs. A detailed breakdown of the cost estimates is given in Section 8.2.5.

| Program / Cost Type                     | Staff Time | @ Unit Cost | = Staff Costs | + Direct Costs | = Total P | Table 11 Estimated Program Costs |
|-----------------------------------------|------------|-------------|---------------|----------------|-----------|----------------------------------|
| <b>CFL Program</b>                      |            |             |               |                |           |                                  |
| Set up costs                            | 2 345 h    | 116         | 272 925       | 40 720         | 313 645   |                                  |
| Advertise / promote                     | 1 000 h    | 100         | 100 000       | 500 000        | 600 000   |                                  |
| Implementation                          | 33 577 h   | 24          | 796 406       | 396 590        | 1 192 996 |                                  |
| Monitoring                              | 1 050 h    | 70          | 74 000        | 114 659        | 188 659   |                                  |
| Total                                   |            |             |               |                | 2 295 300 |                                  |
| <b>Green Buildings Program</b>          |            |             |               |                |           |                                  |
| Seminars                                | 1 600 h    | 38          | 60 800        | 200 000        | 260 800   |                                  |
| Promotion                               | 1 743 h    | 100         | 174 300       | 2 645 000      | 2 819 300 |                                  |
| Project Management                      | 2 976 h    | 100         | 297 600       | 622 760        | 920 360   |                                  |
| Total                                   |            |             |               |                | 4 000 460 |                                  |
| <b>Industrial Efficiency Program</b>    |            |             |               |                |           |                                  |
| Workshops / Seminars                    |            |             |               | 256 625        | 256 625   |                                  |
| Implement                               | 3 200 h    | 145         | 464 000       | 1 020 824      | 1 484 824 |                                  |
| Contingency                             |            |             |               | 87 072         | 87 072    |                                  |
| Total                                   |            |             |               |                | 1 828 521 |                                  |
| <b>Industrial Demonstration Program</b> |            |             |               |                |           |                                  |
| Implement                               | 256 h      | 145         | 37 120        | 36 073         | 73 193    |                                  |
| Monitor & Evaluate                      | 96 h       | 102         | 9 744         | 31 398         | 41 142    |                                  |
| Reporting                               | 144 h      | 121         | 17 400        |                | 17 400    |                                  |
| Miscellaneous                           |            |             |               | 5 000          | 5 000     |                                  |
| Contingency                             |            |             |               | 13 673         | 13 673    |                                  |
| Total                                   |            |             |               |                | 150 408   |                                  |
| <b>Power Factor Correction Program</b>  |            |             |               |                |           |                                  |
| <i>Pilot :</i>                          |            |             |               |                |           |                                  |
| Implement                               | 1 776 h    | 97          | 171 636       | 7 680          | 179 316   |                                  |
| Monitor & Evaluate                      | 528 h      | 142         | 75 000        |                | 75 000    |                                  |
| Contingency                             |            |             |               | 29 152         | 29 152    |                                  |
| <i>Full Scale :</i>                     |            |             |               |                |           |                                  |
| Workshops                               |            |             |               | 225 000        | 225 000   |                                  |
| Implement                               | 22 464 h   | 103         | 2 315 438     | 138 240        | 2 453 679 |                                  |
| Monitor & Evaluate                      | 2 376 h    | 379         | 900 360       |                | 900 000   |                                  |
| Contingency                             |            |             |               | 357 363        | 357 363   |                                  |
| Total                                   |            |             |               |                | 4 257 214 |                                  |

#### 4.9.1 Program Costs

Table 11 summarises the estimates of program costs for each of the programs. A detailed breakdown of the cost estimates is given in Section 8.2.5.

| Program / Cost Type                     | Staff Time | @ Unit Cost | = Staff Costs | + Direct Costs | = Total R |
|-----------------------------------------|------------|-------------|---------------|----------------|-----------|
| <b>CSL Program</b>                      |            |             |               |                |           |
| Set up costs                            | 2 345 h    | 116         | 272 925       | 40 720         | 313 645   |
| Advertise / promote                     | 1 000 h    | 100         | 100 000       | 500 000        | 600 000   |
| Implementation                          | 33 577 h   | 24          | 796 406       | 396 590        | 1 192 996 |
| Monitoring                              | 1 050 h    | 70          | 74 000        | 114 659        | 188 659   |
| Total                                   |            |             |               |                | 2 295 300 |
| <b>Green Buildings Program</b>          |            |             |               |                |           |
| Seminars                                | 1 600 h    | 38          | 60 800        | 200 000        | 260 800   |
| Promotion                               | 1 743 h    | 100         | 174 300       | 2 645 000      | 2 819 300 |
| Project Management                      | 2 976 h    | 100         | 297 600       | 622 760        | 920 360   |
| Total                                   |            |             |               |                | 4 000 460 |
| <b>Industrial Efficiency Program</b>    |            |             |               |                |           |
| Workshops / Seminars                    |            |             |               | 256 625        | 256 625   |
| Implement                               | 3 200 h    | 145         | 464 000       | 1 020 824      | 1 484 824 |
| Contingency                             |            |             |               | 87 072         | 87 072    |
| Total                                   |            |             |               |                | 1 828 521 |
| <b>Industrial Demonstration Program</b> |            |             |               |                |           |
| Monitor & Evaluate                      | 96 h       | 102         | 9 744         | 31 398         | 41 142    |
| Reporting                               | 144 h      | 121         | 17 400        |                | 17 400    |
| Miscellaneous                           |            |             |               | 5 000          | 5 000     |
| Contingency                             |            |             |               | 13 673         | 13 673    |
| Total                                   |            |             |               |                | 150 408   |
| <b>Power Factor Correction Program</b>  |            |             |               |                |           |
| <i>Pilot :</i>                          |            |             |               |                |           |
| Workshops                               |            |             |               | 37 200         | 37 200    |
| Implement                               | 1 776 h    | 97          | 171 636       | 7 680          | 179 316   |
| Monitor & Evaluate                      | 528 h      | 142         | 75 000        |                | 75 000    |
| Contingency                             |            |             |               | 29 152         | 29 152    |
| <i>Full Scale :</i>                     |            |             |               |                |           |
| Workshops                               |            |             |               | 225 000        | 225 000   |
| Implement                               | 22 464 h   | 103         | 2 315 438     | 138 240        | 2 453 679 |
| Monitor & Evaluate                      | 2 376 h    | 379         | 900 600       |                | 900 000   |
| Contingency                             |            |             |               | 357 853        | 357 363   |
| Total                                   |            |             |               |                | 4 257 214 |

Table 11 Estimated Program Costs

| Logic Factor Improvement Program |        |   |        |           |            |
|----------------------------------|--------|---|--------|-----------|------------|
| Pilot Program:                   | 7 392  | h | 109    | 805 000   | 953 637    |
| Full Scale                       |        |   |        |           | 1 758 737  |
| Key Accounts                     |        |   |        |           |            |
| Workshops                        |        |   |        | 259 500   | 259 500    |
| Implement                        | 11 616 | h | 95     | 1 104 000 | 733 829    |
| Monitor & Evaluate               | 16     | m | 25 000 | 400 000   | 400 000    |
| Consultant                       |        |   |        | 374 599   | 374 599    |
| Contingency                      |        |   |        | 249 733   | 249 733    |
| Other GP                         |        |   |        |           |            |
| Brochures                        | 500    | h | 100    | 50 000    | 1 360 000  |
| Workshops                        |        |   |        | 1 357 000 | 1 357 000  |
| Implement                        | 13 200 | h | 106    | 1 395 000 | 885 724    |
| Monitor & Evaluate               | 2 640  | h | 142    | 375 000   | 375 000    |
| Consultant                       |        | h | 142    | 271 136   | 271 136    |
| Contingency                      |        |   |        | 271 136   | 271 136    |
| Total                            |        |   |        |           | 10 845 295 |

#### 4.9.2 Other Costs

Aside from the costs directly associated with programs, there are a number of other costs associated with

| Program \ Cost Type    | Staff Time | Units | Staff Costs P | Direct Costs P | Total P |
|------------------------|------------|-------|---------------|----------------|---------|
| <b>1997</b>            |            |       |               |                |         |
| DSM Plan Preparation   |            |       |               |                |         |
| Administration         |            |       |               |                |         |
| Erd Use Surveys        |            |       |               |                |         |
| Total                  |            |       |               |                |         |
| <b>1998</b>            |            |       |               |                |         |
| Erd Use Surveys        |            |       |               |                |         |
| Analysis               |            |       |               |                |         |
| DSM Training Workshops |            |       |               |                |         |
| Total                  |            |       |               |                |         |
| <b>1999</b>            |            |       |               |                |         |
| Program Evaluation     |            |       |               |                |         |
| Revise DSM Plan        |            |       |               |                |         |
| DSM Training Workshops |            |       |               |                |         |
| Total                  |            |       |               |                |         |

Table 12 Other (Non-Program-Specific) Costs

#### 4.10 Cost-Effectiveness Test Results

5 (i) 1 h

5 (i) 2 i

5 (i)

4.11 Bills/Rates

5 (i) 1 k & j  
6 e (iii)

Implementation of the compact fluorescent lighting program for five years, with the energy and demand savings described, at the current level of NPC charges to MERALCO, and using a discount rate of 7% would save the utility ₱ xx,[SJW46] but would incur program costs and reduced revenue totaling ₱ yy,[SJW47] resulting in a net loss to MERALCO of ₱ zz,[SJW48] Using a utility discount rate of d%,[SJW49] a once-off residential tariff adjustment of *adj* ₱/kWh[SJW50] would recover these losses over the life of the projected program effects. This is indicated in Table 13. The effect on the average annual residential bill of *imp* kWh[SJW51] would be just under ₱ *imp*[SJW52] per year.

| Year                                                              | Projected Consumption<br>MWh | Calculated Savings<br>MWh | Projected Consumption With Program<br>MWh | Recovered Revenue<br>₱ |
|-------------------------------------------------------------------|------------------------------|---------------------------|-------------------------------------------|------------------------|
| Once-off Tariff Adjustment (₱/kWh <sup>-1</sup> )                 |                              |                           |                                           |                        |
| Recovered Revenue Loss 1998 present value discounted at d%[SJW53] |                              |                           |                                           |                        |
| 1998                                                              |                              |                           |                                           |                        |
| 1999                                                              |                              |                           |                                           |                        |
| 2000                                                              |                              |                           |                                           |                        |
| 2001                                                              |                              |                           |                                           |                        |
| 2002                                                              |                              |                           |                                           |                        |
| 2003                                                              |                              |                           |                                           |                        |
| 2004                                                              |                              |                           |                                           |                        |
| 2005                                                              |                              |                           |                                           |                        |
| 2006                                                              |                              |                           |                                           |                        |
| 2007                                                              |                              |                           |                                           |                        |
| 2008                                                              |                              |                           |                                           |                        |

Table 13 Revenue and Tariff Effects

[SJW54]

- Green Buildings Program
- Industrial Efficiency Program
- Industrial Demonstration Program
- Power Factor Correction Program
- Load Factor Improvement Program
- Streetlight Conversion Program

## 4.12 Sensitivity Analysis Results

5 (i) 1 m  
6 j

The programs proposed will be implemented at a pilot level in 1998. Some are still in the feasibility stage. So detailed sensitivity calculations were not considered appropriate for this submission. Nevertheless, the following observations on the sensitivity of the results to several variables can be made.

### 4.12.1 Avoidable Costs

As discussed in the section on avoidable costs, the avoidable cost analysis is based on NPC charges to MERALCO. These charges represent the costs in the generation system to the extent that MERALCO's load shape represents the NPC load shape and to the extent that the energy and demand charges represent the NPC avoidable costs of energy and demand. MERALCO loads represent a large portion of all loads in Luzon, so the MERALCO load shape is, in fact, quite coincident with the NPC load shape for the Luzon grid.

The most likely future change in the NPC charges is that the demand charges will increase and the energy charges will decrease. The more closely the NPC charges represent the true NPC avoidable costs the more closely will the results resemble those that would come from an analysis using the actual NPC avoidable costs of energy and demand.

### 4.12.2 Discount Rates

Adjustment of the discount rates in the program analysis spreadsheet and in SRC/COMPASS® show that the results are not particularly sensitive to changes in the discount rates. The spreadsheet and SRC/COMPASS® data files are available for examination by ERB upon request.

### 4.12.3 Participation Rates

On the key cost-effectiveness test — the societal test — the programs are not particularly sensitive to changes in participation levels. This is because the fixed program costs are small relative to the aggregate cost of the DSM equipment, so the results scale quite readily over large ranges in participation level. [SJWS3]

## 5. FINANCIAL PLAN

### 5.1 Proposal for DSM Financial Incentives

This chapter presents the financial analysis of the proposed DSM programs.



for lamps from retailers and pay them off on their MERALCO electricity bill from the energy savings delivered by the lamps.

The proposed program delivery mechanism for both the green buildings and industrial efficiency programs is an ESCO. ESCOs provide a financial incentive to customers in the form of performance-guaranteed shared-savings.

The industrial demonstration program has third-party incentives from USAID in the form of funding of high efficiency demonstration equipment.

The power factor improvement program will provide financial incentives to customers in the form of a loan to be repaid in instalments on the customers' monthly MERALCO bill.

Financial incentives for the load factor improvement program will be considered is the pilot program indicates that they are required by customers to improve their load factor.

The streetlight conversion program is an internal MERALCO program, so financial incentives are not required. The load research is not a program with customers, so financial incentives are not relevant.

## 5.2 Proposal for Cost and Revenue Recovery

MERALCO proposes to recover program costs and net revenue losses through small adjustments to the tariff of the customer group to whom the programs are offered. The advantages of this approach are that:

- customers who participate in the program experience significant bill savings offset by an insignificant increase due to the tariff increase; and
- customers who don't participate in the program experience insignificant increases in their bills; and
- if this bothers them, they are free to participate in the program and achieve the savings.

MERALCO proposes a provisional residential automatic tariff adjustment of xx P/kWh(SJW35) to recover net losses over the life of the projected residential CFL program effects with a present value of P 225,513; when discounted at d%(SJW35) This could be reviewed when the program goes into full implementation.

It is proposed that pilot results be used to:

- adjust cost recovery for the pilot and

for lamps from retailers and pay them off on their MERALCO electricity bill from the energy savings delivered by the lamps.

The proposed program delivery mechanism for both the green buildings and industrial efficiency programs is an ESCO. ESCOs provide a financial incentive to customers in the form of performance-guaranteed shared-savings.

The industrial demonstration program has third-party incentives from USAID in the form of funding of high efficiency demonstration equipment.

The power factor improvement program will provide financial incentives to customers in the form of a loan to be repaid in instalments on the customers' monthly MERALCO bill.

Financial incentives for the load factor improvement program will be considered in the pilot program indicates that they are required by customers to improve their load factor.

The streetlight conversion program is an internal MERALCO program, so financial incentives are not required. The load research is not a program with customers, so financial incentives are not relevant.

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- customers who participate in the program experience significant bill savings offset by an insignificant increase due to the tariff increase; and
- customers who don't participate in the program experience insignificant increases in their bills; and
- if this bothers them, they are free to participate in the program and achieve the savings.

MERALCO proposes a provisional residential automatic tariff adjustment of  $\Delta P/kWh$  to recover net losses over the life of the projected residential CFL program effects with a present value of  $P_{zz}$  when discounted at  $d\%$ . This could be reviewed when the program goes into full implementation.

It is proposed that pilot results be used to:

- adjust cost recovery for the pilot; and
- set the initial cost recovery rate for the full program.

It is suggested that adjustment of the cost recovery rate be made no more frequently than every six months and no less frequently than every year. More frequent adjustments would be an inefficient use of MERALCO and ERB resources. Less frequent adjustments could cause actual and recovered costs to diverge.

## 6. IMPLEMENTATION PLAN

### 6.1 Proposed Implementation Process

Considering the available resources, of the eight programs that have initially been identified, it is proposed to undertake seven DSM programs in the first year (1998) and the remaining program will commence in the second year (1999). The second year (1999) would also include continuation of some of the programs undertaken in 1998. During these two years it is intended to develop a comprehensive customer database which would be used as a resource in designing other programs for future years.

#### 6.1.1 Programs for 1998

The following programs have been scheduled to be implemented in 1998:-

- . Compact Fluorescent Lighting Program
- . Green Buildings Program
- . Industrial Efficiency Program
- . Industrial Demonstration Program
- . Power Factor Correction Program
- . Load Factor Improvement Program
- . Streetlight Conversion Program

The Green Buildings and Industrial Efficiency Programs will be implemented through an ESCO. The steps involved in setting up an ESCO has been included in the schedule. The programs will be subject to an evaluation at the end of the year and based on the outcomes, a decision to cease, modify or continue the programs will be made.

#### 6.1.2 Programs for 1999

In addition to programs from 1998 that continue, the following programs and activities are scheduled to be implemented in 1999:-

- . Load Research
- . Major Program Review

The major program review would include all nine programs and the

### 6.1.3 Programs for 2000 to 2002

The programs to be undertaken during this period would be dependent on the load shape and corporate objectives achieved during 1998 and 1999. It is likely to include the continuation of all or some of the initial programs. In addition, the following programs will be considered :

- Promotion of efficient air conditioners and other appliances
- Promotion of high efficiency fluorescent lamps
- Promotion of high efficiency motors and variable speed drives.

## 6.2 Timeline Chart of Activities and Milestones

The Gantt Charts covering tasks and milestones for each of the five programs for 1998 and 1999 are detailed in the following sheets. The schedules are based on obtaining Energy Regulatory Board approval by the end of February 1998.

## 7. MEASURING DSM PROGRAM RESULTS

5 (i) 1 e & j  
6 b

### 7.1 Monitoring

5 (i) 2 c

The following monitoring procedures will be adopted for each of the programs:

#### 7.1.1 Compact Fluorescent Lighting Program

The procedure to be adopted for this program involves the setting up of a database of relevant information from each of the participating customers. The database would include the following information:

- Customer name, address and electricity account number
- Date and number of CFLs purchased
- Date of first and last payments
- Customer estimate of hours of usage/day per CFL
- Calculation of energy and demand savings
- Details of CFLs returned and reasons

In addition, the database would assist in tracking customers who have purchased the maximum number of lamps.

### 7.1.2 Green Buildings Program

This program is implemented through ESCOs on performance based contracts. The saving forecasts made in the detailed energy audits for each site will be compared with the actual savings that are achieved after implementation.

### 7.1.3 Industrial Efficiency Program

The impacts of the program will be measured directly from the billing information of the specific industrial sites where energy saving measures have been implemented. In addition, the load profiles of the sites will be monitored continuously before and after implementation of the measures.

### 7.1.4 Industrial Demonstration Program

The effectiveness of the energy saving measures undertaken at the three sites will be measured using the monitoring equipment already installed at the sites and the subsequent billing information.

### 7.1.5 Power Factor Correction Program

This program is implemented through contractors on performance based contracts and will be compensated based on measured results. The saving forecasts made in the assessments for each site will be compared with the actual savings that are achieved after installation of capacitor banks.

### 7.1.6 Load Factor Improvement Program

The status of the adopted load factor improvement measures will be monitored through regular telephone interviews and site visits of program participants. In addition, monitoring of monthly energy and demand data from meter and billing records will be undertaken. Participants will be requested to submit reports on adopted measures.

### 7.1.7 Streetlight Conversion Program

This program has already commenced and the number of retrofits undertaken each month will be recorded.

### 7.1.8 Load Research

In addition to the above, the costs associated with the program will be

## 7.2 Evaluation

All proposed programs will be evaluated upon completion, except in the case of the CFL Program which would be also evaluated midway when any revisions to program delivery would be made. As required by the DSM Framework the programs will be subject to an annual evaluation based on the methodology outlined in Section 4.

## 8. APPENDICES

### 8.1 Forecast

5 (i) 1 c  
5 (i) 2 a & b

#### 8.1.1 Historical and Projected Data

| Year        | Residential | Commercial | Industrial | Streetlight | Total     |
|-------------|-------------|------------|------------|-------------|-----------|
| 1987        | 1 528 695   | 159 407    | 3 972      | 3 174       | 1 695 248 |
| 1988        | 1 584 028   | 169 320    | 4 003      | 3 265       | 1 760 616 |
| 1989        | 1 651 183   | 180 538    | 4 390      | 3 448       | 1 839 559 |
| 1990        | 1 728 820   | 185 245    | 10 439     | 3 395       | 1 927 899 |
| 1991        | 1 818 553   | 192 525    | 11 144     | 3 097       | 2 025 319 |
| 1992        | 1 935 736   | 201 384    | 11 099     | 3 362       | 2 151 581 |
| 1993        | 2 072 642   | 209 159    | 11 719     | 3 562       | 2 297 082 |
| 1994        | 2 234 052   | 226 889    | 12 246     | 3 789       | 2 476 976 |
| 1995        | 2 406 959   | 237 576    | 12 936     | 4 044       | 2 661 515 |
| 1996 (base) | 2 596 687   | 255 640    | 13 073     | 4 132       | 2 869 532 |
| 1997        | 2 822 007   | 266 849    | 13 367     | 4 303       | 3 106 526 |
| 1998        | 2 877 716   | 276 228    | 13 769     | 4 396       | 3 172 109 |
| 1999        | 2 932 596   | 282 201    | 14 214     | 4 487       | 3 233 498 |
| 2000        | 2 987 251   | 289 150    | 14 702     | 4 578       | 3 295 681 |
| 2001        | 3 040 986   | 296 253    | 15 217     | 4 667       | 3 357 103 |
| 2002        | 3 093 737   | 304 191    | 15 765     | 4 755       | 3 418 448 |
| 2003        | 3 145 542   | 312 310    | 16 342     | 4 841       | 3 479 035 |
| 2004        | 3 196 308   | 320 675    | 16 956     | 4 925       | 3 538 864 |
| 2005        | 3 246 054   | 329 313    | 17 610     | 5 008       | 3 597 985 |
| 2006        | 3 294 458   | 338 225    | 18 311     | 5 088       | 3 656 082 |
| 2007        | 3 342 013   | 347 476    | 19 059     | 5 167       | 3 713 715 |
| 2008        | 3 388 163   | 357 055    | 19 859     | 5 244       | 3 770 321 |
| 2009        | 3 432 953   | 366 998    | 20 713     | 5 313       | 3 825 932 |
| 2010        | 3 476 271   | 377 332    | 21 629     | 5 390       | 3 880 622 |
| 2011        | 3 518 483   | 387 999    | 22 604     | 5 466       | 3 931 403 |
| 2012        | 3 559 483   | 398 999    | 23 604     | 5 542       | 3 987 628 |
| 2013        | 3 600 483   | 409 999    | 24 604     | 5 618       | 4 044 604 |
| 2014        | 3 641 483   | 420 999    | 25 604     | 5 694       | 4 102 680 |
| 2015        | 3 682 483   | 431 999    | 26 604     | 5 770       | 4 160 856 |
| 2016        | 3 723 483   | 442 999    | 27 604     | 5 846       | 4 219 132 |
| 2017        | 3 764 483   | 453 999    | 28 604     | 5 922       | 4 277 508 |
| 2018        | 3 805 483   | 464 999    | 29 604     | 6 000       | 4 336 086 |
| 2019        | 3 846 483   | 475 999    | 30 604     | 6 076       | 4 394 862 |
| 2020        | 3 887 483   | 486 999    | 31 604     | 6 152       | 4 453 838 |
| 2021        | 3 928 483   | 497 999    | 32 604     | 6 228       | 4 513 014 |
| 2022        | 3 969 483   | 508 999    | 33 604     | 6 304       | 4 572 390 |
| 2023        | 4 010 483   | 519 999    | 34 604     | 6 380       | 4 631 966 |
| 2024        | 4 051 483   | 530 999    | 35 604     | 6 456       | 4 691 742 |
| 2025        | 4 092 483   | 541 999    | 36 604     | 6 532       | 4 751 618 |
| 2026        | 4 133 483   | 552 999    | 37 604     | 6 608       | 4 811 694 |
| 2027        | 4 174 483   | 563 999    | 38 604     | 6 684       | 4 871 960 |
| 2028        | 4 215 483   | 574 999    | 39 604     | 6 760       | 4 932 420 |
| 2029        | 4 256 483   | 585 999    | 40 604     | 6 836       | 4 993 080 |
| 2030        | 4 297 483   | 596 999    | 41 604     | 6 912       | 5 053 999 |
| 2031        | 4 338 483   | 607 999    | 42 604     | 6 988       | 5 115 175 |
| 2032        | 4 379 483   | 618 999    | 43 604     | 7 064       | 5 176 509 |
| 2033        | 4 420 483   | 629 999    | 44 604     | 7 140       | 5 237 997 |
| 2034        | 4 461 483   | 640 999    | 45 604     | 7 216       | 5 299 692 |
| 2035        | 4 502 483   | 651 999    | 46 604     | 7 292       | 5 361 588 |
| 2036        | 4 543 483   | 662 999    | 47 604     | 7 368       | 5 423 692 |
| 2037        | 4 584 483   | 673 999    | 48 604     | 7 444       | 5 485 996 |
| 2038        | 4 625 483   | 684 999    | 49 604     | 7 520       | 5 548 500 |
| 2039        | 4 666 483   | 695 999    | 50 604     | 7 596       | 5 611 204 |
| 2040        | 4 707 483   | 706 999    | 51 604     | 7 672       | 5 674 176 |
| 2041        | 4 748 483   | 717 999    | 52 604     | 7 748       | 5 737 392 |
| 2042        | 4 789 483   | 728 999    | 53 604     | 7 824       | 5 800 904 |
| 2043        | 4 830 483   | 739 999    | 54 604     | 7 900       | 5 864 632 |
| 2044        | 4 871 483   | 750 999    | 55 604     | 7 976       | 5 928 568 |
| 2045        | 4 912 483   | 761 999    | 56 604     | 8 052       | 5 992 720 |
| 2046        | 4 953 483   | 772 999    | 57 604     | 8 128       | 6 057 088 |
| 2047        | 4 994 483   | 783 999    | 58 604     | 8 204       | 6 121 672 |
| 2048        | 5 035 483   | 794 999    | 59 604     | 8 280       | 6 186 368 |
| 2049        | 5 076 483   | 805 999    | 60 604     | 8 356       | 6 251 272 |
| 2050        | 5 117 483   | 816 999    | 61 604     | 8 432       | 6 316 384 |
| 2051        | 5 158 483   | 827 999    | 62 604     | 8 508       | 6 381 696 |
| 2052        | 5 199 483   | 838 999    | 63 604     | 8 584       | 6 447 280 |
| 2053        | 5 240 483   | 849 999    | 64 604     | 8 660       | 6 513 044 |
| 2054        | 5 281 483   | 860 999    | 65 604     | 8 736       | 6 578 988 |
| 2055        | 5 322 483   | 871 999    | 66 604     | 8 812       | 6 645 112 |
| 2056        | 5 363 483   | 882 999    | 67 604     | 8 888       | 6 711 424 |
| 2057        | 5 404 483   | 893 999    | 68 604     | 8 964       | 6 777 912 |
| 2058        | 5 445 483   | 904 999    | 69 604     | 9 040       | 6 844 584 |
| 2059        | 5 486 483   | 915 999    | 70 604     | 9 116       | 6 911 432 |
| 2060        | 5 527 483   | 926 999    | 71 604     | 9 192       | 6 978 464 |
| 2061        | 5 568 483   | 937 999    | 72 604     | 9 268       | 7 045 680 |
| 2062        | 5 609 483   | 948 999    | 73 604     | 9 344       | 7 113 088 |
| 2063        | 5 650 483   | 959 999    | 74 604     | 9 420       | 7 180 680 |
| 2064        | 5 691 483   | 970 999    | 75 604     | 9 496       | 7 248 448 |
| 2065        | 5 732 483   | 981 999    | 76 604     | 9 572       | 7 316 392 |
| 2066        | 5 773 483   | 992 999    | 77 604     | 9 648       | 7 384 512 |
| 2067        | 5 814 483   | 1 003 999  | 78 604     | 9 724       | 7 452 816 |
| 2068        | 5 855 483   | 1 014 999  | 79 604     | 9 800       | 7 521 304 |
| 2069        | 5 896 483   | 1 025 999  | 80 604     | 9 876       | 7 590 080 |
| 2070        | 5 937 483   | 1 036 999  | 81 604     | 9 952       | 7 659 040 |
| 2071        | 5 978 483   | 1 047 999  | 82 604     | 10 028      | 7 728 176 |
| 2072        | 6 019 483   | 1 058 999  | 83 604     | 10 104      | 7 797 488 |
| 2073        | 6 060 483   | 1 069 999  | 84 604     | 10 180      | 7 866 968 |
| 2074        | 6 101 483   | 1 080 999  | 85 604     | 10 256      | 7 936 616 |
| 2075        | 6 142 483   | 1 091 999  | 86 604     | 10 332      | 8 006 432 |
| 2076        | 6 183 483   | 1 102 999  | 87 604     | 10 408      | 8 076 416 |
| 2077        | 6 224 483   | 1 113 999  | 88 604     | 10 484      | 8 146 568 |
| 2078        | 6 265 483   | 1 124 999  | 89 604     | 10 560      | 8 216 888 |
| 2079        | 6 306 483   | 1 135 999  | 90 604     | 10 636      | 8 287 376 |
| 2080        | 6 347 483   | 1 146 999  | 91 604     | 10 712      | 8 358 032 |
| 2081        | 6 388 483   | 1 157 999  | 92 604     | 10 788      | 8 428 856 |
| 2082        | 6 429 483   | 1 168 999  | 93 604     | 10 864      | 8 499 840 |
| 2083        | 6 470 483   | 1 179 999  | 94 604     | 10 940      | 8 570 984 |
| 2084        | 6 511 483   | 1 190 999  | 95 604     | 11 016      | 8 642 296 |
| 2085        | 6 552 483   | 1 201 999  | 96 604     | 11 092      | 8 713 776 |
| 2086        | 6 593 483   | 1 212 999  | 97 604     | 11 168      | 8 785 424 |
| 2087        | 6 634 483   | 1 223 999  | 98 604     | 11 244      | 8 857 240 |
| 2088        | 6 675 483   | 1 234 999  | 99 604     | 11 320      | 8 929 232 |
| 2089        | 6 716 483   | 1 245 999  | 100 604    | 11 396      | 9 001 400 |
| 2090        | 6 757 483   | 1 256 999  | 101 604    | 11 472      | 9 073 744 |
| 2091        | 6 798 483   | 1 267 999  | 102 604    | 11 548      | 9 146 264 |
| 2092        | 6 839 483   | 1 278 999  | 103 604    | 11 624      | 9 218 960 |
| 2093        | 6 880 483   | 1 289 999  | 104 604    | 11 700      | 9 291 832 |
| 2094        | 6 921 483   | 1 300 999  | 105 604    | 11 776      | 9 364 880 |
| 2095        | 6 962 483   | 1 311 999  | 106 604    | 11 852      | 9 438 104 |
| 2096        | 7 003 483   | 1 322 999  | 107 604    | 11 928      | 9 511 504 |
| 2097        | 7 044 483   | 1 333 999  | 108 604    | 12 004      | 9 585 080 |
| 2098        | 7 085 483   | 1 344 999  | 109 604    | 12 080      | 9 658 832 |
| 2099        | 7 126 483   | 1 355 999  | 110 604    | 12 156      | 9 732 760 |
| 2100        | 7 167 483   | 1 366 999  | 111 604    | 12 232      | 9 806 864 |

Table 14 Historical  
and Projected  
Customer Counts

| Year        | Residential | Commercial | Industrial | Streetlight | Total    |
|-------------|-------------|------------|------------|-------------|----------|
| 1987        | 3 044.9     | 2 931.8    | 2 768.6    | 82.6        | 8 827.8  |
| 1988        | 3 326.5     | 3 356.7    | 3 553.4    | 85.9        | 10 322.5 |
| 1989        | 3 415.0     | 3 658.7    | 3 890.4    | 88.0        | 11 052.1 |
| 1990        | 3 593.1     | 3 813.3    | 4 069.0    | 90.0        | 11 565.4 |
| 1991        | 3 753.6     | 3 750.8    | 4 335.1    | 91.9        | 11 931.4 |
| 1992        | 3 940.8     | 3 815.8    | 4 430.4    | 92.4        | 12 279.4 |
| 1993        | 4 029.1     | 3 781.8    | 4 333.0    | 106.8       | 12 250.7 |
| 1994        | 4 652.4     | 4 747.0    | 5 048.2    | 107.4       | 14 555.1 |
| 1995        | 5 293.6     | 5 140.3    | 5 327.2    | 115.3       | 15 876.4 |
| 1996 (base) | 5 975.8     | 5 805.1    | 5 909.2    | 120.4       | 17 810.4 |
| 1997        | 6 484.9     | 6 335.1    | 6 179.6    | 122.8       | 19 122.4 |
| 1998        | 6 956.7     | 6 835.4    | 6 798.2    | 125.0       | 20 715.3 |
| 1999        | 7 537.4     | 7 408.9    | 7 392.3    | 127.2       | 22 465.8 |
| 2000        | 8 188.7     | 8 058.4    | 8 026.8    | 129.4       | 24 403.3 |
| 2001        | 8 885.7     | 8 738.4    | 8 731.7    | 131.6       | 26 487.4 |
| 2002        | 9 636.2     | 9 468.4    | 9 513.3    | 133.7       | 28 751.6 |
| 2003        | 10 330.1    | 10 240.7   | 10 521.1   | 135.7       | 31 227.6 |
| 2004        | 11 051.2    | 11 100.5   | 11 620.9   | 137.8       | 33 910.4 |
| 2005        | 11 808.5    | 12 059.1   | 12 824.7   | 139.8       | 36 832.1 |
| 2006        | 12 611.5    | 13 113.8   | 14 146.4   | 141.7       | 40 013.4 |
| 2007        | 13 465.1    | 14 276.8   | 15 593.0   | 143.6       | 43 478.5 |
| 2008        | 14 370.4    | 15 559.0   | 17 176.1   | 145.4       | 47 250.9 |
| 2009        | 15 330.4    | 16 972.1   | 18 908.5   | 147.2       | 51 358.2 |
| 2010        | 16 364.0    | 18 507.7   | 20 808.9   | 149.0       | 55 829.6 |
| 2011        | 17 449.1    | 20 201.3   | 22 887.7   | 150.5       | 60 688.6 |

Table 15 Historical and Projected Energy Sales (GWh)

| Year        | Peak Load (MW) | Growth rate |
|-------------|----------------|-------------|
| 1987        | 1 923          |             |
| 1988        | 2 072          | 7.7%        |
| 1989        | 2 225          | 7.4%        |
| 1990        | 2 159          | -3.0%       |
| 1991        | 2 350          | 8.8%        |
| 1992        | 2 386          | 1.5%        |
| 1993        | 2 398          | 0.5%        |
| 1994        | 2 695          | 12.4%       |
| 1995        | 2 901          | 7.6%        |
| 1996 (base) | 3 222          | 11.1%       |
| 1997        | 3 546          | 10.1%       |
| 1998        | 3 824          | 7.8%        |
| 1999        | 4 112          | 7.5%        |
| 2000        | 4 443          | 8.0%        |
| 2001        | 4 725          | 6.3%        |
| 2002        | 5 173          | 9.5%        |
| 2003        | 5 544          | 7.2%        |

Table 16 Historical and Projected Peak Load

|      |        |      |
|------|--------|------|
| 2004 | 6 053  | 8.3% |
| 2005 | 6 556  | 8.3% |
| 2006 | 7 100  | 8.3% |
| 2007 | 7 688  | 8.3% |
| 2008 | 8 324  | 8.3% |
| 2009 | 9 011  | 8.3% |
| 2010 | 9 753  | 8.3% |
| 2011 | 10 554 | 8.2% |

| Year | Sales Growth Rate by Customer Class (%/yr) |            |            |       | Total Sales | Max Demand (MW) |
|------|--------------------------------------------|------------|------------|-------|-------------|-----------------|
|      | Residential                                | Commercial | Industrial | Other |             |                 |
| 1996 |                                            |            |            |       |             |                 |
| 1997 | 8.5%                                       | 9.2%       | 4.6%       | 2.0%  | 7.4%        | 10.1%           |
| 1998 | 7.3%                                       | 7.9%       | 10.0%      | 1.8%  | 8.3%        | 7.8%            |
| 1999 | 8.3%                                       | 8.4%       | 8.7%       | 1.8%  | 8.5%        | 7.8%            |
| 2000 | 8.6%                                       | 8.8%       | 8.6%       | 1.7%  | 8.6%        | 7.9%            |
| 2001 | 8.5%                                       | 8.4%       | 8.8%       | 1.7%  | 8.5%        | 7.8%            |
| 2002 | 8.4%                                       | 8.4%       | 9.0%       | 1.6%  | 8.5%        | 7.9%            |
| 2003 | 7.2%                                       | 8.2%       | 10.6%      | 1.5%  | 8.6%        | 8.0%            |
| 2004 | 7.0%                                       | 8.4%       | 10.5%      | 1.5%  | 8.6%        | 8.3%            |
| 2005 | 6.9%                                       | 8.6%       | 10.4%      | 1.5%  | 8.6%        | 8.3%            |
| 2006 | 6.8%                                       | 8.7%       | 10.3%      | 1.4%  | 8.6%        | 8.3%            |
| 2007 | 6.8%                                       | 8.9%       | 10.2%      | 1.3%  | 8.7%        | 8.3%            |
| 2008 | 6.7%                                       | 9.0%       | 10.2%      | 1.3%  | 8.7%        | 8.3%            |
| 2009 | 6.7%                                       | 9.1%       | 10.1%      | 1.2%  | 8.7%        | 8.3%            |
| 2010 | 6.7%                                       | 9.0%       | 10.1%      | 1.2%  | 8.7%        | 8.3%            |
| 2011 | 6.6%                                       | 9.2%       | 10.0%      | 1.0%  | 8.7%        | 8.3%            |

Table 17 - Forecast Sales and Demand Growth Rate

| Year | Growth Rate (%) |            |            |       | Total |
|------|-----------------|------------|------------|-------|-------|
|      | Residential     | Commercial | Industrial | Other |       |
| 1996 |                 |            |            |       |       |
| 1997 | 8.7%            | 4.4%       | 2.2%       | 4.1%  | 8.3%  |
| 1998 | 2.0%            | 3.5%       | 3.0%       | 2.2%  | 2.1%  |
| 1999 | 1.9%            | 2.2%       | 3.2%       | 2.1%  | 1.9%  |
| 2000 | 1.9%            | 2.5%       | 3.4%       | 2.0%  | 1.9%  |
| 2001 | 1.8%            | 2.5%       | 3.5%       | 1.9%  | 1.9%  |
| 2002 | 1.7%            | 2.7%       | 3.6%       | 1.9%  | 1.8%  |
| 2003 | 1.7%            | 2.7%       | 3.7%       | 1.8%  | 1.8%  |
| 2004 | 1.6%            | 2.7%       | 3.8%       | 1.7%  | 1.7%  |
| 2005 | 1.6%            | 2.7%       | 3.9%       | 1.7%  | 1.7%  |
| 2006 | 1.5%            | 2.7%       | 4.0%       | 1.6%  | 1.6%  |
| 2007 | 1.4%            | 2.7%       | 4.1%       | 1.6%  | 1.6%  |
| 2008 | 1.4%            | 2.8%       | 4.2%       | 1.5%  | 1.5%  |
| 2009 | 1.3%            | 2.8%       | 4.3%       | 1.4%  | 1.5%  |
| 2010 | 1.3%            | 2.8%       | 4.4%       | 1.4%  | 1.4%  |
| 2011 | 1.1%            | 2.8%       | 4.5%       | 1.2%  | 1.3%  |

Table 18 - Forecast Customer Growth Rate by Customer Class



## 8.1.2 Forecast Models

## 8.1.3 Forecast Methodologies

## 8.1.4 Forecast Assumptions

## 8.1.5 Alternative Forecasts

6 d (ii)-(v)

# 8.2 DSM Options

(S)W39)

## 8.2.1 Data and Assumptions used in Option Analysis

5 (i) 2 e  
6 e (i)-(iii)  
6 f

## 8.2.2 Options rejected

5 (i) 2 d

## 8.2.3 Model Used in Analysis

5 (i) 2 g  
6 g

## 8.2.4 Optimisation by the Cost Effectiveness Test Perspectives

6 (i)

## 8.2.5 Breakdown of Program Costs

|       |    |                                                                                                                                                                                                                                                                                                                                                      |
|-------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Page: | 2  | [SJW1] Perhaps we could use a positive expression here, such as "encourage customer loyalty" rather than the negative expression "discourage self generation".                                                                                                                                                                                       |
| Page: | 7  | [SJW2] Include 10 year historical data on the graph to give context. Will energy sales really grow exponentially for ever? I assume that this is the official Meralco forecast, so use it, but be prepared to defend it under questioning from ERB!                                                                                                  |
| Page: | 7  | [SJW3] We have used this generic paragraph in all of the four case study submissions. Are you happy with it?                                                                                                                                                                                                                                         |
| Page: | 11 | [SJW4] I wrote an introductory paragraph, and edited the text to tighten it up a little bit. Please check over it!                                                                                                                                                                                                                                   |
| Page: | 24 | [SJW5] This is perhaps a bit disingenuous! You can think of the new rate structure as providing everyone with "incentives" for a low load factor, but in reality the customers that we are talking about here - whose bills WILL GO UP if they do nothing - will first be trying to avoid a penalty rather than to avail themselves of an incentive! |
| Page: | 24 | [SJW6] You have listed the customer groups who do not need the program. It would be a good idea to list those that DO need the program. Put them in priority order starting with the lowest load factor groups.                                                                                                                                      |
| Page: | 27 | [SJW7] Do you want to mention the IPP?                                                                                                                                                                                                                                                                                                               |
| Page: | 28 | [SJW8] Make sure that this is correct!                                                                                                                                                                                                                                                                                                               |
| Page: | 28 | [SJW9] Check that these NPC avoidable costs are correct.                                                                                                                                                                                                                                                                                             |
| Page: | 28 | [SJW10] Make sure that this note is right.                                                                                                                                                                                                                                                                                                           |
| Page: | 29 | [SJW11] JOSEPH: summarise the results of the SRC/COMPASS* technology analysis here. I have included the numbers from one of the other case study utilities. CHANGE these numbers to the ones that you are using and CHECK that the result matches the SRC/COMPASS* technology analysis!!!                                                            |
| Page: | 29 | [SJW12] Insert the correct result here.                                                                                                                                                                                                                                                                                                              |

|       |                                                                                                                                                                                                                                                                                                                                                                     |    |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 29 |
|       | [SJW13] Insert the correct result here.                                                                                                                                                                                                                                                                                                                             |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 29 |
|       | [SJW14] Insert the correct result here.                                                                                                                                                                                                                                                                                                                             |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 29 |
|       | [SJW15] Insert the correct result here.                                                                                                                                                                                                                                                                                                                             |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW16] CHECK that these numbers match yours. CHANGE if necessary.                                                                                                                                                                                                                                                                                                  |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW17] CHECK that these numbers match yours. CHANGE if necessary.                                                                                                                                                                                                                                                                                                  |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW18] Insert the value here for (MERALCO purchases minus MERALCO consumption) divided by MERALCO consumption.                                                                                                                                                                                                                                                     |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW19] Insert the value here.                                                                                                                                                                                                                                                                                                                                      |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW20] Insert the calculated value here.                                                                                                                                                                                                                                                                                                                           |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 30 |
|       | [SJW21] CHANGE this if you used a different assumption.                                                                                                                                                                                                                                                                                                             |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 31 |
|       | [SJW22] ... and here.                                                                                                                                                                                                                                                                                                                                               |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 31 |
|       | [SJW23] Say what the price is based on.                                                                                                                                                                                                                                                                                                                             |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 31 |
|       | [SJW24] Need to make the discount rates consistent.                                                                                                                                                                                                                                                                                                                 |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 31 |
|       | [SJW25] Make sure you attach them!                                                                                                                                                                                                                                                                                                                                  |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 31 |
|       | [SJW26] If you have any sort of technology-level cost-effectiveness analysis, include it here. or example, if you have the full installed cost of capacity banks per kW of load, and the savings associated with an increment of improvement in power factor, you may be able to indicate the range of power factors where capacitor banks would be cost-effective. |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 32 |
|       | [SJW27] JOSEPH, ANNIE, can you drop the cost-effectiveness analysis for this program in this form here? Include a summary write-up at the front.                                                                                                                                                                                                                    |    |
| Page: |                                                                                                                                                                                                                                                                                                                                                                     | 32 |
|       | [SJW28] Put the values in here.                                                                                                                                                                                                                                                                                                                                     |    |

|       |                                                                                                                                                                                                                |    |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW29] Put the values in here.                                                                                                                                                                                |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW30] Insert the value here for (MERALCO purchases minus MERALCO consumption) divided by MERALCO consumption.                                                                                                |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW31] Insert the value here.                                                                                                                                                                                 |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW32] Insert the number of years life of the lamps here.                                                                                                                                                     |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW33] Insert the calculated value here.                                                                                                                                                                      |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW34] Say what the price is based on.                                                                                                                                                                        |    |
| Page: |                                                                                                                                                                                                                | 33 |
|       | [SJW35] Say what the price is based on.                                                                                                                                                                        |    |
| Page: |                                                                                                                                                                                                                | 34 |
|       | [SJW36] JOSEPH to find eligible market using residential survey results as discussed.                                                                                                                          |    |
| Page: |                                                                                                                                                                                                                | 34 |
|       | [SJW37] I have made a start. Can you finish a paragraph about the number of customers in the target group (>1MW) and how many are projected to participate in the pilot (and in the full program if possible). |    |
| Page: |                                                                                                                                                                                                                | 35 |
|       | [SJW38] RON: paste in the table from your document DSM_277:\load\_Nolfprog.doc. I don't think that we have an electronic copy of this. Our print out is labelled 11/26/97.                                     |    |
| Page: |                                                                                                                                                                                                                | 35 |
|       | [SJW39] ANNIE I think we have the numbers for this, but I don't think we have them electronically. Could you paste the numbers for total number of street lights to be converted in here please?               |    |
| Page: |                                                                                                                                                                                                                | 35 |
|       | [SJW40] JOSEPH, fill in this table with the SRC/COMPASS <sup>®</sup> results.                                                                                                                                  |    |
| Page: |                                                                                                                                                                                                                | 36 |
|       | [SJW41] EARL: is this OK? Or have you developed detailed estimates of participation and energy and demand savings?                                                                                             |    |
| Page: |                                                                                                                                                                                                                | 36 |
|       | [SJW42] EARL: complete the numbers in this paragraph and in the table.                                                                                                                                         |    |

Page: 37  
 [SJW43] RON: Perhaps summarize the results here. Is this data included in the RMI / USAID documents? Make sure you attach them!

Page: 37  
 [SJW44] Help out a poor mechanical engineer: Is "apparent power" the correct term for the vector sum of active and reactive power, i.e. the hypotenuse of the power triangle?

Page: 38  
 [SJW45] ANNIE I think we have the numbers for this, but I don't think we have them electronically. Could you paste the numbers for total energy savings in here please?

Page: 41  
 [SJW46] The reduced supply costs value goes here -- it is equal to the present value of the energy and demand savings with the allowance for losses multiplied by the avoidable cost.

Page: 41  
 [SJW47] The present value of the gross revenue loss plus the program costs goes here.

Page: 41  
 [SJW48] xx minus yy goes here.

Page: 41  
 [SJW49] Put the discount rate you are using here.

Page: 41  
 [SJW50] Put the SRC/COMPASS\* tariff impact here.

Page: 41  
 [SJW51] Put the average MERALCO bill in kWh here.

Page: 41  
 [SJW52] Multiply the average residential MERALCO bill by the tariff impact and put it here.

Page: 41  
 [SJW53] Put the utility discount rate here.

Page: 41  
 [SJW54] I think we should say here that these programs are either:

- pilot programs (green buildings, industrial efficiency, industrial demonstration and power factor correction programs) which will have a negligible impact on rates and that the full program impact on rates will be assessed and submitted to ERB using the pilot program results; or
- have a positive effect on bills and rates -- I think that this is this correct for the load factor improvement program because a customer who reduces a MERALCO-peak coincident kW saves P 195 but MERALCO saves P 290 on their NPC bill.

|       |                                                                                                               |    |
|-------|---------------------------------------------------------------------------------------------------------------|----|
| Page: |                                                                                                               | 42 |
|       | (SJW33) Joseph, my back-of-the envelope analysis shows this, but we should perhaps check this in SRC/COMPASS. |    |
| Page: |                                                                                                               | 43 |
|       | (SJW56) Put the tariff impact value in here.                                                                  |    |
| Page: |                                                                                                               | 43 |
|       | (SJW57) put the net revenue loss value in here.                                                               |    |
| Page: |                                                                                                               | 43 |
|       | (SJW58) Put the correct discount rate in here.                                                                |    |
| Page: |                                                                                                               | 50 |
|       | (SJW59) Put the long list, the screening process and the results here.                                        |    |

ANNEX T

ANNEX "R"

## **Demand-Side Management Plan**

*submitted to*

**Energy Regulatory Board**

*Philippines*

*by*

**MERALCO**

**PASIG CITY, MANILA**

*with assistance from*

**Resource Management International**

*and*

**SRC International Pty Ltd**

*December 1997*

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ANNEX " EE "

COVER SHEET

for

AUDITED FINANCIAL STATEMENTS

SEC Registration Number

C S 2 0 0 7 0 8 5 3 2

COMPANY NAME

R E D O N D O P E N I N S U L A E N E R G Y , I N C .

PRINCIPAL OFFICE ( No. / Street / Barangay / City / Town / Province )

U N I T 3 1 0 , T H E V E N U E , R I Z A L H I - W A Y , S U B I C B A Y I N D U S T R I A L P A R K , P H A S E 1 , S U B I C B A Y F R E E P O R T Z O N E

Form Type

A A F S

Department requiring the report

C F D

Secondary License Type, If Applicable

N / A

COMPANY INFORMATION

Company's Email Address

-

Company's Telephone Number

(632) 422 1900

Mobile Number

-

No. of Stockholders

13

Annual Meeting (Month / Day)

June 30

Fiscal Year (Month / Day)

December 31

CONTACT PERSON INFORMATION

The designated contact person MUST be an Officer of the Corporation

Name of Contact Person

Rafael L. Andrada

Email Address

randrada@meralco.com.ph

Telephone Number/s

(632) 631-2222

Mobile Number

-

CONTACT PERSON'S ADDRESS

Lopez Building, Ortigas Avenue, Barangay Ugong, Pasig City, Metro Manila

NOTE 1 : In case of death, resignation or cessation of office of the officer designated as contact person, such incident shall be reported to the Commission within thirty (30) calendar days from the occurrence thereof with information and complete contact details of the new contact person designated.

2 : All Boxes must be properly and completely filled-up. Failure to do so shall cause the delay in updating the corporation's records with the Commission and/or non-receipt of Notice of Deficiencies. Further, non-receipt of Notice of Deficiencies shall not excuse the corporation from liability for its deficiencies.

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**STATEMENT OF MANAGEMENT'S RESPONSIBILITY  
FOR FINANCIAL STATEMENTS**

The management of Redondo Peninsula Energy, Inc. ("the Company") is responsible for the preparation and fair presentation of the financial statements as at and for the years ended December 31, 2015 and 2014, including the attached Tabular Schedule of Effective Standards and Interpretations as of reporting date, in accordance with the prescribed financial reporting framework indicated therein. This responsibility includes designing and implementing internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate accounting policies, and making accounting estimates that are reasonable in the circumstances.

The Board of Directors reviews and approves the financial statements and submits the same to the stockholders.

SyCip Gorres Velayo & Co., the independent auditor appointed by the stockholders, have examined the financial statements of the Company in accordance with Philippine Standards on Auditing, and in their report to the stockholders, have expressed their opinion on the fairness of presentation upon completion of such examination.

  
**Aaron A. Domingo**  
President

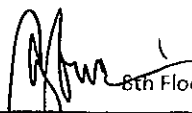
  
**Rafael L. Andrada**  
Treasurer

  
**Oscar S. Reyes**  
Chairman

**SUBSCRIBED AND SWORN** to before me this APR 18 2016 day of April, 2016, affiants exhibiting to me their Tax Identification Numbers (TIN), as follows:

| <u>Name</u>       | <u>TIN No.</u> |
|-------------------|----------------|
| Aaron A. Domingo  | 170-803-692    |
| Rafael L. Andrada | 127-415-866    |
| Oscar S. Reyes    | 136-623-569    |

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Page No. 14  
Book No. II  
Series of 2016



  
**NOTARY PUBLIC**

**Notary Public**  
Pasig, San Juan, Laguna and Pateros  
Issued on July 29, 2015 at Pasig City  
Exp. on July 29, 2016 (015-2016)

Roll No. 5764 / REP No. 0000176-01-00-10 HLM Chaple  
FOR THE PUBLIC / 01-10 Pasig City  
8th Floor, Rockwell Business Center Tower I, Ortigas Avenue, Pasig City 1604 Philippines  
Tel. No. +63 2 422 1900 / Fax No. +63 2 661 4978  
www.rpenergy.ph

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## INDEPENDENT AUDITORS' REPORT

The Stockholders and the Board of Directors  
Redondo Peninsula Energy, Inc.  
Unit 310, The Venue, Rizal Hi-way  
Subic Bay Industrial Park, Phase 1  
Subic Bay Freeport Zone

### Report on the Financial Statements

We have audited the accompanying financial statements of Redondo Peninsula Energy, Inc., which comprise the statements of financial position as at December 31, 2015 and 2014, and the statements of comprehensive income, statements of changes in equity and statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

#### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Philippine Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditors' Responsibility*

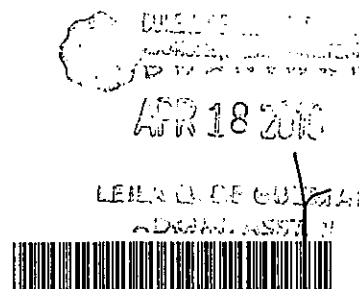
Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with Philippine Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



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*Opinion*

In our opinion, the financial statements present fairly, in all material respects, the financial position of Redondo Peninsula Energy, Inc. as at December 31, 2015 and 2014, and its financial performance and its cash flows for the years then ended in accordance with Philippine Financial Reporting Standards.

**Report on the Supplementary Information Required Under Revenue Regulations No. 15-2010**

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information required under Revenue Regulations No. 15-2010 in Note 14 to the financial statements is presented for purposes of filing with the Bureau of Internal Revenue and is not a required part of the basic financial statements. Such information is the responsibility of the management of Redondo Peninsula Energy, Inc. The information has been subjected to the auditing procedures applied in our audit of the basic financial statements. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.



Martin C. Guantes

Partner

CPA Certificate No. 88494

SEC Accreditation No. 0325-AR-3 (Group A),

August 25, 2015, valid until August 24, 2018

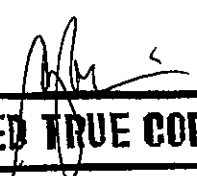
Tax Identification No. 152-884-272

BIR Accreditation No. 08-001998-52-2015,

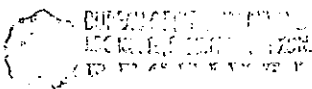
February 27, 2015, valid until February 26, 2018

PTR No. 5321643, January 4, 2016, Makati City

April 13, 2016

  
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LEILA C. DE GUZMAN  
ADMIN. ASST.

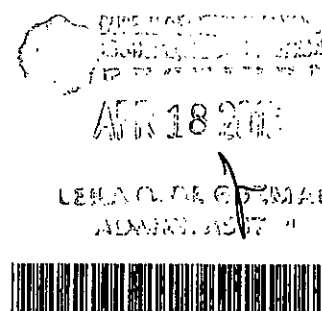


**REDONDO PENINSULA ENERGY, INC.**  
**STATEMENTS OF FINANCIAL POSITION**

|                                        |          | December 31           |                       |
|----------------------------------------|----------|-----------------------|-----------------------|
|                                        | Note     | 2015                  | 2014                  |
| <b>ASSETS</b>                          |          |                       |                       |
| <b>Current Assets</b>                  |          |                       |                       |
| Cash and cash equivalents              | 4        | ₱128,557,790          | ₱225,078,802          |
| Interest receivable                    |          | 56,404                | 168,102               |
| Prepaid expenses                       | 5 and 10 | 1,487,439             | 1,246,713             |
| <b>Total Current Assets</b>            |          | <b>130,101,633</b>    | <b>226,493,617</b>    |
| <b>Noncurrent Assets</b>               |          |                       |                       |
| Property, plant and equipment          | 6        | 1,134,186,350         | 1,062,846,550         |
| Software                               | 11       | 1,589,179             | —                     |
| Input value-added tax                  |          | 25,560,323            | 20,527,392            |
| Other noncurrent assets                | 7 and 10 | 11,657,020            | 12,954,168            |
| <b>Total Noncurrent Assets</b>         |          | <b>1,172,992,872</b>  | <b>1,096,328,110</b>  |
| <b>TOTAL ASSETS</b>                    |          | <b>₱1,303,094,505</b> | <b>₱1,322,821,727</b> |
| <b>LIABILITIES AND EQUITY</b>          |          |                       |                       |
| <b>Current Liabilities</b>             |          |                       |                       |
| Trade and other payables               | 8        | ₱10,743,573           | ₱1,131,887            |
| Income tax payable                     | 12       | 3,602                 | 539                   |
| <b>Total Current Liabilities</b>       |          | <b>10,747,175</b>     | <b>1,132,426</b>      |
| <b>Noncurrent Liability</b>            |          |                       |                       |
| Deferred income tax liability          | 12       | 2,086,611             | 1,614,844             |
| <b>Total Liabilities</b>               |          | <b>12,833,786</b>     | <b>2,747,270</b>      |
| <b>Equity</b>                          |          |                       |                       |
| Capital stock                          | 9        | 1,724,594,700         | 1,724,594,700         |
| Deposits for future stock subscription |          | 150                   | 150                   |
| Deficit                                |          | (434,334,131)         | (404,520,393)         |
| <b>Total Equity</b>                    |          | <b>1,290,260,719</b>  | <b>1,320,074,457</b>  |
| <b>TOTAL LIABILITIES AND EQUITY</b>    |          | <b>₱1,303,094,505</b> | <b>₱1,322,821,727</b> |

See accompanying Notes to Financial Statements.

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**REDONDO PENINSULA ENERGY, INC.**  
**STATEMENTS OF COMPREHENSIVE INCOME**

|                                                 |           | Years Ended December 31 |                    |
|-------------------------------------------------|-----------|-------------------------|--------------------|
|                                                 | Note      | 2015                    | 2014               |
| <b>GENERAL AND ADMINISTRATIVE EXPENSES</b>      |           |                         |                    |
| Salaries, wages and employee benefits           |           | ₱11,866,017             | ₱9,989,222         |
| Professional fees                               |           | 5,014,630               | 3,757,057          |
| Transportation and travel                       |           | 4,487,887               | 3,133,605          |
| Environmental monitoring                        |           | 3,004,132               | 2,499,415          |
| Rent and utilities                              | 10 and 11 | 2,872,070               | 4,321,796          |
| Depreciation and amortization                   | 6 and 11  | 2,731,394               | 3,332,947          |
| Donations, contributions, and community affairs |           | 2,093,531               | 682,028            |
| Office expenses                                 |           | 1,161,928               | 413,362            |
| Contracted services                             |           | 566,280                 | 458,375            |
| Entertainment, amusement and recreation         |           | 298,027                 | 522,819            |
| Insurance                                       |           | 71,292                  | 104,030            |
| Taxes and licenses                              |           | 46,068                  | 82,738             |
| Trainings and seminars                          |           | 22,500                  | 119,768            |
| Others                                          |           | 244,824                 | 172,067            |
|                                                 |           | <b>34,480,580</b>       | <b>29,589,229</b>  |
| <b>OTHER INCOME</b>                             |           |                         |                    |
| Foreign exchange gains - net                    |           | 3,432,755               | 521,468            |
| Interest income                                 | 4 and 7   | 1,709,456               | 2,609,241          |
|                                                 |           | <b>5,142,211</b>        | <b>3,130,709</b>   |
| <b>LOSS BEFORE INCOME TAX</b>                   |           | <b>29,338,369</b>       | <b>26,458,520</b>  |
| <b>PROVISION FOR INCOME TAX</b>                 |           |                         |                    |
|                                                 | 12        |                         |                    |
| Current                                         |           | 3,602                   | 539                |
| Deferred                                        |           | 471,767                 | 350,630            |
|                                                 |           | <b>475,369</b>          | <b>351,169</b>     |
| <b>NET LOSS</b>                                 |           | <b>29,813,738</b>       | <b>26,809,689</b>  |
| <b>OTHER COMPREHENSIVE INCOME</b>               |           | <b>-</b>                | <b>-</b>           |
| <b>TOTAL COMPREHENSIVE LOSS</b>                 |           | <b>₱29,813,738</b>      | <b>₱26,809,689</b> |

See accompanying Notes to Financial Statements.

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LENA G. DE GUZMAN  
 ADMN. ASST.

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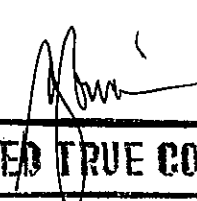




**REDONDO PENINSULA ENERGY, INC.**  
**STATEMENTS OF CHANGES IN EQUITY**  
**FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014**

|                                       | Capital Stock<br>(Note 9) | Deposits for<br>Future Stock<br>Subscription | Deficit        | Total          |
|---------------------------------------|---------------------------|----------------------------------------------|----------------|----------------|
| BALANCES AS AT DECEMBER 31, 2013      | ₱1,724,594,700            | ₱150                                         | (₱377,710,704) | ₱1,346,884,146 |
| Total comprehensive loss for the year | —                         | —                                            | (26,809,689)   | (26,809,689)   |
| BALANCES AS AT DECEMBER 31, 2014      | 1,724,594,700             | 150                                          | (404,520,393)  | 1,320,074,457  |
| Total comprehensive loss for the year | —                         | —                                            | (29,813,738)   | (29,813,738)   |
| BALANCES AS AT DECEMBER 31, 2015      | ₱1,724,594,700            | ₱150                                         | (₱434,334,131) | ₱1,290,260,719 |

*See accompanying Notes to Financial Statements.*

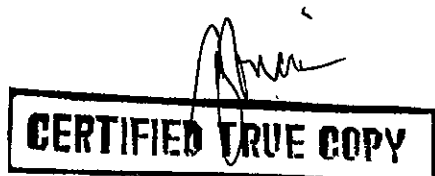
  
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**REDONDO PENINSULA ENERGY, INC.**  
**STATEMENTS OF CASH FLOWS**

|                                                       |                | Years Ended December 31 |               |
|-------------------------------------------------------|----------------|-------------------------|---------------|
|                                                       | Note           | 2015                    | 2014          |
| <b>CASH FLOWS FROM OPERATING ACTIVITIES</b>           |                |                         |               |
| Loss before income tax                                |                | (P29,338,369)           | (P26,458,520) |
| Adjustments for:                                      |                |                         |               |
| Unrealized foreign exchange gains - net               |                | (3,252,675)             | (494,504)     |
| Depreciation and amortization                         | 6 and 11       | 2,731,394               | 3,332,947     |
| Interest income                                       | 4 and 7        | (1,709,456)             | (2,609,241)   |
| Operating loss before working capital changes         |                | (31,569,106)            | (26,229,318)  |
| Decrease (increase) in:                               |                |                         |               |
| Prepaid expenses                                      |                | (759,126)               | 16,670        |
| Input value-added tax                                 |                | (5,032,931)             | (5,331,699)   |
| Increase (decrease) in trade and other payables       |                | 792,493                 | (28,997,023)  |
| Cash used in operations                               |                | (36,568,670)            | (60,541,370)  |
| Interest received                                     |                | 1,821,154               | 2,669,995     |
| Income tax paid                                       |                | (539)                   | (297)         |
| Net cash used in operating activities                 |                | (34,748,055)            | (57,871,672)  |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES</b>           |                |                         |               |
| Additions to:                                         |                |                         |               |
| Property, plant and equipment                         | 6, 7, 8 and 10 | (59,202,998)            | (37,836,321)  |
| Other noncurrent assets                               | 7              | (5,511,410)             | (220,410)     |
| Cash used in investing activities                     |                | (64,714,408)            | (38,056,731)  |
| <b>EFFECT OF EXCHANGE RATE CHANGES</b>                |                |                         |               |
| <b>ON CASH AND CASH EQUIVALENTS</b>                   |                | 2,941,451               | 451,278       |
| <b>NET DECREASE IN CASH AND CASH EQUIVALENTS</b>      |                |                         |               |
|                                                       |                | (96,521,012)            | (95,477,125)  |
| <b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b> |                |                         |               |
|                                                       |                | 225,078,802             | 320,555,927   |
| <b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>       |                |                         |               |
|                                                       |                | P128,557,790            | P225,078,802  |

See accompanying Notes to Financial Statements.



# REDONDO PENINSULA ENERGY, INC.

## NOTES TO FINANCIAL STATEMENTS

---

### 1. Corporate Information

Redondo Peninsula Energy, Inc. ("RP Energy" or the "Company") was incorporated and registered with the Philippine Securities and Exchange Commission (SEC) on May 30, 2007. RP Energy is developing a 2x300 MW independent, circulating-fluidized bed (CFB), coal-fired power plant in the Subic Bay Freeport Zone (SBFZ).

The Company is jointly owned by MERALCO PowerGen Corporation ("MGen", a wholly owned subsidiary of Manila Electric Company ("MERALCO"), 47%), Therma Power, Inc. ("TPI", a wholly owned subsidiary of Aboitiz Power Corporation, 25%) and Taiwan Cogeneration International Corporation - Philippine Branch ("TCIC - Phil", 25%).

On February 3, 2015, the Supreme Court (SC) denied the petition for a Writ of Kalikasan filed by certain opposing parties against the proposed power plant project due to insufficiency of evidence. The SC further upheld the validity of the Environmental Compliance Certificate (ECC) issued by the Department of Environment and Natural Resources (DENR) on December 22, 2008, including the first two (2) amendments thereto, and the Lease and Development Agreement (LDA) of RP Energy with Subic Bay Metropolitan Authority (SBMA).

RP Energy has since resumed the development works and is now targeting to complete technical and commercial evaluation on the Engineering, Procurement and Construction (EPC) proposals for the first 300 MW unit by the first half of 2016. An Amended and Restated LDA (ARLDA) has been executed with the SBMA on February 23, 2016. Other development activities underway include closing the terms for the Income Tax Holiday with the Board of Investments and securing financing of the project, among others.

Construction of the first 300 MW unit is expected to start in 2016 with commercial operations by second half of 2019. Meanwhile, work on the permanent transmission line interconnection is proceeding in preparation for the development of the second 300 MW unit.

The registered office address of the Company is Unit 310, The Venue, Rizal Hi-way, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport Zone.

The Board of Directors (BOD) approved and authorized the issuance of the financial statements of the Company as at and for the years ended December 31, 2015 and 2014 on April 13, 2016.

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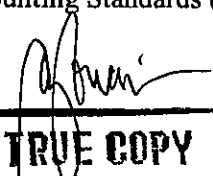
### 2. Basis of Preparation, Statement of Compliance and Summary of Significant Accounting Policies

#### Basis of Preparation

The financial statements have been prepared on a historical cost basis and are presented in Philippine peso, which is the Company's functional and presentation currency. All values are rounded to the nearest Philippine Peso, except when otherwise indicated.

#### Statement of Compliance

The financial statements of the Company have been prepared in accordance with Philippine Financial Reporting Standards (PFRS). The term PFRS, in general, includes all applicable PFRS, Philippine Accounting Standards (PAS) and Interpretations from International Financial Reporting

  
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Interpretations Committee (IFRIC) issued by the Financial Reporting Standards Council (FRSC) and adopted by the Philippine SEC.

### Changes in Accounting Policies and Disclosures

The accounting policies adopted are consistent with those of the previous financial year except for the amended and improved PAS 19, *Employee Benefits - Defined Benefit Plans: Employee Contributions* and the following amendments to existing PFRS that became effective beginning January 1, 2015 and which did not have any significant effect on the Company's financial statements.

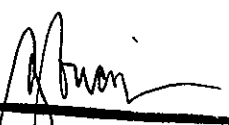
- *Annual Improvements to PFRSs (2010-2012 cycle)*  
The Annual Improvements to PFRSs (2010-2012 cycle) contain non-urgent but necessary amendments to the following standards:
  - PFRS 2, *Share-based Payment: Definition of Vesting Condition* (Amendment)
  - PFRS 3, *Business Combinations - Accounting for Contingent Consideration in a Business Combination* (Amendment)
  - PFRS 8, *Operating Segments - Aggregation of Operating Segments and Reconciliation of the Total of the Reportable Segments' Assets to the Entity's Assets* (Amendments)
  - PAS 16, *Property, Plant and Equipment*, and PAS 38, *Intangible Assets - Revaluation Method - Proportionate Restatement of Accumulated Depreciation and Amortization* (Amendments)
  - PAS 24, *Related Party Disclosures - Key Management Personnel* (Amendment)
- *Annual Improvements to PFRSs (2011-2013 cycle)*  
The Annual Improvements to PFRSs (2011-2013 cycle) contain non-urgent but necessary amendments to the following standards:
  - PFRS 3 - *Scope Exceptions for Joint Arrangements* (Amendment)
  - PFRS 13, *Fair Value Measurement - Portfolio Exception* (Amendment)
  - PAS 40, *Investment Property* (Amendment)

### Future Changes in Accounting Policies

The following are the new and revised standards and interpretations that will become effective subsequent to December 31, 2015. Except as otherwise indicated, the Company does not expect the adoption of these new and amended PFRS, PAS and Philippine Interpretations to have any significant impact on its financial statements.

#### *Effective in 2016*

- PAS 16 and PAS 38 - *Clarification of Acceptable Methods of Depreciation and Amortization* (Amendments), clarify the principle in PAS 16 and PAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortize intangible assets. The amendments are effective prospectively for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact on the Company's financial statements since the Company has not used a revenue-based method to depreciate its noncurrent assets.

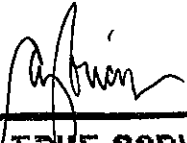
  
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- PAS 16 and PAS 41, *Agriculture - Bearer Plants* (Amendments), change the accounting requirements for biological assets that meet the definition of bearer plants. Under the amendments, biological assets that meet the definition of bearer plants will no longer be within the scope of PAS 41. Instead, PAS 16 shall apply. After initial recognition, bearer plants shall be measured under PAS 16 at accumulated cost (before maturity) and using either the cost model or revaluation model (after maturity). The amendments also require that produce that grows on bearer plants remain within the scope of PAS 41 measured at fair value less costs to sell. For government grants related to bearer plants, PAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*, shall apply. The amendments are retrospectively effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not applicable to the Company.
- PAS 27, *Separate Financial Statements - Equity Method in Separate Financial Statements* (Amendments), allow entities to use the equity method to account for investments in subsidiaries, joint ventures and associates in their separate financial statements. Entities already applying PFRS and electing to change to the equity method in its separate financial statements will have to apply that change retrospectively. For first-time adopters of PFRS electing to use the equity method in its separate financial statements, they will be required to apply this method from the date of transition to PFRS. The amendments are effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have an impact on the Company's financial statements as the Company does not have any investment in subsidiaries, joint ventures and associates.
- PFRS 11, *Joint Arrangements - Accounting for Acquisitions of Interests in Joint Operations* (Amendments), require that a joint operator accounting for the acquisition of an interest in a joint operation, in which the activity of the joint operation constitutes a business must apply the relevant PFRS 3 principles for business combinations accounting. The amendments also clarify that a previously held interest in a joint operation is not remeasured on the acquisition of an additional interest in the same joint operation while joint control is retained. In addition, a scope exclusion has been added to PFRS 11 to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party.

The amendments apply to both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation and are prospectively effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact on the Company's financial statements.

- PFRS 14, *Regulatory Deferral Accounts*, is an optional standard that allows an entity, whose activities are subject to rate-regulation, to continue applying most of its existing accounting policies for regulatory deferral account balances upon its first-time adoption of PFRS. Entities that adopt PFRS 14 must present the regulatory deferral accounts as separate line items in the statement of financial position and present movements in these account balances as separate line items in profit or loss and other comprehensive income. The standard requires disclosures on the nature of, and risks associated with, the entity's rate-regulation and the effects of that rate-regulation on its financial statements. PFRS 14 is effective for annual periods beginning on or after January 1, 2016. Since the Company's activities are not subject to rate-regulation, this standard would not apply.

  
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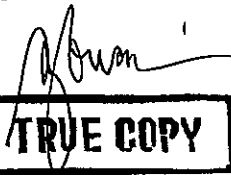
*Annual Improvements to PFRSs (2012-2014 cycle)*

The following Annual Improvements to PFRSs (2012-2014 cycle) are effective for annual periods beginning on or after January 1, 2016 and are not expected to have a material impact on the Company's financial statements:

- PFRS 5, *Non-current Assets Held for Sale and Discontinued Operations - Changes in Methods of Disposal* (Amendment), clarifies that changing from a disposal through sale to a disposal through distribution to owners and vice-versa should not be considered as a new plan of disposal, rather it is a continuation of the original plan. There is, therefore, no interruption of the application of the requirements in PFRS 5. The amendment also clarifies that changing the disposal method does not change the date of classification. The amendment is applied prospectively.
- PFRS 7, *Financial Instruments: Disclosures - Servicing Contracts* (Amendment), requires an entity to provide disclosures for any continuing involvement in a transferred asset that is derecognized in its entirety. The amendment clarifies that a servicing contract that includes a fee can constitute continuing involvement in a financial asset. An entity must assess the nature of the fee and arrangement against the guidance in PFRS 7 in order to assess whether the disclosures are required. The amendment is to be applied such that the assessment of which servicing contracts constitute continuing involvement will need to be done retrospectively. However, comparative disclosures are not required to be provided for any period beginning before the annual period in which the entity first applies the amendment.
- PFRS 7 - *Applicability of the Amendments to PFRS 7 to Condensed Interim Financial Statements* (Amendment), clarifies that the disclosures on offsetting of financial assets and financial liabilities are not required in the condensed interim financial report unless they provide a significant update to the information reported in the most recent annual report. This amendment is applied retrospectively.
- PAS 19 - *Regional Market Issue Regarding Discount Rate* (Amendment), clarifies that market depth of high quality corporate bonds is assessed based on the currency in which the obligation is denominated, rather than the country where the obligation is located. When there is no deep market for high quality corporate bonds in that currency, government bond rates must be used. This amendment is applied prospectively.
- PAS 34, *Interim Financial Reporting - Disclosure of Information 'Elsewhere in the Interim Financial Report'* (Amendment), clarifies that the required interim disclosures must either be in the interim financial statements or incorporated by cross-reference between the interim financial statements and wherever they are included within the greater interim financial report (e.g., in the management commentary or risk report). The amendment is applied retrospectively.

*Effective 2018*

PFRS 9, *Financial Instruments*, as issued, reflects all phases of the financial instruments project and replaces PAS 39, *Financial Instruments: Recognition and Measurement*, and all previous versions of PFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. PFRS 9 is effective for annual periods beginning on or after January 1, 2018, with early application permitted. Retrospective application is required, but comparative information is not compulsory. Early application of previous versions of PFRS 9 is permitted if the date of initial application is before February 1, 2015.

  
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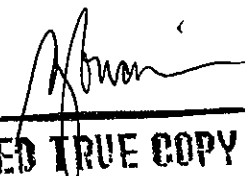
The Company will assess the impact of this standard on a continuing basis.

*Deferred Effectivity*

- Philippine Interpretation IFRIC 15, *Agreements for the Construction of Real Estate*, covers accounting for revenue and associated expenses by entities that undertake the construction of real estate directly or through subcontractors. The Philippine SEC and Philippine FRSC have deferred the effectivity of this interpretation until the final Revenue standard is issued by the International Accounting Standards Board (IASB) and an evaluation of the requirements of the final Revenue standard against the practices of the Philippine real estate industry is completed. This interpretation is not applicable to the Company.
- PFRS 10, *Consolidated Financial Statements*, and PAS 28, *Investment in Associates - Sale or Contribution of Assets between an Investor and its Associate or Joint Venture* (Amendments), address an acknowledged inconsistency between the requirements in PFRS 10 and those in PAS 28 (2011) with respect to the sale or contribution of assets between an investor and its associate or joint venture. The amendments require that full gain or loss is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary. The amendments does not have any impact on the Company's financial position or performance.

The following new standards and amendments issued by the IASB has not yet been adopted by the Philippine FRSC and Philippine SEC:

- International Financial Reporting Standards (IFRS) 15, *Revenue from Contracts with Customers*. IFRS 15 was issued in May 2014 and establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The new revenue standard will supersede all current revenue recognition requirements under IFRS. Either a full or a modified retrospective application is required for annual periods beginning on or after January 1, 2018, with early adoption permitted.
- IFRS 16, *Leases*. IFRS 16 was issued in January 2016 and sets out the principles for the recognition, measurement, presentation and disclosure of leases. The objective is to ensure that lessees and lessors provide relevant information in a manner that faithfully represents those transactions. This information gives a basis for users of financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of the entity. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15 at or before the date of initial application of IFRS 16.
- Amendments to International Accounting Standards (IAS) 12, *Income Taxes - Recognition of Deferred Tax Assets for Unrealized Losses*. In January 2016, the IASB issued the amendments to IAS 12 which clarify how to account for deferred tax assets related to debt instruments measured at fair value. The amendments also address the diversity in practice regarding the recognition of deferred tax assets for unrealized losses. The amendments are effective for annual periods beginning on or after January 1, 2017, with early application permitted.

  
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The Company continues to assess the impact of the new and amended accounting standards and interpretations which are effective subsequent to December 31, 2015, any additional disclosures required will be included in the financial statements when these are adopted.

### Summary of Significant Accounting Policies

#### Financial Instruments

##### Financial Assets

##### *Initial recognition and measurement*

All financial assets are recognized initially at fair value. Transaction costs are included in the initial measurement of all financial assets, except for financial assets measured at fair value through profit or loss (FVPL).

Purchases or sales of financial assets that require delivery of assets within a timeframe established by regulation or convention in the marketplace (regular way purchases) are recognized on the trade date, which is the date that the Company commits to purchase or sell the assets.

Financial assets within the scope of PAS 39 are classified as financial assets at FVPL, loans and receivables, held-to-maturity (HTM) investments, available-for-sale (AFS) investments, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial instruments at initial recognition and, where allowed and appropriate, re-evaluates such designation at each reporting date.

##### *Subsequent measurement*

The subsequent measurement of financial assets depends on their classification as follows:

##### *Financial assets at FVPL*

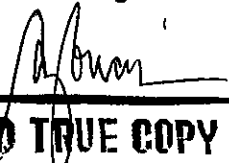
Financial assets at FVPL include financial assets held-for-trading and financial assets designated upon initial recognition as "at FVPL". Financial assets are classified as held-for-trading if they are acquired for the purpose of selling in the near term. Derivatives, including separated embedded derivatives, are also classified as held-for-trading unless they are designated as effective hedging instruments.

Financial assets at FVPL are carried in the statement of financial position at fair value with gains or losses recognized in the statement of comprehensive income.

Financial assets may be designated at initial recognition as "at FVPL" if any of the following criteria are met: (i) the designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the assets or recognizing gains or losses on them on different bases; (ii) the financial assets are part of a group of financial assets, which are managed and their performance are evaluated on a fair value basis, in accordance with a documented risk management strategy; or (iii) the financial assets contain one or more embedded derivatives that would need to be recorded separately.

As at December 31, 2015 and 2014, the Company does not have financial instruments measured as "at FVPL".

Derivatives embedded in host contracts are accounted for as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not carried at fair value. These embedded derivatives are measured at fair value with gains or losses arising from changes in fair value recognized in the statement of comprehensive income.

  
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Reassessment only occurs if there is a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required under the contract.

#### *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Such financial assets are carried at amortized cost using the effective interest method. This method uses an effective interest rate that discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset. Gains or losses are recognized in the statement of comprehensive income when the loans and receivables are derecognized or impaired, as well as when these are amortized. Interest earned or incurred is recorded in the "Interest income" account in the statement of comprehensive income. Assets in this category are included in the current assets except for assets with maturities beyond 12 months from the reporting date, which are classified as noncurrent assets.

Financial assets included in this classification are the Company's cash in bank and cash equivalents, interest receivable, restricted time deposit, performance bond, refundable and miscellaneous deposits as at December 31, 2015 and 2014.

#### Cash and Cash Equivalents

Cash consists of cash on hand and in bank. Cash equivalents are short-term, highly liquid investments that are readily convertible to cash with original maturities of three (3) months or less that are subject to an insignificant risk of change in value.

#### *HTM investments*

HTM investments are non-derivative financial assets, with fixed or determinable payments and fixed maturities, which the Company has the positive intention and ability to hold to maturity. After the initial measurement, HTM investments are measured at amortized cost using the effective interest method. Gains or losses are recognized in the statement of comprehensive income when the investments are derecognized or impaired, as well as through the amortization process. HTM investments are included as current assets except if their maturities are beyond 12 months from the reporting date, which are classified as noncurrent assets.

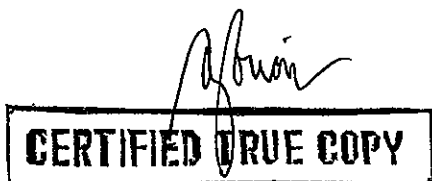
The Company does not have HTM investments as at December 31, 2015 and 2014.

#### *AFS investments*

AFS investments include equity investments and debt securities. Equity investments classified as AFS are those that are neither classified as held-for-trading nor designated as "at FVPL". Debt securities in this category are those that are intended to be held for an indefinite period of time and that may be sold in response to needs for liquidity or to changes in the market conditions.

After initial measurement, AFS investments are measured at fair value with unrealized gains or losses recognized directly in other comprehensive income until the investment is derecognized, at which time the cumulative gain or loss recorded in other comprehensive income is recognized in the statement of comprehensive income, or determined to be impaired, at which time the cumulative loss recorded in other comprehensive income is recognized in the statement of comprehensive income. AFS investments are included under noncurrent assets unless there is an intention to dispose of the investments within 12 months from the reporting date.

The Company does not have AFS investments as at December 31, 2015 and 2014.



### Financial Liabilities

#### *Initial recognition and measurement*

Financial liabilities within the scope of PAS 39 are classified as financial liabilities at FVPL, other financial liabilities, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial liabilities at initial recognition and, where allowed and appropriate, re-evaluates such designation at each reporting date.

Financial liabilities are recognized initially at fair value, inclusive of directly attributable transaction costs, except for financial liabilities classified as "at FVPL".

#### *Subsequent measurement*

The measurement of financial liabilities depends on their classification as follows:

#### *Financial liabilities at FVPL*

Financial liabilities at FVPL include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as "at FVPL". Financial liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term.

Derivative liabilities, including separated embedded liabilities, are also classified as held-for-trading unless they are designated as effective hedging instruments.

Financial liabilities at FVPL are carried in the statement of financial position at fair value with gains or losses recognized in the statement of comprehensive income.

Financial liabilities may be designated at initial recognition as "at FVPL" if any of the following criteria are met: (i) the designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the liabilities or recognizing the gains or losses on them on a different bases; (ii) the financial liabilities are part of a group, which are managed and their performance evaluated on fair value basis, in accordance with a documented risk management strategy; or (iii) the financial liabilities contain one or more embedded derivatives that would need to be separately recorded.

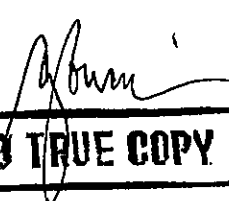
The Company does not have any financial liabilities classified as "at FVPL" as at December 31, 2015 and 2014.

#### *Other financial liabilities*

Financial liabilities are classified in this category if these are not held-for-trading or not designated as "at FVPL" upon inception of the liability. These include liabilities arising from operations or borrowings. Other financial liabilities are classified as current liabilities if maturity is within 12 months from the reporting date. Otherwise, these are classified as noncurrent liabilities.

After initial recognition, other financial liabilities are subsequently measured at amortized cost using the effective interest method. Amortized cost is calculated by taking into account any discount or premium on the issuance and fees that are an integral part of the effective interest rate. Gains or losses are recognized in the statement of comprehensive income when the liabilities are derecognized, as well as through the amortization process.

Financial liabilities included in this classification are the Company's trade and other payables (except liabilities to government agencies) as at December 31, 2015 and 2014.

  
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*Offsetting of financial instruments*

Financial assets and liabilities are offset and the net amount is reported in the statement of financial position if, and only if, there is currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously. This is not generally the case with master netting agreements, and the related assets and liabilities are presented gross in the statement of financial position.

*Fair Value Measurement*

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible to the Company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

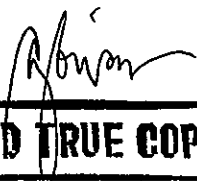
All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognized in the financial statements on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by reassessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

As at December 31, 2015 and 2014, no financial asset was recognized at fair value. The Company has no other assets or liabilities with recurring and nonrecurring fair value measurements.

  
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*'Day 1' difference*

Where the transaction price in a non-active market is different from the fair value of other observable current market transactions in the same instrument, or based on a valuation technique whose variables include only data from observable market, the Company recognizes the difference between the transaction price and fair value (a 'Day 1' difference) in the statement of comprehensive income, unless it qualifies for recognition as some other type of asset. The difference between the transaction price and model value is only recognized in the statement of comprehensive income when the inputs become observable or when the instrument is derecognized. For each of such transaction, the Company determines the appropriate method of recognizing the 'Day 1' difference amount.

Impairment of Financial Assets

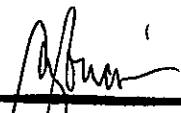
The Company assesses at each reporting date whether a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is an objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred 'loss event') and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

*Financial assets carried at amortized cost*

For financial assets carried at amortized cost, the Company first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant, and individually or collectively for financial assets that are not individually significant. If the Company determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, the asset is included in a group of financial assets with similar credit risk characteristics and that group of financial assets is collectively assessed for impairment based on historical loss assessment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognized are not included in the collective assessment of impairment.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not yet been incurred). The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the statement of comprehensive income. Interest income continues to be accrued on the reduced carrying amount based on the original effective interest rate of the financial asset. Loans, together with the associated allowance, are written off when there is no realistic prospect of future recovery and all collaterals have been realized or have been transferred to the Company.

If, in a subsequent year, the amount of the impairment loss increases or decreases because of an event occurring after the impairment was recognized, the previously recognized impairment loss is increased or decreased by adjusting the allowance account. If an asset written off is recovered, the recovery is recognized in the statement of comprehensive income. Any subsequent reversal of an impairment loss is recognized in the statement of comprehensive income, to the extent that the carrying value of the asset does not exceed its amortized cost at the reversal date.

  
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### Derecognition of Financial Assets and Liabilities

#### *Financial assets*

Financial assets (or where applicable, a part of a financial asset or part of a group of similar financial assets) are derecognized when:

- the right to receive cash flows from the asset have expired;
- the Company has transferred its right to receive cash flows from the asset or has assumed an obligation to receive cash flows in full without material delay to a third party under a “pass-through” arrangement; and
- either the Company has (a) transferred substantially all the risks and rewards of the asset, or (b) neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a “pass-through” arrangement, and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, a new asset is recognized to the extent of the Company’s continuing involvement in the asset.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

#### *Financial liabilities*

Financial liabilities are derecognized when the obligation under the liability is discharged, cancelled or has expired.

Where an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the carrying amounts is recognized in the statement of comprehensive income.

### Input Value-added Tax (VAT)

Input VAT represents VAT due or paid on purchases of goods and services that the Company may claim against any future liability to the Bureau of Internal Revenue (BIR) for output VAT for sale of goods and services. Input VAT is stated at net realizable value, where the cost is reduced for any portion that cannot be claimed against output VAT or recovered as tax credit against future income tax liability. The amount of the loss shall be recognized in the statement of comprehensive income. Input VAT is classified as current asset if expected to be utilized within 12 months from the reporting date. Otherwise, it is classified as noncurrent asset.

### Property, Plant and Equipment

Property, plant and equipment, except land, is stated at cost, net of accumulated depreciation, amortization and impairment losses, if any. Land acquisition for the future connection asset is stated at cost, which includes contract price, surveys, excavation and costs of closing the transaction and obtaining the title, less any impairment. Land is capitalized and recognized as an asset when the risks and rewards of ownership are transferred to the Company through the execution of Deed of Absolute Sale or issuance of Certificate of Title in the name of the Company.

  
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The initial cost of property, plant and equipment consists of their purchase price, including import duties and any directly attributable costs of bringing the assets to their working condition and location intended for use. Cost also includes the cost of replacing part of such property and equipment when the recognition criteria are met. All other repair and maintenance costs are recognized as incurred in the statement of comprehensive income. The present value of the expected cost for decommissioning of the asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Depreciation and amortization of the Company's property, plant and equipment is computed on a straight-line basis over the following estimated useful lives:

| Category                                       | Number of Years                                     |
|------------------------------------------------|-----------------------------------------------------|
| Transportation equipment                       | 5                                                   |
| Office furniture, fixtures and other equipment | 3 to 5                                              |
| Computer equipment                             | 3                                                   |
| Leasehold improvements                         | 3 or the term of the lease,<br>whichever is shorter |

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising from the derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of comprehensive income in the year the asset is derecognized.

The assets' residual values, useful lives and methods of depreciation and amortization are reviewed and adjusted prospectively, if appropriate, at each reporting date to ensure that these are consistent with the expected pattern of economic benefits from items of property, plant and equipment.

Construction in progress is stated at cost, and consists of cost directly associated with the development and construction of the plant and equipment. Construction in progress is not depreciated until such time that the relevant assets are substantially completed and available for their intended use.

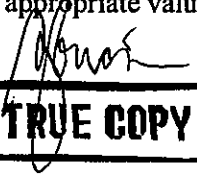
#### Software

Software includes the Company's share in the costs incurred for configuration and interface, coding, installation to hardware, including parallel processing, and data conversion of the computerized accounting system.

Amortization commences once the software is available for use and is computed on a straight-line basis over the estimated useful life of five (5) years.

#### Impairment of Noncurrent Nonfinancial Assets

The Company assesses at each reporting date whether there is an indication that a non-financial asset may be impaired. If any such indication exists, the Company makes a formal estimate of the asset's recoverable amount. Recoverable amount is the higher of an asset's or a cash-generating unit's (CGU's) fair value less costs to sell or its value in use. A CGU is the smallest identifiable asset group that generates cash flows and is largely independent from other assets of the Company. Where the carrying value of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. The fair value is the amount obtainable from the sale of the asset in an arm's-length transaction. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by

  
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valuation multiples or other available fair value indicators. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and the risks specific to the asset. Impairment losses are recognized in the statement of comprehensive income.

An assessment is also made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the individual asset's or CGU's recoverable amount is estimated. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If a reversal of impairment loss is to be recognized, the carrying amount of the asset is increased to its recoverable amount. The increased amount cannot exceed the carrying amount that would have been determined, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the statement of comprehensive income. After such reversal, the depreciation and amortization expense is adjusted in future periods to allocate the asset's revised carrying amount, less any residual value, on a systematic basis over its remaining useful life.

The Company's non-financial assets consist of property, plant and equipment, software, input VAT and prepayments.

#### Capital Stock

Capital stock pertains to the ordinary or common stock of the Company. The proceeds from the issuance of ordinary or common stock are presented in the equity section of the statement of financial position as capital stock to the extent of the par value of the issued shares and any excess of the proceeds over the par value of shares issued, less any incremental costs directly attributable to the issuance, net of tax, is presented in equity as additional paid-in capital.

#### Retained Earnings

The retained earnings balance include the cumulative balance of periodic net income or loss and is reduced by dividend distributions, prior year adjustments, effect of changes in accounting policy and other capital adjustments. A debit balance in the retained earnings account refers to a "deficit" position. A deficit is not an asset but a deduction from equity.

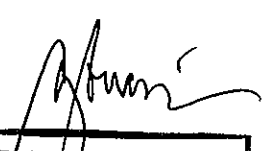
#### Revenue Recognition

Revenue is recognized to the extent that it is probable that the economic benefits associated with the transaction will flow to the Company and the revenue can be reliably measured, regardless of when collection will be made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duty.

Interest income is recognized as the interest accrues, using the effective interest rate, which is the rate that discounts estimated future cash receipts through the expected life of the financial instrument.

#### Expense Recognition

Expenses are recognized when a decrease in future economic benefit related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably. Expenses are recognized in the statement of comprehensive income in the year they are incurred.

  
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### Leases

The determination of whether an arrangement is, or contains a lease is based on the substance of the arrangement at the inception date of whether the fulfillment of the arrangement is dependent on the use of a specific asset or the arrangement conveys a right to use the asset.

### *Company as a Lessee*

Leases where the lessor retains substantially all the risks and rewards of ownership are classified as operating leases. Operating lease payments are recognized as expense in the statement of comprehensive income on a straight-line basis over the lease term. Operating lease expense that is directly attributable to building of the Company's power plant is capitalized as part of construction in progress under property, plant and equipment.

### Foreign Currency Transactions

Transactions in foreign currencies are initially recorded using the applicable functional currency rates prevailing at the date of the transaction. Outstanding monetary assets and liabilities denominated in foreign currencies are restated using the closing exchange rate prevailing at the reporting date. All differences are recognized in the statement of comprehensive income.

### Income Tax

#### *Current income tax*

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authority. The tax rate and tax laws used to compute the amount are those that are enacted or substantively enacted as at the reporting date.

#### *Deferred income tax*

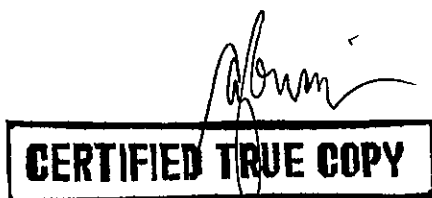
Deferred income tax is provided on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognized for all taxable temporary differences, except:

- where the deferred income tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred income tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred income tax assets are recognized for all deductible temporary differences and carry-forward benefit of unused net operating loss carryover (NOLCO) and the excess of minimum corporate income tax (MCIT) over the regular corporate income tax (RCIT) to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, unused NOLCO and excess MCIT over RCIT, may be utilized, except:

- when the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and





- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred income tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax assets to be utilized. Unrecognized deferred income tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profit will allow the deferred income tax assets to be recovered.

Deferred income tax assets and liabilities are measured at the income tax rates that are applicable to the year when the asset is realized or the liability is settled, based on tax rate and tax laws that are enacted or substantively enacted as at the reporting date.

Deferred income tax assets and liabilities are offset, if, and only if, a legally enforceable right exists to offset current income tax assets against current income tax liabilities and deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred income tax liabilities or assets are expected to be settled or recovered.

#### Provisions

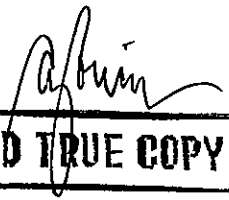
Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of comprehensive income, net of any reimbursement. If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as an interest expense.

#### Contingencies

Contingent liabilities are not recognized in the financial statements. These are disclosed in the notes to financial statements unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the financial statements but are disclosed in the notes to financial statements when an inflow of economic benefits is probable.

#### Events After the Reporting Date

Post year-end events that provide additional information about the Company's financial position as at the reporting date (adjusting events) are reflected in the financial statements. Post year-end events that are not adjusting events are disclosed in the notes to financial statements, when material.

  
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### 3. Significant Judgments, Accounting Estimates and Assumptions

The preparation of the Company's financial statements requires management to make judgments, accounting estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes at the end of the reporting period. However, uncertainty about these assumptions and accounting estimates could result in outcome that requires a material adjustment to the carrying amount of the asset or liability affected in future periods.

#### Judgments

In the process of applying the Company's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the financial statements:

#### *Determining functional currency*

Based on the economic substance of the underlying circumstances relevant to the Company, the functional currency of the Company is the Philippine Peso. The Philippine Peso is the currency of the primary economic environment in which the Company operates. It is the currency that mainly influences the Company's capitalized costs and expenses.

#### *Operating leases*

The Company has lease agreements for its office space and the land where its plant facility will be located (see Note 10). Management has determined, based on the evaluation of the terms and conditions of the arrangements, that it has not acquired any significant risks and rewards of ownership of such properties because the lease arrangements do not transfer to the Company the ownership over the assets at the end of the lease term and do not provide the Company with a bargain purchase option over the leased assets. Consequently, the lease arrangements are accounted for as operating leases.

#### Accounting Estimates and Assumptions

The key accounting estimates and assumptions concerning the future and other key sources of estimation uncertainty as at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

#### *Estimation of useful lives of property, plant and equipment, and software*

The Company estimates the useful lives of property, plant and equipment, and software based on the period over which the assets are expected to be available for use. The estimated useful lives of these assets are reviewed periodically and are updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence and legal or other limits on the use of the assets. In addition, the estimation of useful lives of these assets is based on collective assessment of industry practice, internal technical evaluation and experience with similar assets. It is possible, however, that future results of operations could be materially affected by changes in estimates brought about by changes in factors mentioned in the foregoing. The amounts and timing of depreciation and amortization expense for any period would be affected by changes in these factors and circumstances. The aggregate carrying values of depreciable property, plant and equipment, and software as at December 31, 2015 and 2014 amounted to ₱1,126,639,129 and ₱1,062,846,550, respectively (see Notes 6 and 11).

  
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*Impairment of noncurrent nonfinancial assets*

The Company performs impairment review when certain impairment indicators are present. Determining the fair value of noncurrent nonfinancial assets requires the Company to make accounting estimates and assumptions that can materially affect the Company's financial statements. Future events could cause the Company to conclude that the noncurrent nonfinancial assets are impaired. Any resulting impairment loss could have a material adverse impact on the Company's financial position and performance.

As at December 31, 2015 and 2014, there were no impairment indicators identified. The aggregate carrying values of the Company's noncurrent nonfinancial assets as at December 31, 2015 and 2014 amounted to ₱1,161,335,852 and ₱1,089,604,872, respectively (see Notes 6, 7 and 11).

*Recognition and realizability of deferred income tax assets*

The Company reviews the carrying amounts of deferred income tax assets at each reporting date and reduces these to the extent that it is no longer probable that sufficient future taxable income will be available to allow all or part of the deferred income tax assets to be utilized. Significant management judgment is required to determine the amount of deferred income tax asset that may be recognized, based upon the likely timing and level of future taxable income together with future tax planning strategies. The Company's assessment on the recognition of deferred income tax assets is based on the forecasted taxable income of the following reporting period.

As at December 31, 2015 and 2014, the Company has recognized deferred income tax assets amounting to ₱4,285,918 and ₱3,310,116, respectively, and did not recognize deferred income tax assets on the carryforward benefits of NOLCO amounting to ₱258,082,761 and ₱363,208,891, respectively, and excess MCIT over RCIT amounting to ₱4,438 and ₱73,496, respectively, as management believes that there will not be sufficient future taxable income against which these can be utilized prior to their expectations (see Note 12).

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**4. Cash and Cash Equivalents**

|                           | 2015                | 2014                |
|---------------------------|---------------------|---------------------|
| Cash on hand and in banks | ₱21,144,790         | ₱7,706,802          |
| Cash equivalents          | 107,413,000         | 217,372,000         |
|                           | <b>₱128,557,790</b> | <b>₱225,078,802</b> |

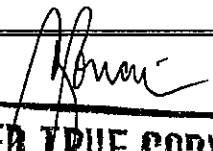
Cash in banks earn interest at prevailing bank deposit rates. Short-term investments are made for varying periods between one (1) day and three (3) months depending on the immediate cash requirements of the Company, and earn interest at the respective short-term investment rates.

Interest income on cash in banks and cash equivalents amounted to ₱1,600,490 and ₱2,498,402 in 2015 and 2014, respectively.

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**5. Prepaid Expenses**

|                                     | 2015              | 2014              |
|-------------------------------------|-------------------|-------------------|
| Prepaid rent (Note 10)              | ₱1,254,856        | ₱801,288          |
| Advances to suppliers and employees | 232,583           | 181,225           |
| Refundable deposits                 | —                 | 264,200           |
|                                     | <b>₱1,487,439</b> | <b>₱1,246,713</b> |

  
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6. Property, Plant and Equipment

|                                              | December 31, 2015 |                             |                                                      |                       |                           |                                          |
|----------------------------------------------|-------------------|-----------------------------|------------------------------------------------------|-----------------------|---------------------------|------------------------------------------|
|                                              | Land              | Transportation<br>Equipment | Office Furniture,<br>Fixtures and<br>Other Equipment | Computer<br>Equipment | Leasehold<br>Improvements | Construction<br>in Progress<br>(Note 10) |
| Cost                                         |                   |                             |                                                      |                       |                           |                                          |
| Beginning of year                            |                   |                             |                                                      |                       |                           |                                          |
| Additions                                    | P-<br>9,136,400   | P1,408,000                  | P1,518,810                                           | P931,376              | P9,481,012                | P1,058,000,163                           |
| End of year                                  | 9,136,400         | 1,408,000                   | 263,638                                              | 325,829               | -                         | 64,168,752                               |
| Accumulated Depreciation<br>and Amortization |                   |                             |                                                      |                       |                           |                                          |
| Beginning of year                            | -                 | 868,267                     | 1,148,311                                            | 855,447               | 5,620,786                 | -                                        |
| Depreciation                                 | -                 | 281,600                     | 325,910                                              | 150,280               | 1,797,029                 | -                                        |
| End of year                                  | -                 | 1,149,867                   | 1,474,221                                            | 1,005,727             | 7,417,815                 | -                                        |
| Net Book Values                              | P9,136,400        | P258,133                    | P308,227                                             | P251,478              | P2,063,197                | P1,122,168,915                           |
|                                              |                   |                             |                                                      |                       |                           | P1,134,186,350                           |

|                                              | December 31, 2014           |                                                      |                       |                           |                                          |                |
|----------------------------------------------|-----------------------------|------------------------------------------------------|-----------------------|---------------------------|------------------------------------------|----------------|
|                                              | Transportation<br>Equipment | Office Furniture,<br>Fixtures and<br>Other Equipment | Computer<br>Equipment | Leasehold<br>Improvements | Construction<br>in Progress<br>(Note 10) | Total          |
| Cost                                         |                             |                                                      |                       |                           |                                          |                |
| Beginning of year                            |                             |                                                      |                       |                           |                                          |                |
| Additions                                    | P1,408,000                  | P1,400,110                                           | P883,360              | P9,481,012                | P1,019,161,794                           | P1,032,334,276 |
| End of year                                  | -                           | 118,700                                              | 48,016                | -                         | 38,838,369                               | 39,005,085     |
| Accumulated Depreciation<br>and Amortization |                             |                                                      |                       |                           |                                          |                |
| Beginning of year                            | 586,667                     | 703,104                                              | 636,528               | 3,233,565                 | -                                        | 5,159,864      |
| Depreciation                                 | 281,600                     | 445,207                                              | 218,919               | 2,387,221                 | -                                        | 3,332,947      |
| End of year                                  | 868,267                     | 1,148,311                                            | 855,447               | 5,620,786                 | -                                        | 8,492,811      |
| Net Book Values                              | P539,733                    | P370,499                                             | P75,929               | P3,860,226                | P1,058,000,163                           | P1,062,846,550 |

Construction in progress represents capitalized site development expenses.

The total cost of fully depreciated properties that are still in use amounted to P2,124,381 and P659,154 as at December 31, 2015 and 2014, respectively.

  
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In 2015, the Company executed separate Deeds of Absolute Sale with various landowners for the purchase of lots along the transmission line route for the Company's connection asset and paid 80% of the total purchase price. The balance of 20%, which shall be paid upon transfer of titles to the Company, is included under the "Trade and other payables" as part of payable to landowners (see Note 8).

#### 7. Other Noncurrent Assets

|                                                 | 2015               | 2014               |
|-------------------------------------------------|--------------------|--------------------|
| Restricted time deposit                         | ₱6,259,054         | ₱5,947,830         |
| Prepaid rent - net of current portion (Note 10) | 4,358,358          | —                  |
| Performance bond                                | 220,410            | 220,410            |
| Prepayments                                     | —                  | 6,230,930          |
| Miscellaneous deposits                          | 819,198            | 554,998            |
|                                                 | <b>₱11,657,020</b> | <b>₱12,954,168</b> |

On June 8, 2010, the Company entered into an LDA with SBMA. In compliance with the terms of the LDA, the Company posted a Certificate of Deposit with face value of US\$133,002, equivalent to ₱6,259,054 and ₱5,947,830 as of December 31, 2015 and 2014, respectively (see Note 10). The restricted time deposit placed with a local financial institution bears interest at 1.7% and 2.0% per annum in 2015 and 2014, respectively. Interest income recognized in 2015 and 2014 amounted to ₱108,966 and ₱110,839, respectively.

On May 21, 2015, the Energy Regulatory Commission (ERC) granted its approval to develop, build, own and operate the 23 kilometers connection asset in favor of the Company. Consequently, the right-of-way expenses under prepayments in 2014 amounting to ₱6,230,930 were capitalized as part of the construction in progress under the "Property, plant and equipment" account in 2015.

#### 8. Trade and Other Payables

|                                | 2015               | 2014              |
|--------------------------------|--------------------|-------------------|
| Trade payables                 | ₱1,184,349         | ₱—                |
| Accrued expenses               | 7,014,153          | 720,218           |
| Payable to landowners (Note 6) | 1,805,040          | —                 |
| Withholding tax payable        | 711,706            | 388,554           |
| Others                         | 28,325             | 23,115            |
|                                | <b>₱10,743,573</b> | <b>₱1,131,887</b> |

Trade payables consist of unpaid billings from suppliers for professional fees and other office expenses.

The accrued expenses balance as at December 31, 2015 pertains to plant site development expenses capitalized under the "Property, plant and equipment" account amounting to ₱5,248,399 and the allocated software cost amounting to ₱1,765,754 (see Note 11).

  
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## 9. Equity

The details of the Company's capital stock as at December 31, 2015 and 2014 are as follows:

|                                       | Number of Shares |            |
|---------------------------------------|------------------|------------|
|                                       | 2015             | 2014       |
| Authorized - ₱100 par value per share |                  |            |
| Balance at beginning and end of year  | 20,000,000       | 20,000,000 |
| Issued and subscribed:                |                  |            |
| Balance at beginning and end of year  | 17,245,947       | 17,245,947 |

## 10. Lease Agreements

- a. The Company executed an LDA with SBMA for a period of 50 years starting June 8, 2010, subject to certain terms and conditions. The base rent for the lease of the property for the duration of the lease is US\$3.50 per square meter and shall be payable in 10 equal installments at the beginning of every five (5) years.

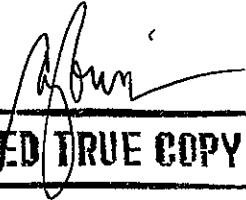
In June 2015, the Company paid the second installment of the lease for the period June 2015 to May 2020 amounting to ₱5,998,769 (US\$133,002). Rental under this operating lease for the years ended December 31, 2015 and 2014 amounting to ₱1,407,252 and ₱1,168,764, respectively, were capitalized as part of the construction in progress under the "Property, plant and equipment" account (see Note 6).

Under the terms and conditions of the ARLDA signed on February 23, 2016, the rent for the lease of property shall be the original base rent and shall be payable annually starting June 2020 until the commercial operations date.

- b. On June 1, 2012, the Company entered into a three-year sublease agreement with a third party for the lease of its office space in the SBFZ. On May 31, 2015, the Company renewed the sublease agreement for a term of five (5) years. Total rent expense recognized in 2015 and 2014 in connection with the said lease amounted to ₱1,036,800.

Future rental commitments as at December 31, 2015 and 2014 are as follows:

|                                             | 2015               | 2014               |
|---------------------------------------------|--------------------|--------------------|
| Within one year                             | ₱2,972,617         | ₱2,484,975         |
| After one year but not more than five years | 11,064,374         | 5,871,332          |
| More than five years                        | 49,342,204         | 48,177,421         |
|                                             | <b>₱63,379,195</b> | <b>₱56,533,728</b> |

  
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## 11. Related Party Transactions

Related party relationship exists when the party has the ability to control, directly or indirectly, through one or more intermediaries, or exercise significant influence over the other party in making financial and operating decisions. Such relationships also exist between and/or among entities which are under common control with the reporting entity and its key management personnel, directors and stockholders. In considering each possible related party relationship, attention is directed to the substance of the relationships, and not merely to the legal form.

As at December 31, 2015 and 2014, the amounts of transactions and outstanding balances with related parties are as follows:

| Related Party | Nature of Transactions | Transactions During the Years Ended December 31 |            | Outstanding Balances as at December 31 |      | Terms and Conditions                          |
|---------------|------------------------|-------------------------------------------------|------------|----------------------------------------|------|-----------------------------------------------|
|               |                        | 2015                                            | 2014       | 2015                                   | 2014 |                                               |
| Shareholder - |                        |                                                 |            |                                        |      |                                               |
| MGen          | Rental and utilities   | ₱1,042,057                                      | ₱3,235,133 | ₱-                                     | ₱-   | Monthly billed and paid, non-interest bearing |
|               | Software               | 1,765,754                                       | -          | 1,765,754                              | -    | Unbilled and unpaid                           |

On June 26, 2013, the Company entered into a Cost Sharing Agreement ("Agreement") with MGen covering the cost of the leased office space in Pasig City. The Agreement provides, among others, payment of the lease rate for the share in the cost of rental, utilities and maintenance which are billed monthly.

Amortization of software in 2015 amounted to ₱176,575.

There is no compensation for key management personnel as at and for the years ended December 31, 2015 and 2014.

## 12. Income Tax

The provision for current income tax represents MCIT in 2015 and 2014.

The Company's deferred income tax asset (liabilities) as at December 31, 2015 and 2014 are as follows:

|                                     | 2015         | 2014         |
|-------------------------------------|--------------|--------------|
| Deferred income tax liabilities on: |              |              |
| Unrealized foreign exchange gain    | (₱4,285,918) | (₱3,310,116) |
| Capitalized lease payments          | (2,086,611)  | (1,614,844)  |
|                                     | (6,372,529)  | (4,924,960)  |
| Deferred income tax asset on NOLCO  | 4,285,918    | 3,310,116    |
|                                     | (₱2,086,611) | (₱1,614,844) |

The components of the Company's unrecognized deductible temporary difference on the carryforward benefits of NOLCO and excess MCIT over RCIT as at December 31, 2015 and 2014 pertain to the following:

|                          | 2015         | 2014         |
|--------------------------|--------------|--------------|
| NOLCO                    | ₱258,082,761 | ₱363,208,891 |
| Excess of MCIT over RCIT | 4,438        | 73,496       |

  
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The above deferred income tax assets were not recognized as management believes that it is not probable that sufficient future taxable income will be available to allow all or part of the deferred income tax assets to be utilized.

A reconciliation between the statutory tax rate and effective income tax rate are as follows:

|                                                                                                                                             | 2015     | 2014    |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|
| Statutory income tax rate                                                                                                                   | 30.00%   | 30.00%  |
| Income tax effects of:                                                                                                                      |          |         |
| Expired NOLCO and MCIT                                                                                                                      | (140.80) | (73.35) |
| Carryforward benefits of NOLCO and excess MCIT and deductible temporary differences for which no deferred income tax assets were recognized | 107.73   | 39.65   |
| Interest income subject to final tax                                                                                                        | 1.75     | 2.96    |
| Nondeductible expenses                                                                                                                      | (0.30)   | (0.59)  |
| Effective income tax rates                                                                                                                  | (1.62%)  | (1.33%) |

The carryforward benefits of NOLCO that may be claimed as deduction from future regular taxable income and excess MCIT over RCIT that may be applied as tax credit against RCIT due are as follows:

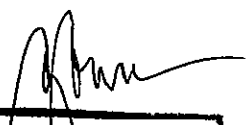
| Year Incurred | Year of Expiration | NOLCO        | Excess MCIT over RCIT |
|---------------|--------------------|--------------|-----------------------|
| 2013          | 2016               | ₱206,587,690 | ₱297                  |
| 2014          | 2017               | 30,206,432   | 539                   |
| 2015          | 2018               | 35,575,032   | 3,602                 |
|               |                    | ₱272,369,154 | ₱4,438                |

The following are the movements of NOLCO and excess MCIT over RCIT for the years ended December 31, 2015 and 2014:

|                   | NOLCO         |              | Excess MCIT over RCIT |         |
|-------------------|---------------|--------------|-----------------------|---------|
|                   | 2015          | 2014         | 2015                  | 2014    |
| Beginning of year | ₱374,242,611  | ₱409,583,608 | ₱73,496               | ₱72,957 |
| Additions         | 35,575,032    | 30,206,432   | 3,602                 | 539     |
| Expirations       | (137,448,489) | (65,547,429) | (72,660)              | —       |
| End of year       | ₱272,369,154  | ₱374,242,611 | ₱4,438                | ₱73,496 |

### 13. Financial Risk Management Objectives and Policies

The Company's principal financial instrument comprises cash and cash equivalents, whose main purpose is to fund the Company's operations. The Company has other financial instruments such as interest receivable, restricted time deposit, performance bond, refundable deposits, miscellaneous deposits and trade and other payables (except liabilities to government agencies).

  
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The main risks arising from the Company's financial instruments are credit risk involving possible exposure to counterparty defaults on its cash investments, liquidity risk in terms of the proper matching of the type of financing required for specific investments, and foreign exchange risk in terms of foreign exchange fluctuations that may significantly affect its foreign currency-denominated cash and cash equivalents and restricted time deposit.

The Company's BOD reviews and approves policies for managing each of these risks.

*Credit Risk*

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. This arises principally from the Company's cash in banks and cash equivalents. Such exposure arises from possible default of the banks.

As at December 31, 2015 and 2014, the Company's cash in banks and cash equivalents, interest receivable, restricted time deposit, performance bond and refundable deposits are neither past due nor impaired. The credit quality of these financial assets that are neither past due nor impaired is considered to be of 'high grade' and expected to be collectible without incurring any credit losses. The Company believes that credit risk associated with these financial assets is minimal.

*Liquidity Risk*

Liquidity risk is the risk of not meeting obligations as they fall due because of inability to liquidate assets or obtain adequate funding.

The Company maintains sufficient cash to finance its operations, capital expenditures, and satisfy maturing obligations. Any excess cash is invested in short-term investments with major financial institutions. The Company, in general, matches the appropriate short or long-term liabilities with the general nature of its use ranging from short-term working capital requirements to longer term capital and equity investments.

The Company's financial liabilities composing of trade and other payables (excluding liabilities to government agencies) as at December 31, 2015 and 2014 with aggregate values of ₱10,031,867 and ₱743,333, respectively, are due within one year, while cash and cash equivalents used for liquidity purposes amounted to ₱128,557,790 and ₱225,078,802, as at December 31, 2015 and 2014, respectively.

*Foreign Exchange Risk*

The Company's exposure to foreign currency risk arises mainly from its U.S. dollar-denominated cash and cash equivalents and restricted time deposit.

The balance of financial assets as at December 31, 2015 and 2014 denominated in U.S. dollar are as follows:

|      | US Dollar   | Peso equivalent |
|------|-------------|-----------------|
| 2015 | \$1,425,677 | ₱67,092,336     |
| 2014 | 1,566,412   | 70,049,925      |

The exchange rates used as at December 31, 2015 and 2014 are ₱47.06/US\$1 and ₱44.72/US\$1, respectively.

  
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The following table demonstrates the sensitivity to a reasonably possible change in the U.S. dollar exchange rate, with all other variables held constant, of the Company's loss before income tax for the years ended December 31, 2015 and 2014:

|      | Peso depreciates<br>(appreciates) | Effect on<br>loss before<br>income tax |
|------|-----------------------------------|----------------------------------------|
| 2015 | ₱1.00                             | (₱1,425,677)                           |
|      | (1.00)                            | 1,425,677                              |
| 2014 | 1.00                              | (1,566,412)                            |
|      | (1.00)                            | 1,566,412                              |

There is no other impact on the Company's equity other than those already affecting the profit or loss.

#### Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, interest receivable, restricted time deposit, refundable deposits, and trade and other payables (except liabilities to government regulatory agencies) approximate their fair values since maturities of these financial instruments are within a short-term period.

The fair values of performance bond and miscellaneous deposits cannot be reliably measured since the timing of related cash flows cannot be reasonably estimated. Accordingly, these are measured at cost.

The Company uses the following hierarchy for measuring and disclosing the fair values of financial instruments by valuation technique:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

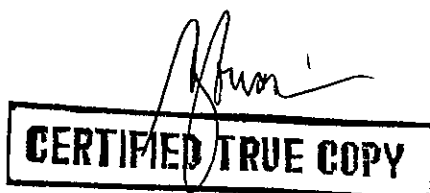
There were no transfers between Level 2 and Level 3 fair value measurements and no transfers into and out of Level 1 fair value measurements.

#### Capital Management

The Company considers capital stock and deposits for future stock subscription as capital. The primary objective of the Company's capital management is to ensure that the Company has available funds in order to support its business activities and pay its existing obligations.

No changes were made in the capital objectives, policies or processes for the years ended December 31, 2015 and 2014. The Company is not subject to externally imposed capital requirements.

The Company was able to meet its capital management objectives as at December 31, 2015 and 2014.



**14. Supplementary Tax Information Required Under Revenue Regulation No. 15-2010**

The Company reported the following types of taxes for the year ended December 31, 2015:

**I. VAT**

The Company's purchases from other VAT-registered individuals or corporations are subject to input VAT. The VAT rate is 12%.

|                                                 |             |
|-------------------------------------------------|-------------|
| Beginning of year                               | ₱20,527,392 |
| Current year's domestic purchases/payments for: |             |
| Capital goods                                   | 37,602      |
| Goods other than capital goods                  | 201,787     |
| Services                                        | 4,792,321   |
| End of year                                     | ₱25,559,102 |

Deferred input VAT as at December 31, 2015 amounted to ₱1,221.

**II. Documentary Stamp Tax (DST)**

The Company paid DST amounting to ₱5,506 for the renewal of a lease contract in 2015.

**III. Taxes and Licenses**

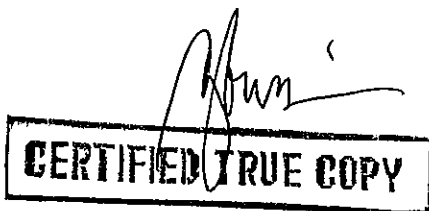
Other taxes and licenses paid by the Company in 2015 pertain to registration and license fees amounting to ₱2,500.

**IV. Withholding Taxes**

|                                 |            |
|---------------------------------|------------|
| Withholding tax on compensation | ₱2,981,099 |
| Expanded withholding tax        | 1,963,122  |
| Fringe benefits tax             | 38,062     |
|                                 | ₱4,982,283 |

**V. Others**

- The Company has no locally produced or imported excisable item, landed cost of imports, custom duties and tariff fees paid or accrued as at December 31, 2015.
- There has been no deficiency tax assessment and other transactions subject thereto for the year ended December 31, 2015.
- There were no tax cases nor litigation and/or prosecution in courts or bodies outside the BIR for the year ended December 31, 2015.



## INDEPENDENT AUDITORS' REPORT

The Stockholders and the Board of Directors  
Redondo Peninsula Energy, Inc.  
Unit 310, The Venue, Rizal Hi-way  
Subic Bay Industrial Park, Phase 1  
Subic Bay Freeport Zone

We have audited the financial statements of Redondo Peninsula Energy, Inc. as at and for the year ended December 31, 2015, on which we have rendered the attached report dated April 13, 2016.

In compliance with Securities Regulation Code Rule 68, As Amended (2011), we are stating that the Company has four (4) stockholders owning one hundred (100) or more shares each.

SYCIP GORRES VELAYO & CO.



Martin C. Guantes

Partner

CPA Certificate No. 88494

SEC Accreditation No. 0325-AR-3 (Group A),

August 25, 2015, valid until August 24, 2018

Tax Identification No. 152-884-272

BIR Accreditation No. 08-001998-52-2015,

February 27, 2015, valid until February 26, 2018

PTR No. 5321643, January 4, 2016, Makati City

April 13, 2016



**INDEPENDENT AUDITORS' REPORT  
ON SUPPLEMENTARY SCHEDULE OF ALL  
EFFECTIVE STANDARDS AND INTERPRETATIONS**

The Stockholders and the Board of Directors  
Redondo Peninsula Energy, Inc.  
Unit 310, The Venue, Rizal Hi-way  
Subic Bay Industrial Park, Phase I  
Subic Bay Freeport Zone

We have audited in accordance with Philippine Standards on Auditing, the financial statements of Redondo Peninsula Energy, Inc. as at and for the years ended December 31, 2015 and 2014 and have issued our report thereon dated April 13, 2016. Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplementary schedule of all the effective standards and interpretations is the responsibility of the Company's management. This schedule is presented for the purpose of complying with Securities Regulation Code Rule 68, As Amended (2011), and is not part of the basic financial statements. This schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, fairly states, in all material respects, the information required to be set forth therein in relation to the basic financial statements taken as a whole.

SYCIP GORRES VELAYO & CO.



Martin C. Guantes

Partner

CPA Certificate No. 88494

SEC Accreditation No. 0325-AR-3 (Group A),

August 25, 2015, valid until August 24, 2018

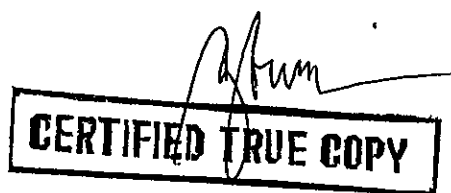
Tax Identification No. 152-884-272

BIR Accreditation No. 08-001998-52-2015,

February 27, 2015, valid until February 26, 2018

PTR No. 5321643, January 4, 2016, Makati City

April 13, 2016



**REDONDO PENINSULA ENERGY, INC.**

**SUPPLEMENTARY SCHEDULE OF ALL EFFECTIVE STANDARDS  
AND INTERPRETATIONS  
DECEMBER 31, 2015**

| PHILIPPINE FINANCIAL REPORTING STANDARDS<br>AND INTERPRETATIONS                                                                                    |                                                                                                                       | Adopted | Not Early<br>Adopted | Not<br>Applicable |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------|----------------------|-------------------|
| Framework for the Preparation and Presentation of Financial Statements<br>Conceptual Framework Phase A: Objectives and Qualitative Characteristics |                                                                                                                       | ✓       |                      |                   |
| PFRSs Practice Statement Management Commentary                                                                                                     |                                                                                                                       |         |                      | ✓                 |
| Philippine Financial Reporting Standards                                                                                                           |                                                                                                                       |         |                      |                   |
| PFRS 1<br>(Revised)                                                                                                                                | <i>First-time Adoption of Philippine Financial Reporting Standards</i>                                                | ✓       |                      |                   |
|                                                                                                                                                    | <i>Amendments to PFRS 1 and PAS 27: Cost of an Investment in a Subsidiary, Jointly Controlled Entity or Associate</i> |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 1: Additional Exemptions for First-time Adopters</i>                                            |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendment to PFRS 1: Limited Exemption from Comparative PFRS 7 Disclosures for First-time Adopters</i>             |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 1: Severe Hyperinflation and Removal of Fixed Date for First-time Adopters</i>                  |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 1: Government Loans</i>                                                                         |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 1: Meaning of Effective PFRSs</i>                                                               |         |                      | ✓                 |
| PFRS 2                                                                                                                                             | <i>Share-based Payment</i>                                                                                            |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 2: Vesting Conditions and Cancellations</i>                                                     |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 2: Group Cash-settled Share-based Payment Transactions</i>                                      |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PFRS 2: Definition of Vesting Condition</i>                                                          |         |                      | ✓                 |
| PFRS 3<br>(Revised)                                                                                                                                | <i>Business Combinations</i>                                                                                          |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendment to PFRS 3: Accounting for Contingent Consideration in a Business Combination</i>                         |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendment to PFRS 3: Scope Exceptions for Joint Arrangements</i>                                                   |         |                      | ✓                 |
| PFRS 4                                                                                                                                             | <i>Insurance Contracts</i>                                                                                            |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendments to PAS 39 and PFRS 4: Financial Guarantee Contracts</i>                                                 |         |                      | ✓                 |
| PFRS 5                                                                                                                                             | <i>Non-current Assets Held for Sale and Discontinued Operations</i>                                                   |         |                      | ✓                 |
|                                                                                                                                                    | <i>Amendment to PFRS 5: Changes in Methods of Disposal</i>                                                            |         | ✓                    |                   |

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| PHILIPPINE FINANCIAL REPORTING STANDARDS<br>AND INTERPRETATIONS |                                                                                                                                                          | Adopted | Not yet<br>adopted | Not<br>applicable |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------|-------------------|
| <b>PFRS 6</b>                                                   | <i>Exploration for and Evaluation of Mineral Resources</i>                                                                                               |         |                    | ✓                 |
| <b>PFRS 7</b>                                                   | <i>Financial Instruments: Disclosures</i>                                                                                                                | ✓       |                    |                   |
|                                                                 | <i>Amendments to PFRS 7: Transition</i>                                                                                                                  | ✓       |                    |                   |
|                                                                 | <i>Amendments to PAS 39 and PFRS 7: Reclassification of Financial Assets</i>                                                                             | ✓       |                    |                   |
|                                                                 | <i>Amendments to PAS 39 and PFRS 7: Reclassification of Financial Assets - Effective Date and Transition</i>                                             | ✓       |                    |                   |
|                                                                 | <i>Amendments to PFRS 7: Improving Disclosures about Financial Instruments</i>                                                                           | ✓       |                    |                   |
|                                                                 | <i>Amendments to PFRS 7: Disclosures - Transfers of Financial Assets</i>                                                                                 | ✓       |                    |                   |
|                                                                 | <i>Amendments to PFRS 7: Disclosures - Offsetting Financial Assets and Financial Liabilities</i>                                                         | ✓       |                    |                   |
|                                                                 | <i>Amendments to PFRS 7: Mandatory Effective Date of PFRS 9 and Transition Disclosures</i>                                                               |         | ✓                  |                   |
|                                                                 | <i>Amendment to PFRS 7: Servicing Contracts</i>                                                                                                          |         | ✓                  |                   |
|                                                                 | <i>Amendment to PFRS 7: Applicability of the Amendments to PFRS 7 to Condensed Interim Financial Statements</i>                                          |         | ✓                  |                   |
| <b>PFRS 8</b>                                                   | <i>Operating Segments</i>                                                                                                                                |         |                    | ✓                 |
|                                                                 | <i>Amendments to PFRS 8: Aggregation of Operating Segments and Reconciliation of the Total of the Reportable Segments' Assets to the Entity's Assets</i> |         |                    | ✓                 |
| <b>PFRS 9</b>                                                   | <i>Financial Instruments</i>                                                                                                                             |         | ✓                  |                   |
|                                                                 | <i>Amendments to PFRS 9: Mandatory Effective Date of PFRS 9 and Transition Disclosures</i>                                                               |         | ✓                  |                   |
| <b>PFRS 10</b>                                                  | <i>Consolidated Financial Statements</i>                                                                                                                 |         |                    | ✓                 |
|                                                                 | <i>Amendments to PFRS 10: Investment Entities</i>                                                                                                        |         |                    | ✓                 |
|                                                                 | <i>Amendments to PFRS 10: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i>                                      |         | ✓                  |                   |
| <b>PFRS 11</b>                                                  | <i>Joint Arrangements</i>                                                                                                                                |         |                    | ✓                 |
|                                                                 | <i>Amendments to PFRS 11: Accounting for Acquisitions of Interests in Joint Operations</i>                                                               |         | ✓                  |                   |
| <b>PFRS 12</b>                                                  | <i>Disclosure of Interests in Other Entities</i>                                                                                                         |         |                    | ✓                 |
|                                                                 | <i>Amendments to PFRS 12: Investment Entities</i>                                                                                                        |         |                    | ✓                 |
| <b>PFRS 13</b>                                                  | <i>Fair Value Measurement</i>                                                                                                                            | ✓       |                    |                   |
|                                                                 | <i>Amendment to PFRS 13: Short-term Receivables and Payables</i>                                                                                         | ✓       |                    |                   |
|                                                                 | <i>Amendment to PFRS 13: Portfolio Exception</i>                                                                                                         | ✓       |                    |                   |
| <b>PFRS 14</b>                                                  | <i>Regulatory Deferral Accounts</i>                                                                                                                      |         | ✓                  |                   |

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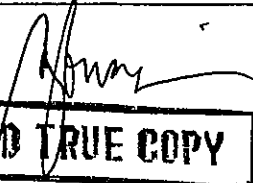
| PHILIPPINE FINANCIAL REPORTING STANDARDS<br>AND INTERPRETATIONS |                                                                                                              | Adopted | Not Early<br>Adopted | Not<br>Applicable |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------|----------------------|-------------------|
| Philippine Accounting Standards                                 |                                                                                                              |         |                      |                   |
| PAS 1<br>(Revised)                                              | <i>Presentation of Financial Statements</i>                                                                  | ✓       |                      |                   |
|                                                                 | <i>Amendment to PAS 1: Capital Disclosures</i>                                                               | ✓       |                      |                   |
|                                                                 | <i>Amendments to PAS 32 and PAS 1: Puttable Financial Instruments and Obligations Arising on Liquidation</i> |         |                      | ✓                 |
|                                                                 | <i>Amendments to PAS 1: Presentation of Items of Other Comprehensive Income</i>                              | ✓       |                      |                   |
| PAS 2                                                           | <i>Inventories</i>                                                                                           |         |                      | ✓                 |
| PAS 7                                                           | <i>Statement of Cash Flows</i>                                                                               | ✓       |                      |                   |
| PAS 8                                                           | <i>Accounting Policies, Changes in Accounting Estimates and Errors</i>                                       | ✓       |                      |                   |
| PAS 10                                                          | <i>Events after the Reporting Period</i>                                                                     | ✓       |                      |                   |
| PAS 11                                                          | <i>Construction Contracts</i>                                                                                |         |                      | ✓                 |
| PAS 12                                                          | <i>Income Taxes</i>                                                                                          | ✓       |                      |                   |
|                                                                 | <i>Amendment to PAS 12: Deferred Tax: Recovery of Underlying Assets</i>                                      |         |                      | ✓                 |
| PAS 16                                                          | <i>Property, Plant and Equipment</i>                                                                         | ✓       |                      |                   |
|                                                                 | <i>Amendment to PAS 16: Revaluation Method - Proportionate Restatement of Accumulated Depreciation</i>       |         |                      | ✓                 |
|                                                                 | <i>Amendments to PAS 16: Clarification of Acceptable Methods of Depreciation and Amortization</i>            |         | ✓                    |                   |
|                                                                 | <i>Amendments to PAS 16: Bearer Plants</i>                                                                   |         | ✓                    |                   |
| PAS 17                                                          | <i>Leases</i>                                                                                                | ✓       |                      |                   |
| PAS 18                                                          | <i>Revenue</i>                                                                                               | ✓       |                      |                   |
| PAS 19<br>(Amended)                                             | <i>Employee Benefits</i>                                                                                     |         |                      | ✓                 |
|                                                                 | <i>Amendments to PAS 19: Defined Benefit Plans: Employee Contribution</i>                                    |         |                      | ✓                 |
|                                                                 | <i>Amendments to PAS 19: Regional market issue regarding discount rate</i>                                   |         | ✓                    |                   |
| PAS 20                                                          | <i>Accounting for Government Grants and Disclosure of Government Assistance</i>                              |         |                      | ✓                 |
| PAS 21                                                          | <i>The Effects of Changes in Foreign Exchange Rates</i>                                                      | ✓       |                      |                   |
|                                                                 | <i>Amendment to PAS 21: Net Investment in a Foreign Operation</i>                                            |         |                      | ✓                 |
| PAS 23<br>(Revised)                                             | <i>Borrowing Costs</i>                                                                                       |         |                      | ✓                 |
| PAS 24<br>(Revised)                                             | <i>Related Party Disclosures</i>                                                                             | ✓       |                      |                   |
|                                                                 | <i>Amendments to PAS 24: Key Management Personnel</i>                                                        | ✓       |                      |                   |

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| PHILIPPINE FINANCIAL REPORTING STANDARDS<br>AND INTERPRETATIONS |                                                                                                             | Adopted | Not Yet<br>Adopted | Not<br>Applicable |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------|--------------------|-------------------|
| PAS 26                                                          | Accounting and Reporting by Retirement Benefit Plans                                                        |         |                    | ✓                 |
| PAS 27<br>(Amended)                                             | Separate Financial Statements                                                                               |         |                    | ✓                 |
|                                                                 | Amendments to PAS 27: Investment Entities                                                                   |         |                    | ✓                 |
|                                                                 | Amendments to PAS 27: Equity Method in Separate Financial Statements                                        |         | ✓                  |                   |
| PAS 28<br>(Amended)                                             | Investments in Associates and Joint Ventures                                                                |         |                    | ✓                 |
|                                                                 | Amendments to PAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture |         | ✓                  |                   |
| PAS 29                                                          | Financial Reporting in Hyperinflationary Economies                                                          |         |                    | ✓                 |
| PAS 32                                                          | Financial Instruments: Disclosure and Presentation                                                          | ✓       |                    |                   |
|                                                                 | Amendments to PAS 32 and PAS 1: Puttable Financial Instruments and Obligations Arising on Liquidation       |         |                    | ✓                 |
|                                                                 | Amendment to PAS 32: Classification of Rights Issues                                                        |         |                    | ✓                 |
|                                                                 | Amendments to PAS 32: Offsetting Financial Assets and Financial Liabilities                                 | ✓       |                    |                   |
| PAS 33                                                          | Earnings per Share                                                                                          |         |                    | ✓                 |
| PAS 34                                                          | Interim Financial Reporting                                                                                 |         |                    | ✓                 |
|                                                                 | Amendment to PAS 34: Disclosure of information 'elsewhere in the interim financial report'                  |         | ✓                  |                   |
| PAS 36                                                          | Impairment of Assets                                                                                        | ✓       |                    |                   |
|                                                                 | Amendments to PAS 36: Recoverable Amount Disclosures for Non-Financial Assets                               | ✓       |                    |                   |
| PAS 37                                                          | Provisions, Contingent Liabilities and Contingent Assets                                                    | ✓       |                    |                   |
| PAS 38                                                          | Intangible Assets                                                                                           | ✓       |                    |                   |
|                                                                 | Amendments to PAS 38: Revaluation Method - Proportionate Restatement of Accumulated Amortization            |         |                    | ✓                 |
|                                                                 | Amendments to PAS 38: Clarification of Acceptable Methods of Depreciation and Amortization                  |         | ✓                  |                   |
| PAS 39                                                          | Financial Instruments: Recognition and Measurement                                                          | ✓       |                    |                   |
|                                                                 | Amendments to PAS 39: Transition and Initial Recognition of Financial Assets and Financial Liabilities      | ✓       |                    |                   |
|                                                                 | Amendments to PAS 39: Cash Flow Hedge Accounting of Forecast Intragroup Transactions                        |         |                    | ✓                 |
|                                                                 | Amendments to PAS 39: The Fair Value Option                                                                 |         |                    | ✓                 |

  
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| PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS |                                                                                                                                                                     | Adopted | Not Early Adopted | Not Applicable |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------|----------------|
|                                                              | Amendments to PAS 39 and PFRS 4: <i>Financial Guarantee Contracts</i>                                                                                               |         |                   | ✓              |
|                                                              | Amendments to PAS 39 and PFRS 7: <i>Reclassification of Financial Assets</i>                                                                                        | ✓       |                   |                |
|                                                              | Amendments to PAS 39 and PFRS 7: <i>Reclassification of Financial Assets - Effective Date and Transition</i>                                                        | ✓       |                   |                |
|                                                              | Amendments to Philippine Interpretation IFRIC-9 and PAS 39, <i>Embedded Derivatives</i>                                                                             |         |                   | ✓              |
|                                                              | Amendment to PAS 39: <i>Eligible Hedged Items</i>                                                                                                                   |         |                   | ✓              |
|                                                              | Amendments to PAS 39: <i>Novation of Derivatives and Continuation of Hedge Accounting</i>                                                                           |         |                   | ✓              |
| PAS 40                                                       | <i>Investment Property</i>                                                                                                                                          |         |                   | ✓              |
|                                                              | Amendments to PAS 40: <i>Clarifying the Interrelationship between PFRS 3 and PAS 40 when Classifying Property as Investment Property or Owner-Occupied Property</i> |         |                   | ✓              |
| PAS 41                                                       | <i>Agriculture</i>                                                                                                                                                  |         |                   | ✓              |
|                                                              | Amendments to PAS 41: <i>Bearer Plants</i>                                                                                                                          |         | ✓                 |                |
| <b>Philippine Interpretations</b>                            |                                                                                                                                                                     |         |                   |                |
| IFRIC 1                                                      | <i>Changes in Existing Decommissioning, Restoration and Similar Liabilities</i>                                                                                     |         |                   | ✓              |
| IFRIC 2                                                      | <i>Members' Share in Co-operative Entities and Similar Instruments</i>                                                                                              |         |                   | ✓              |
| IFRIC 4                                                      | <i>Determining Whether an Arrangement Contains a Lease</i>                                                                                                          | ✓       |                   |                |
| IFRIC 5                                                      | <i>Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds</i>                                                         |         |                   | ✓              |
| IFRIC 6                                                      | <i>Liabilities arising from Participating in a Specific Market - Waste Electrical and Electronic Equipment</i>                                                      |         |                   | ✓              |
| IFRIC 7                                                      | <i>Applying the Restatement Approach under PAS 29 Financial Reporting in Hyperinflationary Economies</i>                                                            |         |                   | ✓              |
| IFRIC 9                                                      | <i>Reassessment of Embedded Derivatives</i>                                                                                                                         |         |                   | ✓              |
|                                                              | Amendments to Philippine Interpretation IFRIC - 9 and PAS 39: <i>Embedded Derivatives</i>                                                                           |         |                   | ✓              |
| IFRIC 10                                                     | <i>Interim Financial Reporting and Impairment</i>                                                                                                                   |         |                   | ✓              |
| IFRIC 11                                                     | <i>PFRS 2 - Group and Treasury Share Transactions</i>                                                                                                               |         |                   | ✓              |
| IFRIC 12                                                     | <i>Service Concession Arrangements</i>                                                                                                                              |         |                   | ✓              |
| IFRIC 13                                                     | <i>Customer Loyalty Programmes</i>                                                                                                                                  |         |                   | ✓              |

  
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| PHILIPPINE FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS |                                                                                                          | Adopted | Not yet Adopted | Not Applicable |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------|-----------------|----------------|
| IFRIC 14                                                     | <i>The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction</i>          |         |                 | ✓              |
|                                                              | <i>Amendments to Philippine Interpretations IFRIC - 14: Prepayments of a Minimum Funding Requirement</i> |         |                 | ✓              |
| IFRIC 15                                                     | <i>Agreements for the Construction of Real Estate</i>                                                    |         | ✓               |                |
| IFRIC 16                                                     | <i>Hedges of a Net Investment in a Foreign Operation</i>                                                 |         |                 | ✓              |
| IFRIC 17                                                     | <i>Distributions of Non-cash Assets to Owners</i>                                                        |         |                 | ✓              |
| IFRIC 18                                                     | <i>Transfers of Assets from Customers</i>                                                                |         |                 | ✓              |
| IFRIC 19                                                     | <i>Extinguishing Financial Liabilities with Equity Instruments</i>                                       |         |                 | ✓              |
| IFRIC 20                                                     | <i>Stripping Costs in the Production Phase of a Surface Mine</i>                                         |         |                 | ✓              |
| IFRIC 21                                                     | <i>Levies</i>                                                                                            | ✓       |                 |                |
| SIC-7                                                        | <i>Introduction of the Euro</i>                                                                          |         |                 | ✓              |
| SIC-10                                                       | <i>Government Assistance - No Specific Relation to Operating Activities</i>                              |         |                 | ✓              |
| SIC-15                                                       | <i>Operating Leases - Incentives</i>                                                                     | ✓       |                 |                |
| SIC-25                                                       | <i>Income Taxes - Changes in the Tax Status of an Entity or its Shareholders</i>                         |         |                 | ✓              |
| SIC-27                                                       | <i>Evaluating the Substance of Transactions Involving the Legal Form of a Lease</i>                      | ✓       |                 |                |
| SIC-29                                                       | <i>Service Concession Arrangements: Disclosures</i>                                                      |         |                 | ✓              |
| SIC-31                                                       | <i>Revenue - Barter Transactions Involving Advertising Services</i>                                      |         |                 | ✓              |
| SIC-32                                                       | <i>Intangible Assets - Web Site Costs</i>                                                                |         |                 | ✓              |

**CERTIFIED TRUE COPY**



## **OPERATING EXPENSES**

**ANNEX " FF "**

Operating Expenses for the following are included as part of the financial model provided in the sealed envelope:

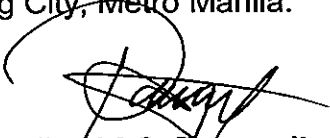
1. Power Plant
2. General and Administrative Expense

**SWORN STATEMENT**

I, David C. Evangelista, of legal age, with office address at 8/F Rockwell Business Center Tower 1, Ortigas Avenue, Pasig City, after heaving been sworn in accordance with law, hereby despose and state that:

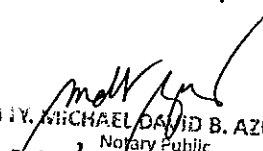
1. I am the duly authorized representative of Redondo Peninsula Energy, Inc. ("RPE") for purposes of executing a sworn statement regarding the fuel procurement process relative to the Power Supply Agreement between RPE and the Manila Electric Company;
2. As the Authorized Representative, I have taken part in the internal management discussions and planning regarding the practicability and feasibility of entering into fuel supply agreements;
3. RPE has not yet entered into fuel supply agreements as of this date;
4. For now, RPE does not intend to enter into long-term supply agreements with coal suppliers;
5. It is RPE's view that given the softness in coal prices, it is prudent not to enter into a long-term fuel contract but to purchase coal through short-term contracts and through the spot market, without prejudice to entering into medium-term and long-term contracts, in whole or in part, for its requirements;
6. RPE intends to engage suitably qualified coal trader(s)/broker(s) to identify and procure the necessary supply of coal at the required quantity and quality on a spot market basis;
7. RPE is of the view that adequate supplies of coal can be procured economically and efficiently to meet the supply needs of the project and will in addition employ an in-house coal supply team with adequate resources, budget and skilled personnel, to monitor and manage the coal supply procurement process in a timely, efficient and cost conscious manner.
8. I am executing this sworn statement to attest to the truth of the foregoing and for whatever legal purpose it may serve.

WITNESS MY HAND this 26<sup>th</sup> day of April 2016 in Pasig City, Metro Manila.

  
David C. Evangelista  
Affiant

SUBSRIBED AND SWORN to before me this 26<sup>th</sup> day of April 2016 at Pasig City, Metro Manila by affiant who exhibited to me his Passport bearing the number EC6114072 issued on December 1, 2015 in DFA NCR Central as proof of identity.

Doc. No. 138 ;  
Page No. 29 ;  
Book No. II ;  
Series of 2016.

  
ATTY. MICHAEL DAVID B. AZUCENA  
Notary Public  
Pasig, San Juan, Taguig and Pateros  
Issued on December 29, 2015 at Pasig City  
Appointment No. 76 (2016-2017)  
Roll No. 58433/ IBP No. 1020808/ 01-06-16 Makati Chapter  
PTR No. 1455699/01-21-16 Pasig City  
MCLE V-0002613-05/09/16  
8<sup>th</sup> Floor Lopez Bldg., Ortigas Avenue, Pasig City

ANNEX " ## "

**Certification from the Engine Manufacturer**

Redondo Peninsula Energy, Inc. (RPE) is still in the process of evaluating proposals received from bidders and has not yet awarded the project to an EPC Contractor. This is not yet applicable.

The PSA has a provision on the Net Plant Heat Rate Test Certificate which is a requirement for commercial operations. RPE will submit the certificate from the independent engineer as soon as it becomes available.

## ANNEX " II "

### **Simulation to meet additional energy/demand requirements**

This is not applicable. Redondo Peninsula Energy, Inc. (RPE) does not have a Minimum Energy Off-Take (MEOT) as there is no Take-or-Pay provision in the Power Supply Agreement. Meralco is only obligated to pay fixed capacity payments but no fixed energy payments.



Potential Cost of Ancillary Services

Not applicable. Redondo Peninsula Energy, Inc. (RPE) is fully contracted hence will not have ancillary services.



Republic of the Philippines  
**SANGGUNIANG PANLUNGSOD**  
City Government of Pasig

ACKNOWLEDGMENT

This is to acknowledge the receipt of a copy of Manila Electric Company (MERALCO) and Redondo Peninsula Energy, Inc.'s (RPE) verified Joint Application entitled "IN THE MATTER OF THE APPLICATION FOR THE APPROVAL OF THE POWER SUPPLY AGREEMENT (PSA) BETWEEN MANILA ELECTRIC COMPANY (MERALCO) AND REDONDO PENINSULA ENERGY, INC. (RPE), WITH MOTION FOR CONFIDENTIAL TREATMENT OF INFORMATION", *with attached Annexes*, served by MERALCO, prior to its filing with the Energy Regulatory Commission (ERC).

This acknowledgment is being issued upon the request of MERALCO for whatever legal intents and purposes it may served.

Issued this 29<sup>th</sup> day of April 2016 at Pasig City.

  
LOIDA U. VILLANUEVA  
Acting City Council Secretary

REPUBLIC OF THE PHILIPPINES )  
CITY OF MANILA ) s.s.

### AFFIDAVIT OF PUBLICATION

I, **EDWIN L. MONFORTE**, of legal age, married, Filipino and with office address at c/o **BusinessWorld Publishing Corporation (BWPC)**, 95 Balete Drive Ext., New Manila, Quezon City, after being duly sworn to in accordance with law, depose and state:

That I am the **BILLING & COLLECTION MANAGER** of the **BusinessWorld Publishing Corporation (BWPC)** a domestic corporation duly organized and existing under by virtue of Philippine laws with office and business address at 95 Balete Drive Ext., New Manila, Quezon City.

That the said corporation publishes **BusinessWorld**, a weekday broadsheet newspaper published in English and of general circulation.

That the order of MANILA ELECTRIC COMPANY

captioned as follows: JOINT APPLICATION  
WITH MOTION FOR CONFIDENTIAL TREATMENT  
of INFORMATION

(Please see attached printed text) had been published in **BusinessWorld** in its issues of:

APRIL 29, 2016

FURTHER AFFIANT SAYETH NAUGHT.  
Manila, Philippines

  
**EDWIN L. MONFORTE**  
Affiant

SUBSCRIBED AND SWORN to before me this 29th day of April 2016  
affiant exhibited to me his Driver's License No. NO4-94-315947 issued by LTO  
on March. 08, 2016 which expiry date is March 09, 2019

Doc. No. 78  
Page No. 16  
Book No. 7  
Series of 2016

  
**ATTY. AGUSTIN B. CABREDO**  
Notary Public for Manila  
Notarial Commission No. 2015-030  
Until December 31, 2016  
Rm. 409, First United Bldg. Co.,  
Escollta, Manila  
Roll No. 26047  
PTR No. 4886571 / 1-4-18 / Manila  
IBP Lifetime Member 03097  
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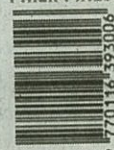
1. Download the free iSmartPhoto App on Google Play or App Store on your smartphone.
2. Enter the Love this Chevy code 143-24389
3. Hold your phone over the print ad and let the adventure begin.

ChevyPhilippines ChevyPhilippines

PROMO VALID UNTIL MAY 31, 2016. PER DTI-FTB SPD PERMIT NO. 3614 SERIES OF 2016. Qualification for ownership packages is subject to bank approval. Applies to the Trailblazer 4x2 L A/T variant. All-in low down payment includes free 3-year LTD Registration, free Chattel Mortgage, free 1-year Comprehensive Insurance. The warranty coverage for the Chevrolet Trailblazer is 3 years plus a 2-year extended warranty on the Power Train or 100,000 kilometers, whichever comes first. Photo may vary from actual unit. Prices of provincial dealers may vary due to freight cost.

COMPLIMENTARY

P25  
IN METRO  
MANILA,  
PHILIPPINES



# BusinessWorld

BUSINESS  
NEWS OF 2016  
AND 2017

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ROTARY  
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MANILA

| STOCK MARKET                                                                                                                                                                | ASIAN MARKETS                                                                                                                                                                                                                                                                                                                                                                                                                    | WORLD MARKETS                                                                                                                                                                      | PESO-DOLLAR RATES                                                                                                                                        | ASIAN CURRENCIES                                                                                                                                                                                                                                                                                                                                  | WORLD CURRENCIES                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>INDEX</b><br>OPEN: 7,199.98<br>HIGH: 7,220.66<br>LOW: 7,158.63<br>CLOSE: 7,162.56<br>VOL: 1.269 B<br>VAL(P): 6.685 B<br>17.97 PTS.<br>0.25%<br>30 DAYS TO APRIL 28, 2016 | <b>APRIL 28, 2016</b><br>JAPAN (NIKKEI 225) 16,666.05 ▼ -624.44 -3.61<br>HONG KONG (HANG SENG) 21,388.03 ▲ 26.43 0.12<br>TAIWAN (WEIGHTED) 8,473.87 ▼ -89.18 -1.04<br>THAILAND (SET INDEX) 1,399.91 ▼ -11.93 -0.84<br>S. KOREA (KSE COMPOSITE) 2,000.93 ▼ -14.47 -0.72<br>SINGAPORE (STRAITS TIMES) 2,862.3 ▼ -12.42 -0.43<br>SYDNEY (ALL ORDINARIES) 5,225.43 ▲ 37.72 0.73<br>MALAYSIA (KLSE COMPOSITE) 1,674.76 ▼ -17.58 -1.04 | <b>APRIL 27, 2016</b><br>DOW JONES 18,041.550 ▲ 51.230<br>NASDAQ 4,863.141 ▼ -25.142<br>S&P 500 2,095.150 ▲ 3.450<br>FTSE 100 6,319.910 ▲ 35.390<br>EURO STOXX50 2,927.310 ▲ 4.740 | <b>FX</b><br>OPEN P46.780<br>HIGH P46.720<br>LOW P46.830<br>CLOSE P46.770<br>W. AVE. P46.773<br>VOL. \$740.00 M<br>1.4 CTS.<br>30 DAYS TO APRIL 28, 2016 | <b>APRIL 28, 2016 LATEST BID (0900GMT)</b><br>JAPAN (YEN) 108.150 ▲ 111.260<br>HONG KONG (HK DOLLAR) 7.757 ▲ 7.757<br>TAIWAN (NT DOLLAR) 32.273 ▲ 32.381<br>THAILAND (BAHT) 34.990 ▲ 35.150<br>S. KOREA (WON) 1,139.230 ▲ 1,148.370<br>SINGAPORE (DOLLAR) 1.344 ▲ 1.349<br>INDONESIA (RUPIAH) 13,185 ▲ 13,192<br>MALAYSIA (RINGGIT) 3.890 ▲ 3.910 | <b>APRIL 28, 2016</b><br>\$/UK POUND 1.4588 ▲ 1.4580 DUBAI<br>\$/EURO 1.1358 ▲ 1.1306 WTI<br>\$/AUSTRALIAN DOLLAR 0.7625 ▲ 0.7612 BRENT<br>CANADA DOLLAR/US\$ 1.2564 ▼ 1.2595<br>SWISS FRANC/US\$ 0.9668 ▼ 0.9723 |

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FRIDAY-SATURDAY • APRIL 29-30, 2016 • www.bworldonline.com

S1/1-12 • 4 SEC

## Outlook tempered for PHL, much of Asia

By Keith Richard D. Mariano

THE ECONOMIC and Social Commission for Asia and the Pacific (ESCAP) slashed its growth forecast for the Philippines this year, as the weak recovery of developed markets and moderating expansion of China continue to

dampen global trade prospects.

In its *Economic and Social Survey of Asia and the Pacific 2016* released yesterday, the regional development arm of the United Nations (UN) projected a 6% expansion in the Philippines' gross domestic product (GDP).

ESCAP previously tipped a faster 6.3% expansion for the Philippine economy in mid-Janu-

ary, when it released the yearend update to the 2015 edition of the survey. Actual Philippine GDP growth was 5.8% last year.

"I think it's been more of a broad-based trend not just in the Philippines," ESCAP Economic Affairs Officer Heather Lynne Taylor said during the report's Philippine launch in Mandaluyong City, when asked what

prompted the downward revision.

"[I]t's largely related to externalities especially related to China, depreciation of Chinese currency. That's had a significant impact on growth outlook for many of Asian economies since our yearend update in 2015."

ESCAP expects the Asia and the Pacific region to expand

slower than previously thought, revising its regional forecast this year down to 3.5% from 3.6%.

The UN agency likewise cut to 4.8% from 5% the projected growth of developing Asia-Pacific, which includes all economies in the region except Australia, Japan and New Zealand.

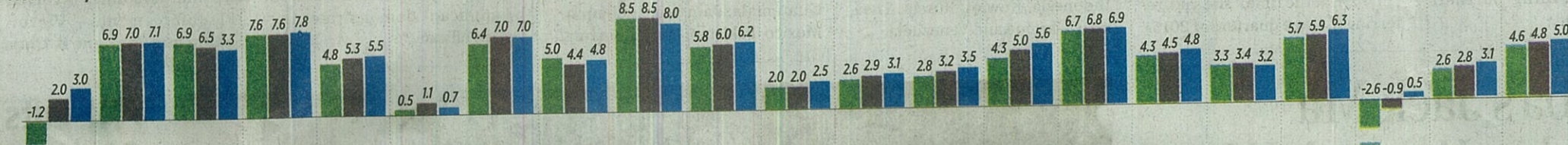
"One important factor hindering faster economic growth of

developing economies in the Pacific is the frictions in the advanced economies," CAP noted.

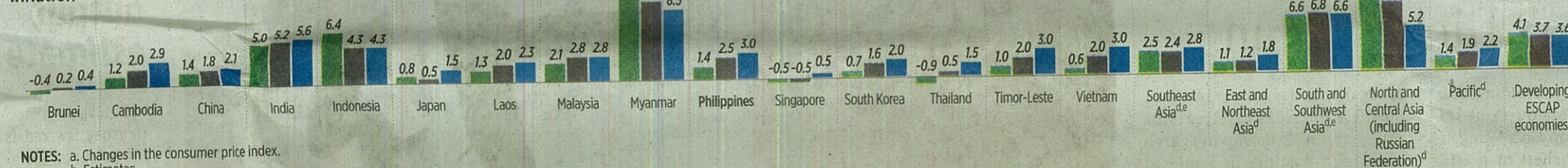
"With the outlook of the European Union continuing to remain on the sidelines somewhat stalling performance expansion of the United States, the

### ECONOMIC PERFORMANCE, INFLATION RATES IN SELECT ESCAP ECONOMIES

Real GDP performance



Inflation<sup>a</sup>



NOTES: a. Changes in the consumer price index.  
b. Estimates.  
c. Forecasts (as of March 31, 2016).  
d. GDP figures at market prices in 2010 United States dollars (at 2005 prices) are used as weights to calculate the subregional aggregates.  
e. The estimates and forecasts for countries relate to fiscal years defined as follows: 2016 refers to fiscal year spanning the period from April 1, 2016 to March 31, 2017 in India and Myanmar; from March 21, 2016 to March 20, 2017 in Afghanistan and Iran; from July 1, 2015 to June 30, 2016 in Bangladesh, Bhutan and Pakistan; and from July 16, 2015 to July 15, 2016 in Nepal.  
f. Developing ESCAP economies consist of all countries listed in the table excluding Australia, Japan and New Zealand.

SOURCE: UN ESCAP ECONOMIC AND SOCIAL SURVEY OF ASIA AND THE PACIFIC 2016. BUSINESSWORLD GRAPHICS

## Stock market prospects secure from poll risk

Stock Exchange index (PSEi) rally



Increase in  
of basic goods  
seen still more



Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

IN THE MATTER OF THE APPLICATION  
FOR THE APPROVAL OF THE POWER  
SUPPLY AGREEMENT (PSA) BETWEEN  
MANILA ELECTRIC COMPANY  
MERALCO) AND REDONDO PENINSULA  
ENERGY, INC. (RPE), WITH MOTION  
FOR CONFIDENTIAL TREATMENT OF  
INFORMATION,

ERC CASE NO. 2016-\_\_ RC

MANILA ELECTRIC COMPANY  
MERALCO) AND REDONDO PENINSULA  
ENERGY, INC. (RPE),

Applicants.

X-----X

**JOINT APPLICATION WITH MOTION FOR  
CONFIDENTIAL TREATMENT OF INFORMATION**

Applicants MANILA ELECTRIC COMPANY ("MERALCO") and REDONDO  
PENINSULA ENERGY, INC. ("RPE"), through their respective undersigned counsel,  
respectfully state:

1. Applicant MERALCO is a private corporation existing under the  
laws of the Republic of the Philippines, with principal office located at Ortigas Avenue,  
Barangay Ugong, Pasig City. It may be served with notices and other processes of this  
Honorable Commission through its counsel at the address indicated herein.

2. MERALCO has a legislative franchise to operate and maintain  
a distribution system in the cities/municipalities of Metro Manila, Bulacan, Cavite and  
Rizal and certain cities, municipalities and barangays in Batangas, Laguna, Quezon  
and Pampanga, pursuant to Republic Act No. 9209, and is authorized to charge all  
its customers for their electric consumption at the rates approved by this Honorable  
Commission.

3. Applicant RPE is a corporation duly organized and existing  
under the laws of the Republic of the Philippines, with its office address at Unit 310,  
The Venue, Rizal Highway, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport  
Zone, Philippines. It may be served with notices and other processes of this Honorable  
Commission through its counsel at the address indicated herein.

4. RPE shall construct, own, operate, manage and maintain a 300  
MW (net) sub-critical circulating fluidized-bed coal-fired power generating facility in Sitio  
Vaglatore, Barangay Cawag, Municipality of Subic in the Province of Zambales, within  
the Subic Bay Freeport Zone (the "Plant").

5. Based on MERALCO's Distribution Development Plan, "from  
2015 to 2024, energy sales is forecasted to grow by a compounded average growth rate  
of 3.7%."

6. In order to ensure continuous and reliable electricity for  
MERALCO's customers with the expected continuous increase in demand and load  
growth, and mitigate exposure to the Wholesale Electricity Spot Market ("WESM"), there  
is a need for MERALCO to source additional capacity through bilateral power supply  
contracts.

7. Under Section 45(b) of Republic Act No. 9136 ("EPIRA"), it  
is provided that "Distribution utilities may enter into bilateral power supply contracts  
subject to review by the ERC xxx".

8. Accordingly, following extensive negotiations, on 20 April 2016,  
MERALCO executed a Power Supply Agreement ("PSA") with RPE, for the purchase  
of 225 MW Contract Capacity and Associated Energy from the Plant that RPE shall  
construct, own, operate, manage and maintain.

9. The PSA, a copy of which is attached as ANNEX "A" and made  
an integral part hereof, contains the following salient features:

**"ARTICLE 2  
PURPOSE; TERM**

xxx

**Section 2.2 Term of Agreement**

2.2.1 This Agreement shall become effective upon the satisfaction (or the  
waiver by the relevant Party) of the conditions set out in Section 3.1 (the  
"Effective Date").

2.2.2 The term of this Agreement (the "Term") shall commence on the  
Effective Date and shall expire on the date falling twenty (20) years after the  
Operations Effective Date xxx.

xxx

**ARTICLE 3  
EFFECTIVE DATE, COMMENCEMENT DATE  
AND COMMERCIAL OPERATIONS DATE**

**Section 3.1 Effective Date**

3.1.1 The Effective Date shall be the date that the following conditions shall  
have been satisfied or waived by the relevant Party, as certified by Power  
Supplier and Meralco xxx.

xxx

**Section 3.2 Commencement Date**

3.2.1 The "Commencement Date" shall occur upon the satisfaction of the  
conditions below:

- the conditions set out in Section 3.1 have been fulfilled;
- each Party has delivered to the other Party a certification  
dated no earlier than two (2) Days prior to the proposed  
Commencement Date to the effect that its representations  
and warranties contained herein shall be true and correct in all  
material respects on and as of the Commencement Date;
- on or before the Longstop Date, (i) the ERC shall have approved  
in the ERC Final Approval this Agreement, including the pricing  
structure as set out herein (or as otherwise acceptable to Power  
Supplier), and (ii) the Acceptance Date has occurred; and
- Financial Close or NTP Issuance shall have occurred within the  
period contemplated under Section 3.2.2.

Power Supplier shall deliver written notice to Meralco of the satisfaction of  
these conditions and Meralco shall confirm in writing the occurrence of the  
Commencement Date.

3.2.2 Power Supplier covenants to achieve Financial Close or NTP Issuance  
within ninety (90) Days from the Acceptance Date (the "Required Financial  
Completion Date").

xxx

**Section 3.3 Operations Effective Date**

3.3.1 Subject to the occurrence of the Commencement Date, Operations  
Effective Date shall occur on the date that is forty-four (44) months from  
the Commencement Date. From and after the Operations Effective Date,  
the obligations of Power Supplier and Meralco under this Agreement with  
respect to the sale and purchase of Contract Capacity and Associated  
Energy shall become effective.

3.3.2 If, at any time after the occurrence of the Operations Effective Date,  
Power Supplier fails to supply Meralco with Contract Capacity and Associated  
Energy, Meralco shall be entitled to procure Replacement Power from the  
WESM and Power Supplier shall be liable to pay Meralco the amount  
equivalent to the difference between (i) the WESM cost of the Replacement  
Power and (ii) the amount Meralco would have paid for the Replacement  
Power had it been sold at the Price (the "WESM Differential"). For the

3.5.1 In the event that Power Supplier anticipates that the Plant shall achieve  
Commercial Operations Date prior to the Operations Effective Date ("Early  
Commercial Operations Date"), Power Supplier shall promptly deliver to  
Meralco written notice (the "Early COD Notice") of such anticipated Early  
Commercial Operations Date, indicating the anticipated date thereof, at least  
three (3) months prior to the then anticipated date of the Early Commercial  
Operations Date.

3.5.2 Upon receipt of such Early COD Notice, Meralco shall, by written  
notice to Power Supplier, choose between the following options:

- Consider that the Operations Effective Date shall occur on the  
Early Commercial Operations Date or on such other date as the  
Parties may agree; or
- Elect to have Power Supplier deliver, on a non-firm basis  
during the Interim Supply Period and until the occurrence of the  
Operations Effective Date, such portion of the Contract Capacity  
and Associated Energy required by Meralco, for which it shall  
pay the Non-Firm Price.

xxx

**ARTICLE 6  
SALE AND PURCHASE OF CONTRACT CAPACITY AND ASSOCIATED  
ENERGY**

**Section 6.1 Sale and Purchase of Power**

6.1.1 Subject to the terms and conditions of this Agreement, from the  
Operations Effective Date until the expiration of the Term, Power Supplier  
shall:

- make available to Meralco, and Meralco shall purchase from  
Power Supplier, at the Price determined in accordance with  
Appendix E, the Contract Capacity of the Plant; and
- sell and Deliver to Meralco, and Meralco shall purchase from  
Power Supplier, at the Price determined in accordance with  
Appendix E, the Associated Energy, to the extent of Meralco's  
relevant day-ahead nominations as provided in Appendix H;

provided that, Power Supplier may make available Contract Capacity and  
Deliver Associated Energy to Meralco from other sources, including the  
WESM, at the Price; and any such Associated Energy Delivered from such  
other sources shall be deemed Delivered by Power Supplier by declaration  
made from the Plant.

The Dispatch of Contract Capacity and Associated Energy shall meet the  
requirements set out in Appendix B.

6.1.2 Unless otherwise expressly permitted by this Agreement, Power  
Supplier shall not, without Meralco's prior written consent, sell, divert,  
grant, transfer, dedicate, reserve or assign all or any portion of the Contract  
Capacity and Associated Energy to any Person other than Meralco.

6.1.3 The supply of Contract Capacity and Associated Energy by Power  
Supplier to Meralco shall be in accordance with the WESM Rules. Each  
Party shall, during the Term, always keep and maintain its registration as a  
Direct WESM Member.

6.1.4 Power Supplier shall source its supply for Meralco from the Plant except  
during (i) the Interim Supply Period; (ii) Outages; (iii) any curtailment due  
to Dispatch Instructions; (iv) ramping limitations and (v) system frequency  
fluctuations.

xxx

**ARTICLE 9  
OUTAGES**

**Section 9.1 Scheduled Outage and Major Maintenance  
Outage Allowances**

Beginning on the Commercial Operations Date, Power Supplier shall  
be allowed Scheduled Outages not to exceed the Full Load Equivalent  
Scheduled Outage Allowance Days for each Contract Year during the Term  
as computed in Appendix E, during which times reduced or no supply of  
Contract Capacity or Associated Energy will be available to Meralco.  
Notwithstanding that the Commercial Operations Date does not coincide  
with the start of a Contract Year, Power Supplier shall be entitled to the  
Full Load Equivalent Scheduled Outage Allowance Days for such Contract  
Year when the Commercial Operations Date occurred. For the avoidance of  
doubt, during the Interim Supply Period, Power Supplier shall not be entitled  
to the Full Load Equivalent Scheduled Outage Allowance Days.

Power Supplier shall be entitled to the Full Load Equivalent Major  
Maintenance Outage Allowance Days to undertake major repair, overhaul  
and maintenance of the Plant in accordance with the technical requirements  
of the Plant; provided that, it shall, in no case, be availed of more frequently  
than once every four (4) years; and provided further, that the first Major  
Maintenance Outage shall occur no earlier than the fourth (4th) year after  
the occurrence of the Commercial Operations Date.

**Section 9.2 Forced Outage Allowance**

Beginning on the Commercial Operations Date, Power Supplier shall be  
allowed Forced Outages not to exceed the Full Load Equivalent Forced  
Outage Allowance Days for each Contract Year during the Term as computed  
in Appendix E, during which time reduced or no supply of Contract Capacity  
or Associated Energy will be available to Meralco. Notwithstanding that the  
Commercial Operations Date does not coincide with the start of a Contract  
Year, Power Supplier shall be entitled to the Full Load Equivalent Forced  
Outage Allowance Days for such Contract Year when the Commercial  
Operations Date occurred. For the avoidance of doubt, during the Interim  
Supply Period, Power Supplier shall not be entitled to the Full Load  
Equivalent Forced Outage Allowance Days.

**Section 9.3 Replacement Power**

9.3.1 During outages within the Full Load Equivalent Forced Outage  
Allowance Days; Full Load Equivalent Scheduled Outage Allowance Days  
and the Full Load Equivalent Major Maintenance Outage Allowance Days,  
Power Supplier shall not be required to supply Meralco with Replacement  
Power. In such circumstances, Meralco, at its own cost, shall source the  
Replacement Power from the WESM and Power Supplier shall not bill  
Meralco for these quantities.

9.3.2 During any period in which an Event of Force Majeure affects Power  
Supplier or Meralco, Meralco shall procure its own Replacement Power from  
the WESM to the extent supply or offtake is so affected.

9.3.3 During any period of Scheduled Outage for which unutilized Full  
Load Equivalent Scheduled Outage Allowance Days is not available, or  
Major Maintenance Outage for which unutilized Full Load Equivalent Major  
Maintenance Outage Allowance Days is not available, Power Supplier shall  
purchase Replacement Power from WESM or third parties to the extent the  
same is available for delivery to Meralco. Replacement Power quantities  
procured by Power Supplier under this Section 9.3.3 shall be declared as  
BCQ and shall be paid by Meralco at the Price in accordance with Appendix  
E. During any period of Forced Outage for which unutilized Full Load  
Equivalent Forced Outage Allowance Days is not available, Power Supplier  
shall purchase Replacement Power from WESM or third parties to the extent  
the same is available for delivery to Meralco. Replacement Power quantities  
procured by Power Supplier and delivered to Meralco under this Section  
9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in  
accordance with Appendix E.

xxx

**ARTICLE 10  
ASSIGNMENT OR TRANSFER OF CONTRACT CAPACITY**

**Section 10.1 Implementation of Open Access and Retail  
Competition or Reduction in Demand of Captive Customers**

With the implementation of Open Access and Retail Competition in phases  
in accordance with the guidelines issued by the ERC or in relation to any  
reduction in demand of Meralco's captive customers, the amount of Contract  
Capacity may be adjusted in accordance with the terms hereof.

xxx

**ARTICLE 11  
BILLING AND PAYMENT**

xxx

**Section 11.2 Payments**

11.2.1 Meralco shall pay the entire amount indicated in the Final Invoice  
(subject to Appendix I) when due and payable, provided that Meralco shall  
not be required to make payment on any Invoice that is manifestly in error  
apparently invalid, or not in the form or substance contemplated by this  
Agreement until the same has been corrected following prompt notice by  
Meralco to Power Supplier of such error, invalidity or absence of proper form  
or substance.

xxx

**ARTICLE 12  
TAXES, FEES AND COSTS**

xxx

**Section 12.2 Charges Due to Change in Circumstances**

12.2.1 If, as a result of a Change in Circumstances, Meralco becomes  
liable to pay any new charges, fees, taxes, duties, assessments or other  
similar amounts ("New Charges"), or any increase in existing charges, fees  
taxes, duties, assessments or other similar amounts ("Increased Charges")  
become payable with respect to this Agreement, the New Charges or  
Increased Charges shall form part of the price that Meralco will charge to its  
customers.

12.2.2 In the event that, as a result of a Change in Circumstances and  
pursuant to a corresponding order of the ERC or any relevant Government  
Instrumentality:

- Meralco is prevented from making a timely pass-through to its  
customers of any charges under this Agreement as approved  
by the ERC in the ERC Final Approval as accepted by Powe  
Supplier (such amounts referred to hereinafter as "Disallowed  
Pass-Through Amounts"); or
- any portion of the Price that has been paid to Power Supplie  
is required to be refunded to Meralco or Meralco's customer  
in connection with the ERC Application or any petition, claim  
case, proceeding or other action involving any of the Partie  
brought before any judicial, administrative or quasi-judicial bod  
(such portion of the Price referred to hereinafter as "Refundabl  
Amounts");

the Parties shall enter into good faith negotiations to agree on a satisfactor  
solution regarding the amendment of this Agreement to restore Meralco'  
commercial position prior to such Change in Circumstances, including an  
adjustment of the Price; provided that in the case of Section 12.2.2(b),  
Power Supplier shall refund all Refundable Amounts to Meralco or Meralco'  
customers in the manner and within the period as required by the ERC o  
any other relevant Government Instrumentality (as applicable). If the Partie  
fail to reach a mutually satisfactory resolution within sixty (60) Days from the  
commencement of negotiations, the provisions of Section 18.6.6(a) will apply.

12.2.3 If as a result of a Change in Circumstances affecting Powe  
Supplier, Power Supplier becomes liable to pay any New Charges or an  
Increased Charges with respect to this Agreement, or Power Supplier is n  
longer able to require payment from Meralco for Disallowed Pass-Throug  
Amounts, or Power Supplier is required to refund Refundable Amounts, or  
Change in Circumstances materially increases the operating costs or capit  
expenditures associated with the Plant or materially and adversely affect  
its performance of its obligations under this Agreement, adversely affect  
the sale by Power Supplier of Contract Capacity and Associated Energy i  
accordance with this Agreement, makes the Power Supplier's administratio  
or operational aspects of such performance materially more burdensom  
(whether made at the direction of any Governmental Instrumentality c  
otherwise) or causes serious damage to, or materially and adverse  
affects the financial condition of Power Supplier, Power Supplier shall sen  
a notice to Meralco of the occurrence of such Change in Circumstance  
("Notice of Change in Circumstances") together with an analysis o  
the cost impact of such Change in Circumstances and Meralco shall fil  
the necessary application with the ERC for the adjustment of the Pric  
("Application for Price Adjustment") within thirty (30) Days from recei  
of the Notice of Change in Circumstances; provided that, Meralco shall no  
be liable to pay any adjustment in the Price from the time the Change i  
Circumstances becomes effective until the ERC approves the Applicatio  
for Price Adjustment ("Interim Period"); and provided, further, that Net  
Charges or Increased Charges for which the Power Supplier sends a Notic  
of Change in Circumstances in accordance with this Section 12.2.3 shall no  
include charges, fees, taxes, duties or other similar amounts relating to (i  
taxes on the income of Power Supplier, (ii) taxes on the real property owner  
held by or in possession of Power Supplier, and (iii) business taxes on th  
operations of Power Supplier.

12.2.4 In the event that:

- Meralco is unable to file an Application for Price Adjustmen  
within thirty (30) Days from receipt of the Notice of Change i  
Circumstances, or
- the ERC denies, in whole or in part, the Application for Pric  
Adjustment, or
- if no order is issued granting the Application for Price Adjustmen  
within sixteen (16) months from receipt of the Notice of Chang  
in Circumstances, or
- the total amount of unreimbursed New Charges, Increase  
Charges, Disallowed Pass-Through Amounts that Powe  
Supplier is unable to collect from Meralco, and the Refundab  
Amounts actually refunded by Power Supplier, accumulate  
during the Interim Periods for all Change in Circumstance  
events occurring for the entire Term ("Unreimbursed New  
Increased Charges and Refundable Amounts") exceeds th  
equivalent of two percent (2%) of the Capacity Payments for or  
(1) Contract Year ("Threshold Level 1").

the Parties shall enter into good faith negotiations to agree on a satisfactor  
solution regarding the amendment of this Agreement to restore Powe  
Supplier's commercial position prior to such Change in Circumstance  
including an adjustment of the Price. If the Parties fail to reach a mutual  
satisfactory resolution within sixty (60) Days from the commencement  
negotiations, the Power Supplier shall be entitled to terminate this Agreeeme  
in accordance with the provisions of Section 18.6.6(b).

xxx

**ARTICLE 14  
COVENANTS**

xxx

**Section 14.2 ERC Approval**

14.2.1 Subject to the non-occurrence of the Longstop Date, Pow  
Supplier shall immediately inform Meralco of its receipt of the ERC Fin  
Approval by providing proof thereof. Power Supplier shall have ten (10) Day  
from the date of such receipt of the ERC Final Approval to notify Meralco  
writing that (i) it accepts such ERC Final Approval or (ii) it does not acce  
the ERC Final Approval, stating the grounds for non-acceptance.

14.2.2 In case of Power Supplier's non-acceptance, Power Suppli  
shall be free to file with the ERC a motion for reconsideration and Meral  
shall cooperate and use reasonable efforts to support any such motion. A  
order on a motion for reconsideration filed shall be treated as an ERC Fir  
Approval for purposes of the processes under this Section 14.2, and Pow  
Supplier shall accept or reject such ERC Final Approval in accordance w  
Section 14.2.1 above.

14.2.3 If the ERC's Final Approval requires an amendment of any provis  
herein, including provisions on amounts payable under this Agreement,

Commission.

3. Applicant RPE is a corporation duly organized and existing under the laws of the Republic of the Philippines, with its office address at Unit 310, The Venue, Rizal Highway, Subic Bay Industrial Park, Phase 1, Subic Bay Freeport Zone, Philippines. It may be served with notices and other processes of this Honorable Commission through its counsel at the address indicated herein.

4. RPE shall construct, own, operate, manage and maintain a 300 MW (net) sub-critical circulating fluidized-bed coal-fired power generating facility in Sitio Naglatore, Barangay Cawag, Municipality of Subic in the Province of Zambales, within the Subic Bay Freeport Zone (the "Plant").

5. Based on MERALCO's Distribution Development Plan, "from 2015 to 2024, energy sales is forecasted to grow by a compounded average growth rate of 3.7%."

6. In order to ensure continuous and reliable electricity for MERALCO's customers with the expected continuous increase in demand and load growth, and mitigate exposure to the Wholesale Electricity Spot Market ("WESM"), there is a need for MERALCO to source additional capacity through bilateral power supply contracts.

7. Under Section 45(b) of Republic Act No. 9136 ("EPIRA"), it is provided that "Distribution utilities may enter into bilateral power supply contracts subject to review by the ERC xxx".

8. Accordingly, following extensive negotiations, on 20 April 2016, MERALCO executed a Power Supply Agreement ("PSA") with RPE, for the purchase of 225 MW Contract Capacity and Associated Energy from the Plant that RPE shall construct, own, operate, manage and maintain.

9. The PSA, a copy of which is attached as ANNEX "A" and made an integral part hereof, contains the following salient features:

**"ARTICLE 2  
PURPOSE; TERM**

xxx

**Section 2.2 Term of Agreement**

2.2.1 This Agreement shall become effective upon the satisfaction (or the waiver by the relevant Party) of the conditions set out in Section 3.1 (the "Effective Date").

2.2.2 The term of this Agreement (the "Term") shall commence on the Effective Date and shall expire on the date falling twenty (20) years after the Operations Effective Date xxx.

xxx

**ARTICLE 3  
EFFECTIVE DATE, COMMENCEMENT DATE  
AND COMMERCIAL OPERATIONS DATE**

**Section 3.1 Effective Date**

3.1.1 The Effective Date shall be the date that the following conditions shall have been satisfied or waived by the relevant Party, as certified by Power Supplier and Meralco xxx.

xxx

**Section 3.2 Commencement Date**

3.2.1 The "Commencement Date" shall occur upon the satisfaction of the conditions below:

(a) the conditions set out in Section 3.1 have been fulfilled;

(b) each Party has delivered to the other Party a certification dated no earlier than two (2) Days prior to the proposed Commencement Date to the effect that its representations and warranties contained herein shall be true and correct in all material respects on and as of the Commencement Date;

(c) on or before the Longstop Date, (i) the ERC shall have approved in the ERC Final Approval this Agreement, including the pricing structure as set out herein (or as otherwise acceptable to Power Supplier), and (ii) the Acceptance Date has occurred; and

(d) Financial Close or NTP Issuance shall have occurred within the period contemplated under Section 3.2.2.

Power Supplier shall deliver written notice to Meralco of the satisfaction of these conditions and Meralco shall confirm in writing the occurrence of the Commencement Date.

3.2.2 Power Supplier covenants to achieve Financial Close or NTP Issuance within ninety (90) Days from the Acceptance Date (the "Required Financial Completion Date").

xxx

**Section 3.3 Operations Effective Date**

3.3.1 Subject to the occurrence of the Commencement Date, Operations Effective Date shall occur on the date that is forty-four (44) months from the Commencement Date. From and after the Operations Effective Date, the obligations of Power Supplier and Meralco under this Agreement with respect to the sale and purchase of Contract Capacity and Associated Energy shall become effective.

3.3.2 If, at any time after the occurrence of the Operations Effective Date, Power Supplier fails to supply Meralco with Contract Capacity and Associated Energy, Meralco shall be entitled to procure Replacement Power from the WESM and Power Supplier shall be liable to pay Meralco the amount equivalent to the difference between (i) the WESM cost of the Replacement Power and (ii) the amount Meralco would have paid for the Replacement Power had it been paid at the Price (the "WESM Differential"). For the avoidance of doubt, if the WESM Differential is a negative number, Meralco shall have no liability whatsoever to Power Supplier.

3.3.3 After Meralco receives the invoice from the WESM that includes the WESM Differential, Meralco shall be entitled to invoice Power Supplier for payment of the WESM Differential. Power Supplier shall pay the WESM Differential within five (5) Days from receipt of such invoice.

3.3.4 In the event Power Supplier fails to pay Meralco the WESM Differential within the period stated in Section 3.3.3, Meralco shall be entitled to draw on the Performance Security, subject to the obligation of Power Supplier to replenish the Performance Security in accordance with Section 4.5.

3.3.5 In the event that Power Supplier fails to supply Contract Capacity and Associated Energy to Meralco for sixty (60) Days, Meralco shall have the right, by written notice to Power Supplier, to terminate this Agreement. In case of such termination, Meralco shall have the right to forfeit as liquidated damages the amount of the Performance Security and to draw on the Performance Security for the settlement of such liquidated damages.

**Section 3.4 Commercial Operations Date and Scheduled Commercial Operations Date**

3.4.1 The "Commercial Operations Date" shall occur upon delivery by Power Supplier of the documents enumerated below, in each case, in the form and substance satisfactory to Meralco:

- (a) Capacity Test Certificate xxx;
- (b) a Net Plant Heat Rate Test Certificate xxx;
- (c) all permits, licenses, authorizations and other approvals from all Government Authorities and third parties needed for the operation of the Plant and the supply of electricity by the Power Supplier to Meralco xxx;
- (d) a Commercial Operations Date Certificate; and
- (e) certification by Power Supplier's insurance advisor or broker that the insurances required for the Plant under this Agreement relevant for at least the first Contract Year have been obtained.

xxx

**Section 3.5 Early Occurrence of the Commercial Operations Date**

other sources shall be deemed Delivered by Power Supplier by declaration made from the Plant.

The Dispatch of Contract Capacity and Associated Energy shall meet the requirements set out in Appendix B.

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent, sell, divert, grant, transfer, dedicate, reserve or assign all or any portion of the Contract Capacity and Associated Energy to any Person other than Meralco.

6.1.3 The supply of Contract Capacity and Associated Energy by Power Supplier to Meralco shall be in accordance with the WESM Rules. Each Party shall, during the Term, always keep and maintain its registration as a Direct WESM Member.

6.1.4 Power Supplier shall source its supply for Meralco from the Plant except during (i) the Interim Supply Period; (ii) Outages; (iii) any curtailment due to Dispatch Instructions; (iv) ramping limitations and (v) system frequency fluctuations.

xxx

**ARTICLE 9  
OUTAGES'**

**Section 9.1 Scheduled Outage and Major Maintenance Outage Allowances**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages not to exceed the Full Load Equivalent Scheduled Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which times reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Scheduled Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Scheduled Outage Allowance Days.

Power Supplier shall be entitled to the Full Load Equivalent Major Maintenance Outage Allowance Days to undertake major repair, overhaul and maintenance of the Plant in accordance with the technical requirements of the Plant; provided that, it shall, in no case, be availed of more frequently than once every four (4) years; and provided further, that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after the occurrence of the Commercial Operations Date.

**Section 9.2 Forced Outage Allowance**

Beginning on the Commercial Operations Date, Power Supplier shall be allowed Forced Outages not to exceed the Full Load Equivalent Forced Outage Allowance Days for each Contract Year during the Term as computed in Appendix E, during which time reduced or no supply of Contract Capacity or Associated Energy will be available to Meralco. Notwithstanding that the Commercial Operations Date does not coincide with the start of a Contract Year, Power Supplier shall be entitled to the Full Load Equivalent Forced Outage Allowance Days for such Contract Year when the Commercial Operations Date occurred. For the avoidance of doubt, during the Interim Supply Period, Power Supplier shall not be entitled to the Full Load Equivalent Forced Outage Allowance Days.

**Section 9.3 Replacement Power**

9.3.1 During outages within the Full Load Equivalent Forced Outage Allowance Days, Full Load Equivalent Scheduled Outage Allowance Days and the Full Load Equivalent Major Maintenance Outage Allowance Days, Power Supplier shall not be required to supply Meralco with Replacement Power. In such circumstances, Meralco, at its own cost, shall source the Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.

9.3.2 During any period in which an Event of Force Majeure affects Power Supplier or Meralco, Meralco shall procure its own Replacement Power from the WESM to the extent supply or offtake is so affected.

9.3.3 During any period of Scheduled Outage for which unutilized Full Load Equivalent Scheduled Outage Allowance Days is not available, or Major Maintenance Outage for which unutilized Full Load Equivalent Major Maintenance Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E. During any period of Forced Outage for which unutilized Full Load Equivalent Forced Outage Allowance Days is not available, Power Supplier shall purchase Replacement Power from WESM or third parties to the extent the same is available for delivery to Meralco. Replacement Power quantities procured by Power Supplier and delivered to Meralco under this Section 9.3.3 shall be declared as BCQ and shall be paid by Meralco at the Price in accordance with Appendix E.

xxx

**ARTICLE 10  
ASSIGNMENT OR TRANSFER OF CONTRACT CAPACITY**

**Section 10.1 Implementation of Open Access and Retail Competition or Reduction in Demand of Captive Customers**

With the implementation of Open Access and Retail Competition in phases in accordance with the guidelines issued by the ERC or in relation to any reduction in demand of Meralco's captive customers, the amount of Contract Capacity may be adjusted in accordance with the terms hereof.

**Section 10.2 Notification of Reduction in Contract Capacity**

In respect of the start of each phase under Open Access and Retail Competition or in case of any reduction in demand of Meralco's captive customers, Meralco shall deliver to Power Supplier written notice specifying the reduced amount of Contract Capacity under this Agreement resulting from transfers made in accordance with Section 10.3.

**Section 10.3 Assignment or Transfer of Contract Capacity Due to Open Access and Retail Competition or Reduction in Demand of Captive Customers**

10.3.1 Meralco shall be entitled to assign, transfer, designate, delegate or allocate (collectively in this context, "Transfer") its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to any of its business segments or its Retail Electricity Supplier ("RES") Affiliate, without the prior consent of the Power Supplier. In the event that Meralco has two or more RES Affiliates, Power Supplier shall have the option to choose the RES Affiliate to which Meralco shall Transfer its rights and obligations, which option shall be communicated to Meralco within five (5) Days from receipt of the Transfer Notice (defined below).

10.3.2 Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity that is no longer required by Meralco as a result of Open Access and Retail Competition or a reduction in demand of its captive customers to (i) any of its Affiliates or (ii) to any other Person, subject to the consent of Power Supplier, which consent shall not be unreasonably withheld delayed or conditioned, it being understood that withholding consent would not be considered unreasonable if the proposed Transfer would be contrary to the reasonable requirements of Finance Parties under the Finance Documents, as evidenced by a written confirmation by the relevant Finance Parties. Power Supplier shall exert reasonable efforts to (i) procure that only the consent of Finance Parties representing no more than seventy-five percent (75%) of the debt plus undrawn commitments shall be required for a Transfer under the Finance Documents; and (ii) upon written notice being given by Meralco, procure such consent for the Transfer. Meralco shall endeavor to cooperate with Power Supplier by providing documents and information in relation to the Transfer as may be reasonably required by the Finance Parties.

Pass-Through Amounts"); or

- (b) any portion of the Price that has been paid to Power Supplier is required to be refunded to Meralco or Meralco's custom in connection with the ERC Application or any petition, case, proceeding or other action involving any of the Par brought before any judicial, administrative or quasi-judicial b (such portion of the Price referred to hereinafter as "Refunda Amounts").

the Parties shall enter into good faith negotiations to agree on a satisfac solution regarding the amendment of this Agreement to restore Meral commercial position prior to such Change in Circumstances, including adjustment of the Price; provided that in the case of Section 12.2.2 Power Supplier shall refund all Refundable Amounts to Meralco or Meral customers in the manner and within the period as required by the ERC any other relevant Government Instrumentality (as applicable). If the Par fail to reach a mutually satisfactory resolution within sixty (60) Days from commencement of negotiations, the provisions of Section 18.6.6(a) will appl

12.2.3 If as a result of a Change in Circumstances affecting Pow Supplier, Power Supplier becomes liable to pay any New Charges or : Increased Charges with respect to this Agreement, or Power Supplier is longer able to require payment from Meralco for Disallowed Pass-Throu Amounts, or Power Supplier is required to refund Refundable Amounts, o Change in Circumstances materially increases the operating costs or cap expenditures associated with the Plant or materially and adversely affe its performance of its obligations under this Agreement, adversely affe the sale by Power Supplier of Contract Capacity and Associated Energy accordance with this Agreement, makes the Power Supplier's administrati or operational aspects of such performance materially more burdensor (whether made at the direction of any Governmental Instrumentality otherwise) or causes serious damage to, or materially and advers affects the financial condition of Power Supplier, Power Supplier shall se a notice to Meralco of the occurrence of such Change in Circumstanc ("Notice of Change in Circumstances") together with an analysis the cost impact of such Change in Circumstances and Meralco shall t the necessary application with the ERC for the adjustment of the Pri ("Application for Price Adjustment") within thirty (30) Days from rece of the Notice of Change in Circumstances; provided that, Meralco shall n be liable to pay any adjustment in the Price from the time the Change Circumstances becomes effective until the ERC approves the Applicati for Price Adjustment ("Interim Period"); and provided, further, that Ne Charges or Increased Charges for which the Power Supplier sends a Noti of Change in Circumstances in accordance with this Section 12.2.3 shall n include charges, fees, taxes, duties or other similar amounts relating to taxes on the income of Power Supplier, (ii) taxes on the real property owne held by or in possession of Power Supplier, and (iii) business taxes on li operations of Power Supplier.

12.2.4. In the event that:

- (a) Meralco is unable to file an Application for Price Adjustme within thirty (30) Days from receipt of the Notice of Change Circumstances, or
- (b) the ERC denies, in whole or in part, the Application for Pri Adjustment, or
- (c) if no order is issued granting the Application for Price Adjustme within sixteen (16) months from receipt of the Notice of Chang in Circumstances, or
- (d) the total amount of unreimbursed New Charges, Increase Charges, Disallowed Pass-Through Amounts that Pow Supplier is unable to collect from Meralco, and the Refundab Amounts actually refunded by Power Supplier, accumulat during the Interim Periods for all Change in Circumstanc events occurring for the entire Term ("Unreimbursed New , Increased Charges and Refundable Amounts") exceeds ti equivalent of two percent (2%) of the Capacity Payments for or (1) Contract Year ("Threshold Level 1").

the Parties shall enter into good faith negotiations to agree on a satisfactor solution regarding the amendment of this Agreement to restore Pow Supplier's commercial position prior to such Change in Circumstanc including an adjustment of the Price. If the Parties fail to reach a mutual satisfactory resolution within sixty (60) Days from the commencement negotiations, the Power Supplier shall be entitled to terminate this Agreeem in accordance with the provisions of Section 18.6.6(b).

xxx

**ARTICLE 14  
COVENANTS**

xxx

**Section 14.2 ERC Approval**

14.2.1 Subject to the non-occurrence of the Longstop Date, Powe Supplier shall immediately inform Meralco of its receipt of the ERC Fin Approval by providing proof thereof. Power Supplier shall have ten (10) Day from the date of such receipt of the ERC Final Approval to notify Meralco i writing that (i) it accepts such ERC Final Approval or (ii) it does not accep the ERC Final Approval, stating the grounds for non-acceptance.

14.2.2 In case of Power Supplier's non-acceptance, Power Supplie shall be free to file with the ERC a motion for reconsideration and Meralc shall cooperate and use reasonable efforts to support any such motion. An order on a motion for reconsideration filed shall be treated as an ERC Fin Approval for purposes of the processes under this Section 14.2, and Powe Supplier shall accept or reject such ERC Final Approval in accordance wit Section 14.2.1 above.

14.2.3 If the ERC's Final Approval requires an amendment of any provisio herein, including provisions on amounts payable under this Agreement, c subjects such approval to any material term or condition that is not acceptabl to either Party, acting reasonably ("ERC Conditional Approval"), the Partie shall cooperate in good faith to resolve the required ERC amendment or t address the material term or condition. The Parties may:

- (a) within fifteen (15) Days after the receipt of the ERC Conditions Approval, seek reconsideration of the ERC Conditional Approval; or
- (b) within sixty (60) Days after receipt of the ERC Conditions Approval, revise and file an amended Agreement incorporating changes (other than the Price) for approval by the ERC ("Amended Agreement");

provided that, if the motion for reconsideration is denied by the ERC, or the Amended Agreement is disapproved by the ERC, or approved by the ERC but still with any material term or condition that is not acceptable to eithe Party, acting reasonably, the Party adversely affected may terminate thi Agreement upon sixty (60) Days prior written notice to the other Party i accordance with the provisions of Section 18.6.2.

xxx

**ARTICLE 17  
FORCE MAJEURE**

xxx

**Section 17.5 Effect of Extended Force Majeure**

If any Event of Force Majeure prevents Power Supplier from making available the Contract Capacity or Delivering the Associated Energy o Meralco from accepting Contract Capacity or Associated Energy, in each case for a continuous period of more than one hundred eighty (180) Days then either Party may upon written notice, require the other Party to mee as soon as practicable to reasonably discuss any modification, change o amendment of this Agreement under such reasonable terms, to the exten necessary to resolve the issues arising from the Event of Force Majeure

| Schedule 1, Appendix E of the PSA:                      |                                                    |  |
|---------------------------------------------------------|----------------------------------------------------|--|
| Base Full Load Equivalent Scheduled Outage Allowance    | 30 Days per Contract Year                          |  |
| Full Load Equivalent Major Maintenance Outage Allowance | 20 Days, not more frequent than once every 4 years |  |
| Base Full Load Equivalent Forced Outage Allowance       | 15 Days per Contract Year                          |  |



# Burgos case closure up to next president

THE FAMILY of activist-farmer Jonas Joseph T. Burgos, the poster boy of those who involuntarily disappeared in the country, has a challenge to whoever wins the May 9 presidential election: Bring him home.

The longer that desaparecidos like Burgos — and two UP coeds who were abducted months before him — remain unaccounted for, the greater the risk that the situation fuels impunity of such grave crimes against human rights and the people, encouraging more evil forces to keep seizing people, said the Burgos family in a statement on Thursday (April 28), the ninth anniversary of the kidnapping.

Jonas, the third child of the late world press freedom icon Jose G. Burgos, Jr., was seized by four men and a woman as he ate lunch alone at the Ever Gotesco Mall in Quezon City on April 28, 2007. Family and friends, led by his mother Edita T. Burgos, have gone to the courts, to the streets, to both government and non-state forums here and abroad in the vain hope of having his abductors surface him.

Among the first to reach out to Mrs. Burgos was the late former president Corazon C. Aquino, whose rise to power was chronicled by the Burgoses' "Mosquito Press" trailblazers during the Marcos dictatorship.

When her only son Benigno III became senator in the midterm elections of 2007, his first privilege speech — witnessed by his mother from the gallery — was on the Burgos' abduction. Mr. Aquino timed his speech with the anniversary of his father's assassination.

Citing the "collective statements of concern" among advocacy groups, the Catholic church, and other sectors regarding the Burgos disappearance, Mr. Aquino at the time lamented the government's "position of denial... [which] makes one wonder about

this administration's capacity and, indeed, willingness, to protect its citizens and seek justice on their behalf."

He was elected president four years later and gave his word to the Burgos family that Burgos will be surfaced and that justice will be served.

With Mr. Aquino's term almost over, Jonas remains a desaparecido nine years after his abduction, the family said in its statement on Thursday.

"Worse, one of the main suspects, Former Colonel Eduardo Año, was promoted to General. Aquino even appointed him as the chief of the Intelligence Service of the Armed Forces of the Philippines," the Burgos family statement noted. Mr. Año now heads the Philippine Army.

"The President's inaction or the case is the same inaction we saw from former president Gloria Macapagal-Arroyo. If we've found Arroyo guilty, then how can we say that President Aquino is not part of the state's cover-up of the crime?" J.L. Burgos, brother of Jonas, said.

Human rights violations have resurfaced as a public issue this election season — particularly in the context of the vice-presidential bid of survey front-runner Ferdinand R. Marcos, Jr., whose father and namesake led a brutal 14-year dictatorship.

Confronted by this matter in a recent debate, Mr. Marcos said "I certainly acknowledge every human rights abuse in every administration."

The Burgos family said in their statement: "With the coming elections, the family and friends of Jonas hope that the next president will not be part of the continuing cover-up. The Burgos family challenges the next president to bring the perpetrators to justice and bring Jonas back home." — *main report by Interaksyon*

## Sacked governor's PDAF kickbacks tantamount to plunder — Ombudsman

THE OFFICE of the Special Prosecutor of the Ombudsman on Thursday filed a motion for reconsideration on the Sandiganbayan's April 12 decision granting bail to sacked Masbate governor Rizalina Seachon-Lanete, citing "sufficient evidence to convict her," a statement by the Office of the Ombudsman said.

The graft court's Fourth Division granted bail to Ms. Lanete and alleged pork barrel scam mastermind Janet Lim-Napoles, saying the evidence on their

2,388 pages (covering 21 days of hearings from May 6 to No. 23) and 5,614 exhibits inclusive derivatives or sub-markings.

The statement also disputes Ms. Lanete's questioning "the authenticity of the signature above her name," as noted by the court citing the prosecution's view that she "never raised the issue of the authenticity of her signature and has not denied her signatures the documents."

On the court's conclusion that the evidence of guilt of Lane

and maintain, to the extent feasible, the rights and obligations of the Parties under this Agreement.

If the Parties do not reach such satisfactory solution prior to the end of such one hundred eighty (180) Day period, or such other time as may be agreed upon, either Party may terminate this Agreement in accordance with Section 18.6.5.

XXX

### ARTICLE 18 EVENTS OF DEFAULT AND TERMINATION

XXX

#### Section 18.3 Remedies in case of an Event of Default

18.3.1 During the Curing Period with respect to a Power Supplier Event of Default, Meralco shall, for each time Power Supplier fails to make Available the Contract Capacity or to Deliver the Associated Energy, be entitled to source energy from the WESM. In such case, and provided that Power Supplier is able to cure the Power Supplier Event of Default prior to the exercise by Meralco of its rights under Section 18.3.3, Power Supplier shall be liable to pay Meralco the difference between the amount Meralco actually paid for such energy and the Price. It is understood and agreed that, despite the cure of a Power Supplier Event of Default, Meralco's rights under Section 18.3.3 continues to subsist until Power Supplier makes full payment of its liability under this Section 18.3.1.

18.3.2 During the Curing Period with respect to a Meralco Event of Default, Power Supplier shall, from the time of Meralco's failure to accept or pay for the Contract Capacity and Associated Energy, be entitled to sell the Contract Capacity and Associated Energy to the WESM. In such case, and provided that Meralco is able to cure the Meralco Event of Default prior to the exercise by Power Supplier of its rights under Section 18.3.4, Meralco shall be liable to pay Power Supplier the difference between the amount Power Supplier actually received from such sale to the WESM and the Price. It is understood and agreed that, despite the cure of a Meralco Event of Default, Power Supplier's rights under Section 18.3.4 continues to subsist until Meralco makes full payment of its liability under this Section 18.3.2.

XXX

10. The Payment Structure, as provided in Appendix E of the PSA shall be as follows:

#### "C. PAYMENT UPON OPERATIONS EFFECTIVE DATE

The payment to be made in each Billing Period during the Term for Contract Capacity and Associated Energy shall consist of a Capacity Payment, Energy Payment, Interconnection Facilities Payment, and Reimbursable Cost Payment. The Capacity Payment consists of Component A (MCP), and Component B (MFOM), and the Energy Payments consists of Component C (MFP), and Component D (MVOM). Other payments consist of Component E (MIFP), Component F Reimbursable Cost Payment (RCP) and Component G (VAT). Thus, the Monthly Power Bill ("MPB") payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

MPB = MCP + MFOM + MFP + MVOM + MIFP + RCP + VAT

11. Given the foregoing, a sample calculation of the base contract under the PSA, given a certain set of assumptions, results in an annual effective rate of PhP3.8466 per kWh (at plant gate), as shown in the sample calculation below:

RPE PSA - Rate Impact  
(Year 2021)

| LINE COMPONENT                               | LINE         | BASE RATE <sup>(1)</sup> | CFR Adj Factor <sup>(2)</sup> | BILLING DETERMINANT <sup>(3)</sup> | AMOUNT (PhP)       |
|----------------------------------------------|--------------|--------------------------|-------------------------------|------------------------------------|--------------------|
| Depository Payment (MCP)                     |              |                          |                               |                                    | 3,355,480,530.00   |
| Pass Portion                                 | (PhP/kWh-yr) | 14,913.2468              |                               | 225,000 (kWh)                      |                    |
| Fixed O&M Payment (MFOM)                     |              |                          |                               |                                    | 399,340,584.10     |
| US Dollar Portion Escalating                 | (USD/kWh-yr) | 19.3828                  | 1.000000                      | 225,000 (kWh)                      |                    |
| Pass Portion Escalating                      | (PhP/kWh-yr) | 1,870.1896               | 1.000000                      | 225,000 (kWh)                      |                    |
| Fixed Portion Escalating                     |              |                          |                               |                                    | 405,791,310.00     |
| US Dollar Portion                            | (USD/kWh)    | 0.0220                   |                               | 1,576,300,000 (kWh)                |                    |
| Variable O&M Payment (MVOM)                  |              |                          |                               |                                    | 1,595,487,404.73   |
| Pass Portion                                 | (PhP/kWh)    | 0.1172                   | 1.000000                      | 1,576,300,000 (kWh)                |                    |
| Interconnection Facilities Payment (MIFP)    |              |                          |                               |                                    | 247,472,360.00     |
| Capital Recovery                             | (PhP/kWh-yr) | 408.4158                 |                               | 225,000 (kWh)                      |                    |
| Fixed O&M                                    | (PhP/kWh-yr) | 174.8456                 | 1.000000                      | 225,000 (kWh)                      |                    |
| Reimbursable Cost Payment (RCP)              |              |                          |                               |                                    | 39,295,260.00      |
| Real Property Tax                            | (PhP)        |                          |                               |                                    | 3,854,813          |
| Lease Fees                                   | (PhP)        |                          |                               |                                    | 75,000,000         |
| Start-up and Shutdown Costs                  | (PhP)        |                          |                               |                                    |                    |
| Supplemental Payments                        | (PhP)        |                          |                               |                                    | 18,473,930         |
| Compensating Energy Charges                  | (PhP)        |                          |                               |                                    |                    |
| Replacement Power                            | (PhP)        |                          |                               |                                    |                    |
| TOTAL PAYMENT                                | (PhP)        |                          |                               |                                    | 6,065,105,579.42   |
| Effective Rate at Plant Gate                 | (PhP/kWh)    |                          |                               |                                    | 3.8466             |
| WESM Line Rental Rate <sup>(4)</sup>         | (PhP/kWh)    |                          |                               |                                    | 0.5000             |
| Delivered Rate                               | (PhP/kWh)    |                          |                               |                                    | 4.3466             |
| Effective Cost on WESM Price <sup>(5)</sup>  | (PhP/kWh)    |                          |                               |                                    | 7.0640             |
| Increase / (Decrease) over WESM Price        | (PhP/kWh)    |                          |                               |                                    | (2.9174)           |
| Masbate Captive Energy Demand <sup>(6)</sup> | (kWh)        |                          |                               |                                    | 34,558,621.888     |
| Increase / (Decrease) in Generation Cost     | (PhP)        |                          |                               |                                    | (4,600,188,356.80) |
| Increase / (Decrease) in Generation Cost     | (PhP/kWh)    |                          |                               |                                    | (0.1327)           |

NOTES:  
<sup>(1)</sup> Base Rates set forth in Schedule 3 of Appendix E of the PSA.  
<sup>(2)</sup> Annual Capacity Rate (Annual) and US Dollar Portion Escalating rates by applying the formulas shown in Appendix E of the PSA.  
<sup>(3)</sup> Annual Payment calculated based on Quarterly Billing Payment Rate of PhP3.8466 per kWh, Masbate Index of USD 50.38/USD, Freight Price of USD 5.90/MT, and Fuel Price of PhP 46.07/MT (Quarterly Billing Payment Rate of PhP3.8466 per kWh).  
<sup>(4)</sup> Reimbursable Payments (pass through costs) based on actual 2021 rates.  
<sup>(5)</sup> Assumed estimated RPE line rental rate.  
<sup>(6)</sup> Cost of independent volume of RPE was sourced from the WESM based on forecast average Jan.-Dec. 2021 hourly prices.  
<sup>(7)</sup> Masbate Captive Energy Demand based on 2021 forecast.  
<sup>(8)</sup> Assumed no OPI escalation.  
<sup>(9)</sup> Energy Payments based on 50,000 plant capacity factor.

12. As seen in the rate impact above, given the above assumptions, the simulated delivered price under the PSA would result in the reduction of MERALCO's generation charge by PhP0.1327 per kWh.

13. Notably, the Plant offers greater reliability compared to existing plants that are past their expected plant life, at a price competitively at par with the rates of the existing plants despite its newness.

14. It bears emphasis that there is an urgent need for the final approval of the PSA considering the requirement of lenders for the Honorable Commission's final approval of the PSA prior to financial closure. Only thereafter can RPE commence construction of the Plant to meet the target Commercial Operations Date and allow for delivery of MERALCO's needed capacity and associated energy by then.

15. Verily, this Honorable Commission's approval of the PSA will send strong signals to lenders of the viability of financing power generation projects in the Philippines, and thus, set the pace for infusion of similar investments by the private sector.

16. Additionally, the Plant is part of the Department of Energy's "DOE" planned indicative power projects. It is worthy to note that the realization of this project and its contribution to achieving the government's target of available capacity as per the DOE's Philippine Development Plan would largely depend on the timely approval of this Application.

17. In support of this Application, the Judicial Affidavit of MR. JUPRILLO C. MENESES, Head of MERALCO's Energy Sourcing Office, is attached as ANNEX "B" and made an integral part hereof.

18. Likewise, in support of this Application, the Applicants provide his Honorable Commission with the following documents, which underwent the pre-bidding conference of this Honorable Commission, to wit:

| DESCRIPTION OF DOCUMENT                                                                                                           | ANNEX |
|-----------------------------------------------------------------------------------------------------------------------------------|-------|
| Articles of Incorporation of RPE                                                                                                  | C     |
| Securities and Exchange Commission ("SEC") Certificate of Registration of the said Articles of Incorporation                      | D     |
| List of Shareholders (Latest GIS of RPE - SEC Form)                                                                               | E     |
| Write-up on Board of Investment ("BOI") Certificate of Registration                                                               | F     |
| Environmental Compliance Certificate ("ECC") issued by the Department of Environment and Natural Resources ("DENR")               | G     |
| Executive Summary                                                                                                                 | H     |
| Debt/Equity Ratio                                                                                                                 | I     |
| Project Cost                                                                                                                      | J     |
| Computation of Return on Investment/Weighted Average Cost of Capital ("WACC")                                                     | K     |
| Write-up on Certification from the Bank/Lending Institution                                                                       | L     |
| Purchased Power Rate/Breakdown of the base prices of Operation and Maintenance: Capacity Fee; Fixed Operation Fee; and Energy Fee | M     |

calculations and, as such, are confidential in nature. Further, there are confidentiality clauses set out by the Parties under the PSA.

20. Under Rule 4 of the ERC Rules of Procedure, the Honorable Commission may, upon request of a party and determination of the existence of conditions which would warrant such remedy, treat certain information submitted to it as confidential. Pursuant to said rule, RPE respectfully move that Annexes "M", "Q", "Y" and "FF" not be disclosed and be treated as confidential documents in accordance with Rule 4 of the ERC Rules of Procedure.

21. RPE hereby submits Annexes "M", "Q", "Y" and "FF" in a sealed envelope.

#### PRAYER

WHEREFORE, premises considered, it is respectfully prayed that the Honorable Commission:

- ISSUE an Order (i) treating Annexes "M", "Q", "Y" and "FF" and the information contained therein as confidential, (ii) directing their non-disclosure to persons other than officers and staff of the Honorable Commission, as necessary, pursuant to Rule 4 of the ERC Rules, and (iii) prescribing guidelines for the protection thereof; and
- after hearing on the merits, a Decision be rendered APPROVING the PSA between Applicants MERALCO and RPE.

Other relief just and equitable under the circumstances are likewise prayed for. Pasig City, 28 April 2016.

#### MANILA ELECTRIC COMPANY

Applicant  
 MERALCO Compound, Lopez Building,  
 Ortigas Avenue, Pasig City

By:  


FRANCIS DING S. ANTONIO  
 Roll of Attorneys No. 48145  
 PTR No. 1473407; 01/21/16; Pasig City  
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 MCLE Compliance No. V-0004608; 6 November 2014

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#### KATHERINE MARI S. GARCIA-MORENO

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 MCLE Compliance No. V-001784; 26 March 2014

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 Tel no. 1622-2260; Fax No: 1622-3550

#### REDONDO PENINSULA ENERGY, INC.

Applicant

By:

#### PUYAT JACINTO & SANTOS

Counsel for Applicant RPE

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#### JOSHUA GILBERT P. PARAISO

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IBP LRN 08639/12-22/2009/Camarines Sur

LETR No. 53234/2011-04/2016/Makati City

MCLE Compliance No. IV-0002055/6-13-11

RAFAEL RAYMUNDO A. EVANGELISTA

Roll No. 87284

IBP No. 978622/1-5-15/Makati City

PTR No. 4781136/1-9-15/Makati City

MCLE Compliance No. V-00141572-15-2016

REPUBLIC OF THE PHILIPPINES)  
 CITY OF PASIG

J.S.

#### VERIFICATION

#### AND CERTIFICATION OF NON-FORUM SHOPPING

I, JOSE RONALD V. VALLES, Filipino, of legal age, married, with office address at 7<sup>th</sup> Floor, Lopez Building, MERALCO Compound, Ortigas Avenue, Barangay Ugong, Pasig City, after being sworn in accordance with law, hereby depose and say that --

1. I am the Vice President and Head, Regulatory Affairs Office, of Applicant Manila Electric Company ("MERALCO"). In such capacity, I have caused the preparation and filing of the foregoing Application;

2. Moreover, I have been authorized by the Board of Directors of MERALCO to certify that Applicant has not heretofore filed any similar action, pleading or application involving the same issues before the Supreme Court, the Court of Appeals or any other lower courts or administrative bodies. A copy of the Secretary's Certificate authorizing me to cause the preparation of the instant Application and sign this Verification and Certification is attached hereto as ANNEX "MM";

3. I have read and understood the allegations contained therein and the same are true and correct based on my personal knowledge and authentic records made available to me in the ordinary course of business of MERALCO;

4. To the best of my knowledge, no similar action or proceeding is pending before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies;

5. If I should hereafter learn that a similar action has been filed before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies, I undertake to report such fact to this Honorable Commission within five (5) days from notice of such fact.

IN WITNESS WHEREOF, I have hereunto affixed my signature this April 28, 2016, at Pasig City, Philippines.

  
 JOSE RONALD V. VALLES  
 Affiant

SUBSCRIBED AND SWORN to before me this April 28, 2016, affiant having exhibited to me his Social Security System ID bearing the number 33-10900088.

Doc. No. 340:

ATTEST:   
 ATTY. ROMEO M. VALDEZ

10. The Payment Structure, as provided in Appendix E of the PSA will be as follows:

**"C. PAYMENT UPON OPERATIONS EFFECTIVE DATE**

The payment to be made in each Billing Period during the Term for Contract Capacity and Associated Energy shall consist of a Capacity Payment, Energy Payment, Interconnection Facilities Payment, and Reimbursable Cost Payment. The Capacity Payment consists of Component A (MCP), and Component B (MFOM), and the Energy Payments consists of Component C (MFP), and Component D (MVOM). Other payments consist of Component E (MIFP), Component F Reimbursable Cost Payment (RCP) and Component G (VAT). Thus, the Monthly Power Bill ("MPB") payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

$$MPB = MCP + MFOM + MFP + MVOM + MIFP + RCP + VAT$$

11. Given the foregoing, a sample calculation of the base contract under the PSA, given a certain set of assumptions, results in an annual effective of PhP3.8466 per kWh (at plant gate), as shown in the sample calculation below:

**RPE PSA-Rate Impact (Year 2011)**

| NO COMPONENT                                 | UNIT                   | BASE RATE <sup>1</sup> | CPAAS Factor <sup>2</sup> | BILLING DETERMINANT <sup>3</sup> | AMOUNT (PhP)            |
|----------------------------------------------|------------------------|------------------------|---------------------------|----------------------------------|-------------------------|
| Capacity Payment (MCP)                       | (PhP/kWh) <sup>4</sup> | 1,513.2428             |                           | 225,000 (kWh)                    | 3,355,480,530.00        |
| Fixed O&M Payment (MFOM)                     | (USD/kWh) <sup>5</sup> | 19.2828                | 1.000000                  | 225,000 (kWh)                    | 399,480,684.10          |
| US Dollar Portion Escalating                 | (PhP/kWh) <sup>6</sup> | 1,970.1836             |                           | 225,000 (kWh)                    | 420,791,310.00          |
| at Payment (MFP)                             | (USD/kWh) <sup>7</sup> | 0.0270                 | 1.576,300,000             | (kWh)                            | 1,595,887,404.73        |
| Fixed O&M Payment (MVOM)                     | (PhP/kWh)              | 0.1572                 | 1.000000                  | 1,576,300,000 (kWh)              | 247,872,390.00          |
| Interconnection Facilities Payment (MIFP)    | (PhP/kWh)              | 400.4156               | 1.000000                  | 225,000 (kWh)                    | 90,748,487.50           |
| Capital Recovery                             | (PhP/kWh)              | 174.6456               | 1.000000                  | 225,000 (kWh)                    | 39,295,260.00           |
| Fixed O&M                                    | (PhP/kWh)              |                        |                           |                                  |                         |
| Reimbursable Cost Payment (RCP) <sup>8</sup> | (PhP/kWh)              |                        |                           |                                  |                         |
| Real Property Tax                            | (PhP/kWh)              |                        |                           |                                  | 1,554,813               |
| Lease Fee                                    | (PhP/kWh)              |                        |                           |                                  | 75,000,000              |
| Start-up and Shutdown Costs                  | (PhP/kWh)              |                        |                           |                                  |                         |
| Supplemental Payments                        | (PhP/kWh)              |                        |                           |                                  | 35,473,970              |
| Commissioning Energy Charges                 | (PhP/kWh)              |                        |                           |                                  |                         |
| Replacement Power                            | (PhP/kWh)              |                        |                           |                                  |                         |
| <b>TOTAL PAYMENT</b>                         | (PhP/kWh)              |                        |                           |                                  | <b>6,065,105,379.42</b> |
| <b>Effective Rate at Plant Gate</b>          | (PhP/kWh)              |                        |                           |                                  | <b>3.8466</b>           |
| <b>US Dollar Rate</b>                        | (PhP/kWh)              |                        |                           |                                  | <b>0.5000</b>           |
| <b>Adjusted Rate</b>                         | (PhP/kWh)              |                        |                           |                                  | <b>4.3466</b>           |
| Effective Cost at WESM Price <sup>9</sup>    | (PhP/kWh)              |                        |                           |                                  | 7.9848                  |
| Change / (Decrease) over WESM Price          | (PhP/kWh)              |                        |                           |                                  | (2.5174)                |
| Netto Captive Energy Demand <sup>10</sup>    | (kWh)                  |                        |                           |                                  | 34,538,621.088          |
| Change / (Decrease) in Generation Cost       | (PhP/kWh)              |                        |                           |                                  | (4,600,188,356.80)      |
| Change / (Decrease) in Generation Cost       | (PhP/kWh)              |                        |                           |                                  | (0.1327)                |

12. As seen in the rate impact above, given the above assumptions, simulated delivered price under the PSA would result in the reduction of MERALCO's generation charge by about PhP0.1327 per kWh.

13. Notably, the Plant offers greater reliability compared to existing plants that are past their expected plant life, at a price competitively at par with the rates of existing plants despite its newness.

14. It bears emphasis that there is an urgent need for the final approval of the PSA considering the requirement of lenders for the Honorable Commission's final approval of the PSA prior to financial closure. Only thereafter can RPE commence construction of the Plant to meet the target Commercial Operations Date and allow for delivery of MERALCO's needed capacity and associated energy by then.

15. Verily, this Honorable Commission's approval of the PSA will send strong signals to lenders of the viability of financing power generation projects in the Philippines, and thus, set the pace for infusion of similar investments by the private sector.

16. Additionally, the Plant is part of the Department of Energy's (DOE) planned indicative power projects. It is worthy to note that the realization of this project and its contribution to achieving the government's target of available capacity under the DOE's Philippine Development Plan would largely depend on the timely approval of this Application.

17. In support of this Application, the Judicial Affidavit of MR. RINIL C. MENESES, Head of MERALCO's Energy Sourcing Office, is attached as IEX "B" and made an integral part hereof.

18. Likewise, in support of this Application, the Applicants provide Honorable Commission with the following documents, which underwent the pre-conference of this Honorable Commission, to wit:

| DESCRIPTION OF DOCUMENT                                                                                                         | ANNEX |
|---------------------------------------------------------------------------------------------------------------------------------|-------|
| Articles of Incorporation of RPE                                                                                                | C     |
| Utilities and Exchange Commission ("SEC") Certificate of Registration of said Articles of Incorporation                         | D     |
| Shareholders (Latest GIS of RPE - SEC Form)                                                                                     | E     |
| Board of Investment ("BOI") Certificate of Registration                                                                         | F     |
| Environmental Compliance Certificate ("ECC") issued by the Department of Environment and Natural Resources ("DENR")             | G     |
| Culture Summary                                                                                                                 | H     |
| Equity Ratio                                                                                                                    | I     |
| Cost                                                                                                                            | J     |
| Computation of Return on Investment/Weighted Average Cost of Capital ("ACC")                                                    | K     |
| Letter on Certification from the Bank/Lending Institution                                                                       | L     |
| Charged Power Rate/Breakdown of the base prices of Operation and Maintenance; Capacity Fee; Fixed Operation Fee; and Energy Fee | M     |
| Simple Computation of Power Rates                                                                                               | N     |
| Impact on the overall rates of MERALCO upon approval of the PSA                                                                 | O     |
| Rationale of Indexation                                                                                                         | P     |
| Flow specifying the Initial Costs and Breakdown of Operating and Maintenance expenses                                           | Q     |
| Letter on Minimum Energy Off-take ("MEOT")                                                                                      | R     |
| Letter on the Procurement Process of Fuel                                                                                       | S     |
| Letter on Related Agreements                                                                                                    | T     |
| Connection Agreement between National Grid Corporation ("NGCP") and RPE                                                         | U     |
| Letter on Certificate of Compliance ("COC") of RPE                                                                              | V     |
| Letter on National Power Corporation ("NPC") Certification                                                                      | W     |
| Technical and Economic Characteristics                                                                                          | X     |
| Analysis                                                                                                                        | Y     |
| Procurement Process leading up to the execution of the PSA                                                                      | Z     |
| Plans regarding transmission projects                                                                                           | AA    |
| Letter from Department of Energy's ("DOE") regarding Philippine Development Plan ("PDP")                                        | BB    |
| Distribution Development Plan ("DDP") of MERALCO                                                                                | CC    |
| Land Side Management (DSM) of MERALCO                                                                                           | DD    |
| Complete Set of Audited Financial Statements of RPE                                                                             | EE    |
| Rating Expenses                                                                                                                 | FF    |
| Statement on Fuel Procurement                                                                                                   | GG    |
| Letter on Certification of Engine Manufacturer                                                                                  | HH    |
| Letter on Simulation of the Number of Operating Units necessary to meet MEOT                                                    | II    |
| Letter on Potential Cost (absolute amounts and PhP/kWh) of Ancillary Services                                                   | JJ    |
| Acknowledgement receipt by the City of Pasig                                                                                    | KK    |
| Letter of Publication                                                                                                           | LL    |

These documents are requested to be treated as confidential and are attached to this Application in a sealed envelope.

**ALLEGATIONS IN SUPPORT OF MOTION FOR CONFIDENTIAL TREATMENT OF INFORMATION**

19. RPE notes that Annexes "M", "Q", "Y" and "FF" of this Application contain certain non-public information, data and calculations involving business and financial trade secrets reflecting RPE's investment and business

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REDONDO PENINSULA ENERGY, INC.  
Applicant

By:

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LETR. No. 53232/2011-04/2016/Makati City

MCLE Compliance No. IV-0002055/6-13-11

RAFAEL RAYMUNDO A. EVANGELISTA

Roll No. 57284

IBP No. 978622/1-5-15/Makati City

PTR No. 4781136/1-9-15/Makati City

MCLE Compliance No. V-0014157/2-15-2016

REPUBLIC OF THE PHILIPPINES)  
CITY OF PASIG

vs.

**VERIFICATION AND CERTIFICATION OF NON-FORUM SHOPPING**

I, JOSE RONALD V. VALLES, Filipino, of legal age, married, with office address at 7th Floor, Lopez Building, MERALCO Compound, Ortigas Avenue, Barangay Ugong, Pasig City, after being sworn in accordance with law, hereby depose and say that -

1. I am the Vice President and Head, Regulatory Affairs Office, of Applicant Manila Electric Company ("MERALCO"). In such capacity, I have caused the preparation and filing of the foregoing Application;

2. Moreover, I have been authorized by the Board of Directors of MERALCO to certify that Applicant has not heretofore filed any similar action, pleading or application involving the same issues before the Supreme Court, the Court of Appeals or any other lower courts or administrative bodies. A copy of the Secretary's Certificate authorizing me to cause the preparation of the instant Application and sign this Verification and Certification is attached hereto as ANNEX "MM";

3. I have read and understood the allegations contained therein and the same are true and correct based on my personal knowledge and authentic records made available to me in the ordinary course of business of MERALCO;

4. To the best of my knowledge, no similar action or proceeding is pending before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies;

5. If I should hereafter learn that a similar action has been filed before the Supreme Court, the Court of Appeals, the lower courts or administrative bodies, I undertake to report such fact to this Honorable Commission within five (5) days from notice of such fact.

IN WITNESS WHEREOF, I have hereunto affixed my signature this April 28, 2016, at Pasig City, Philippines.

JOSE RONALD V. VALLES  
Affiant

SUBSCRIBED and SWORN to before me this April 28, 2016, affiant having exhibited to me his Social Security System ID bearing the number 33-10900088.

Doc. No. 340;  
Page No. 69;  
Book No. III;  
Series of 2016.

ATTEST: ROSEMARY M. RAMOS  
Notary Public for the Philippines  
My Comm. No. 12345, Exp. Date 12/31/2016  
RMS NO. 5532 BP No. 12345, Office: Pasig City  
1234, Lopez Building, Ortigas Ave., Pasig City

**VERIFICATION AND CERTIFICATION**

I, ROCHEL DONATO GLORIA, of legal age, Filipino, with business address at Aboitiz Power, NAC Tower, 32nd Street Bonifacio Global City, Taguig, after having been duly sworn in accordance with law, depose and say that:

1. I am the duly authorized representative of Redondo Peninsula Energy, Inc. (the "Corporation"). Attached hereto as proof of such authority is a Secretary's Certificate issued by the Corporate Secretary of the Corporation.

2. As the duly authorized representative of the Corporation, I have caused the preparation and filing of the foregoing Application; I have read the allegations contained therein and certify that the same are true and correct based on my personal knowledge and on authentic records in the possession of the Corporation;

3. The Corporation has not commenced any other action or proceeding involving the same issues and parties before any court, tribunal or quasi-judicial agency; to the best of my knowledge, no such action or proceeding involving the same issues and parties is pending; and if I should learn that the same or similar action or proceeding has been filed or is pending, I hereby undertake to report such fact to this Honorable Commission within five (5) days to therefrom.

IN WITNESS WHEREOF, I have hereunto set my hand in PASIG CITY on April 28, 2016.

ROCHEL DONATO GLORIA

SUBSCRIBED and SWORN to before me this 28th day of April 2016 at Taguig City, Philippines, Affiant exhibiting to me his Passport bearing number EC4495474 issued at DFA NCR East on June 25 2015

Doc. No. III;  
Page No. 24;  
Book No. II;  
Series of 2016.

ATTEST: ROSEMARY M. RAMOS  
Notary Public for the Philippines  
My Comm. No. 12345, Exp. Date 12/31/2016  
RMS NO. 5532 BP No. 12345, Office: Pasig City  
1234, Lopez Building, Ortigas Ave., Pasig City

who were abducted months before him — remain unaccounted for, the greater the risk that the situation fuels impunity of such grave crimes against human rights and the people, encouraging more evil forces to keep seizing people, said the Burgos family in a statement on Thursday (April 28), the ninth anniversary of the kidnapping.

Jonas, the third child of the late world press freedom icon Jose G. Burgos, Jr., was seized by four men and a woman as he ate lunch alone at the Ever Gotesco Mall in Quezon City on April 28, 2007. Family and friends, led by his mother Edita T. Burgos, have gone to the courts, to the streets, to both government and non-state forums here and abroad in the vain hope of having his abductors surface him.

Among the first to reach out to Mrs. Burgos was the late former president Corazon C. Aquino, whose rise to power was chronicled by the Burgoses' "Mosquito Press" trailblazers during the Marcos dictatorship.

When her only son Benigno III became senator in the midterm elections of 2007, his first privilege speech — witnessed by his mother from the gallery — was on the Burgos abduction. Mr. Aquino timed his speech with the anniversary of his father's assassination.

Citing the "collective statements of concern" among advocacy groups, the Catholic church, and other sectors regarding the Burgos disappearance, Mr. Aquino at the time lamented the government's "position of denial... [which] makes one wonder about

With Mr. Aquino's term almost over, Jonas remains a desaparecido nine years after his abduction, the family said in its statement on Thursday.

"Worse, one of the main suspects, Former Colonel Eduardo Año, was promoted to General. Aquino even appointed him as the chief of the Intelligence Service of the Armed Forces of the Philippines," the Burgos family statement noted. Mr. Año now heads the Philippine Army.

"The President's inaction on the case is the same inaction we saw from former president Gloria Macapagal-Arroyo. If we've found Arroyo guilty, then how can we say that President Aquino is not part of the state's cover-up of the crime?" JL Burgos, brother of Jonas, said.

Human rights violations have resurfaced as a public issue this election season — particularly in the context of the vice-presidential bid of survey front-runner Ferdinand R. Marcos, Jr., whose father and namesake led a brutal 14-year dictatorship.

Confronted by this matter in a recent debate, Mr. Marcos said: "I certainly acknowledge every human rights abuse in every administration."

The Burgos family said in their statement: "With the coming elections, the family and friends of Jonas hope that the next president will not be part of the continuing cover-up. The Burgos family challenges the next president to bring the perpetrators to justice and bring Jonas back home." — *main report by Interaksyon*

## Sacked governor's PDAF kickbacks tantamount to plunder — Ombudsman

THE OFFICE of the Special Prosecutor of the Ombudsman on Thursday filed a motion for reconsideration on the Sandiganbayan's April 12 decision granting bail to sacked Masbate governor Rizalina Seachon-Lanete, citing "sufficient evidence to convict her," a statement by the Office of the Ombudsman said.

The graft court's Fourth Division granted bail to Ms. Lanete and alleged pork barrel scam mastermind Janet Lim-Napoles, saying the evidence on their alleged misuse of Ms. Lanete's Priority Development Assistance Fund (PDAF) was "not strong." (Ms. Napoles remains detained after she was sentenced last year for the illegal detention of her assistant and cousin Benhur Luy, the whistle-blower in the pork barrel scandal.)

Going by the computation in its statement, the Ombudsman said the Fourth Division excluded 32 items totaling P34.88 million from Mr. Luy's Daily Disbursement Records — the list of kickbacks or "rebates" paid to Ms. Lanete totaling P76.08 million. The difference is less than the P50-million threshold needed to charge Ms. Lanete with plunder, a non-bailable offense.

The Ombudsman also requested the court "to reconsider several of its findings that appear contrary to submitted evidence," and urged the "careful examination" of records including transcripts of stenographic notes numbering

2,388 pages (covering 21 dates of hearings from May 6 to Nov. 23) and 5,614 exhibits inclusive of derivatives or sub-markings.

The statement also disputed Ms. Lanete's questioning "the authenticity of the signature above her name," as noted by the court; citing the prosecution's view that she "never raised the issue of the authenticity of her signature and has not denied her signatures in the documents."

On the court's conclusion that the evidence of guilt of Lanete and Napoles is not strong because "accused Napoles and accused Lanete have never met" and that "there was never an instance when money was handed over personally to Lanete."

The Ombudsman challenged the assertion that the accused parties "never met" and, thus, "there was never an instance when money was handed over personally to Lanete" — saying "the prosecution finds it unreasonable to expect public officials to consort with their co-conspirators in public and risk revealing evidence of illegal activity."

The statement cited testimonies from local officials of supposedly beneficiary districts, findings by the Commission on Audit, and on-site verification by the Ombudsman's Field Investigation Office as "collectively" confirming that projects funded by Ms. Lanete's PDAF and "supposedly implemented" by Napoles's NGOs were "ghosts." — *James Glenn M. Gomez*



## **SECRETARY'S CERTIFICATE**

I, SIMEON KEN R. FERRER, a duly elected, qualified and incumbent Corporate Secretary of the Manila Electric Company (MERALCO), a corporation duly organized and existing under and by virtue of the laws of the Philippines, do hereby certify that:

At the regular meeting of the Executive Committee of the Board of Directors of the Company duly convened and held on April 18, 2016, at which meeting a quorum was present, acted throughout and voted, the following resolutions were approved and said resolutions are in full force and effect on the date hereof:

"RESOLVED, that the Board of Directors of the Manila Electric Company Electric Company (MERALCO) hereby authorizes MERALCO to enter into a Power Supply Agreement with Redondo Peninsula Energy, Inc. (RPE);

"RESOLVED, FURTHER, that the following officers, namely Messrs. MANUEL V. PANGILINAN, Chairman of the Board, OSCAR S. REYES, President & Chief Executive Officer, ALFREDO S. PANLILIO, Senior Vice President, Head, Customer Retail Services and Corporate Communication and RONNIE L. APEROCHO, First Vice President & Head, Networks, are hereby directed and empowered, for and in behalf of the Company, to sign, execute and deliver any contract, agreement, instrument, and other documents which may be deemed necessary or appropriate for the purpose, and to perform or execute all other acts and deeds as may be necessary or appropriate to carry out or accomplish the said purpose;

"RESOLVED, FURTHERMORE, that the Board of Directors authorize, as it hereby authorizes, MERALCO, through Ms. IVANNA G. DELA PEÑA, First Vice President & Head, Regulatory Management Office and Atty. JOSE RONALD V. VALLES, Vice President and Head, Regulatory Affairs, or any lawyer or employee of MERALCO that any of them may designate, name or appoint:

- (1) To file the appropriate application with the Energy Regulatory Commission (ERC) for the approval of the Power Supply Agreement between MERALCO and Redondo Peninsula Energy, Inc. (RPE), for the supply and delivery of electric power to MERALCO;
- (2) to sign, execute, and deliver in connection therewith the necessary pleadings, motions, verification, affidavit of merit, certificate of non-forum shopping, powers of attorney, and other instruments as may be necessary or proper; and
- (3) To designate, name, and appoint, a representative or an attorney-in-fact in behalf of the Company during the preliminary conference, pre-trial, trial, execution and all other stages of or incidents related to the case, proceeding or action; to negotiate, enter into, and agree

to an amicable settlement, make admissions or stipulations of fact and/or documents; and to perform and execute any and all actions and such other matters as may aid in the prompt disposition of such case, proceeding or action."

WITNESS THE SIGNATURE of the undersigned as such officer of the Company and its corporate seal hereunto affixed on this 19 APR 2016 day of April 2016.

  
SIMEON KEN R. FERRER  
Corporate Secretary

19 APR 2016

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_ day of April 2016, affiant exhibited to me his Taxpayer Identification Number (TIN) 116-283-788, issued by the Bureau of Internal Revenue (BIR) as his competent evidence of identity.

Doc. No. 191;  
Page No. 40;  
Book No. II;  
Series of 2016.

  
ATTY. MA. ELIZA CAMILLE B. YAMAMOTO  
Notary Public  
Pasig, San Juan, Taguig and Pateros  
Issued on April 20, 2015 at Pasig City  
Appointment No. 160 (2015-2016)  
Roll No. 59329/ IBP No. 1020802/ 01-06-16 PPLM Chapter  
PTR No. 1465695/01-21-16 Pasig City  
MCLE V-0002609-06/09/14  
8<sup>th</sup> Floor Lopez Bldg., Ortigas Avenue, Pasig City



**SECRETARY'S CERTIFICATE**

I, WILLIAM S. PAMINTUAN, a duly elected, qualified and incumbent Corporate Secretary of REDONDO PENINSULA ENERGY, INC. (the "Corporation"), a corporation duly organized and existing under and by virtue of the laws of the Philippines, do hereby certify that:

At the regular meeting of the Board of Directors of the Corporation duly convened and held on April 13, 2016, at which meeting a quorum was present, acted throughout and voted, the following resolutions were approved and that said resolutions are in full force and effect on the date hereof:

"RESOLVED, that the Board of Directors of the Corporation hereby approves and authorizes, the Corporation to enter into a long-term Power Supply Agreement (PSA) with Manila Electric Company;

RESOLVED, FURTHER, that Mr. Luis Miguel O. Aboitiz be designated as the authorized representative and signatory of the Corporation, having full authority to sign, execute, and deliver the foregoing PSA and all other necessary documents related thereto;

RESOLVED FURTHER, that the Corporation is authorized, as it is hereby authorized, to file an Application as Co-Applicant for the approval of the PSA (the "Application") before the Energy Regulatory Commission ("ERC");

RESOLVED FURTHER, that Messrs. Rochel Donato Gloria or David C. Evangelista or Dexter I. Raquel, are hereby authorized:

1. to file or cause the filing of the necessary petitions, pleadings, motions and documents, and to represent the Corporation, and to appear for and on its behalf in all proceedings, hearings, meetings and discussions before the ERC, including pre-trial conferences, in respect to the Application, to perform any and all acts and deeds and to submit and sign such documents and pleadings necessary to implement this authority;
2. to act as agent of and appear on behalf of the Corporation in all proceedings relating to the Application, with full power to make commitments and take positions and to consider (i) the possibility of amicable settlement or a submission to arbitration, mediation or other modes of alternative dispute resolution; (ii) the simplification of the issues; (iii) the necessity or desirability of amendments to the pleadings; (iv) the possibility of obtaining stipulations or admissions of facts and of documents totally or partially to avoid unnecessary proof; (v) the limitation of the number of witnesses or time allocated to particular witnesses and issues; (v) the advisability of a preliminary reference of issues to a commissioner; (vii) the necessity or desirability of having an expository hearing or consumer forum; (viii) procedures at the hearing and hearing schedule; (ix) the submission of written testimony and exhibits

to be offered and the marking thereof; (x) the agreements regarding service of documents; and (xi) such other matters as may aid in the prompt disposition of the proceedings;

3. to negotiate, conclude, enter into and execute a compromise or amicable settlement of the Application, if appropriate, or to submit the Application to alternative modes of dispute under such terms and conditions as they may deem just and reasonable;
4. to represent the Corporation as its witness during the hearing on the Application before the ERC or to appoint a witness/es as may be necessary;
5. to sign, execute and obtain any document, including the verification and certification of non-forum shopping, which may be required in the filing and during the course of the Application;
6. to file any appeal or represent the Corporation in further proceedings relative to the Application; and
7. do and perform, on behalf of the Corporation, any act and deed relating to the Application which the Corporation could legally do and perform.

RESOLVED FURTHER, that the law firm of PUYAT JACINTO AND SANTOS be appointed, as it is hereby appointed, including its partners and associates, as counsel for the Corporation with respect to the Application and in connection with the foregoing purposes."

IN WITNESS WHEREOF, I have hereunto set my hand on this 19 APR 2016 2016 in Pasig City, Metro Manila, Philippines.

  
WILLIAM S. PAMINTUAN  
Corporate Secretary

SUBSCRIBED AND SWORN TO before me in Pasig City this 19 APR 2016 2016 by William S. Pamintuan who has satisfactorily proven to me his identity through his Passport No. EC2114124 issued on 16 September 2014 valid until 15 September 2019 at DFA NCR Central, that he is the person who personally signed before me the foregoing Secretary's Certificate and acknowledged that he executed the same.

Doc. No.: 190;  
Page No: 39;  
Book No: 11;  
Series of 2016

  
ATTY. MA. ELIZA CAMILLE B. YAMAMOTO  
Notary Public  
Pasig, San Juan, Taguig and Pateros  
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