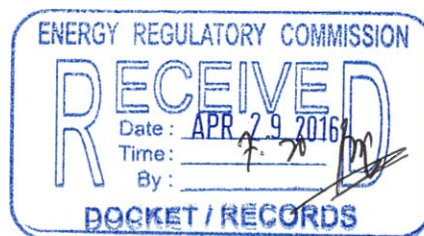


Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City

IN THE MATTER OF THE
APPLICATION FOR THE
APPROVAL OF THE POWER
SUPPLY AGREEMENT (PSA)
BETWEEN MANILA ELECTRIC
COMPANY (MERALCO) AND
ATIMONAN ONE ENERGY, INC.
(A1E), WITH MOTION FOR
CONFIDENTIAL TREATMENT
OF INFORMATION



ERC CASE NO. 2016 – 692 RC

MANILA ELECTRIC COMPANY
(MERALCO) AND ATIMONAN
ONE ENERGY, INC. (A1E),
Applicants.

X-----X

JOINT APPLICATION
with
MOTION FOR CONFIDENTIAL TREATMENT OF
INFORMATION

Applicants **MANILA ELECTRIC COMPANY** ("MERALCO") and **ATIMONAN ONE ENERGY, INC.** ("A1E"), 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 A1E is a corporation duly organized and existing under the laws of the Republic of the Philippines, with its office address at 8th Floor, Tower 1, Rockwell Business Center, Ortigas Avenue, Pasig City, Metro Manila. It may be served with notices and other processes of this Honorable Commission through its counsel at the address indicated herein.

4. A1E shall construct, own, operate, manage and maintain a 2 x 600 MW (net) supercritical coal-fired power generating facility in the Municipality of Atimonan, Quezon (the "**Plant**"), on the island of Luzon in the Philippines.

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 26 April 2016, MERALCO executed a Power Supply Agreement ("**PSA**") with A1E, for the purchase of 1,200 MW Contract Capacity and Associated Energy from the Plant that A1E 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:

"2.2 Term of Agreement

2.1.1 [sic] Subject to Article 3, this Agreement shall become effective on the Effective Date.

2.1.1.1 [sic] The term of this Agreement (the "Term") shall commence on the Commercial Operations Date (Unit 1), and shall expire on the date falling twenty (20) years and six (6) months thereafter xxx xxx

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 3.1.1 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 issued an ERC Final Approval, 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 shall have occurred.

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 within ninety (90) Days from the Acceptance Date (the "Required Financial Completion Date").

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that the Plant shall achieve Commercial Operations Date fifty-eight (58) months from the Commencement Date for Unit 1 (the "Scheduled Commercial Operations Date (Unit 1)") and six (6) months thereafter for Unit 2 (the "Scheduled Commercial Operations Date (Unit 2)").

3.3.2 The Plant shall achieve Commercial Operations Date for each Unit of the Plant upon the delivery of the Power Supplier of the documents enumerated below, in form and substance satisfactory to Meralco:¹

¹ With respect to Commercial Operations Date of Unit 1 and Unit 2:

- (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 Instrumentalities and third parties needed for the operation Meralco, xxx;
- (d) a Commercial Operations Date Certificate; and
- (e) Power Supplier Certification that the insurances required under this Agreement relevant for at least the first Contract Year have been obtained.

3.4 Early Occurrence of the Commercial Operations Date

- 3.4.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Scheduled Commercial Operations 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.
- 3.4.2 Upon receipt of such Early COD Notice, Meralco shall, by written notice to Power Supplier, choose between the following options:
- (a) Consider that the Scheduled Commercial Operations 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 Scheduled Commercial Operations Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

xxx xxx xxx

6.1 Supply of Power

Subject to the terms and conditions of this Agreement:

6.1.1 From the Commercial Operations Date for each Unit of the Plant until the expiration of the Term or earlier termination of this Agreement, 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) deliver and sell 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.

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

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent:

- (a) 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; or
- (b) provide Meralco with capacity and/or electrical energy from any source other than the Plant.

Article 9 Outages

9.1 Outage Allowances and Replacement Power

9.1.1 After Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages of thirty (30) Full Load Equivalent Outage Days ("Full Load Equivalent Scheduled Outage Allowance Days") and Forced Outages of fifteen (15) Full Load Equivalent Outage Days ("Full Load Equivalent Forced Outage Allowance Days") each Contract Year; provided that no more than four (4) times during the Term, Power Supplier shall be entitled to an additional twenty (20) Full Load Equivalent Outage Days to undertake major repair, overhaul and maintenance of the Plant not more frequent than once every four (4) years ("Full Load Equivalent Major Maintenance Outage Allowance Days"); provided further that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after Commercial Operations Date, and the Major Maintenance Outage of Unit 1 and Unit 2 shall not occur at the same time.

9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days, Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities; provided that, upon service of a written notice to Meralco no later than ninety (90) Days prior to a Scheduled Outage or Major Maintenance Outage, Power Supplier shall have the option to purchase Replacement Power during Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, which Replacement Power shall be declared as BCQ and paid by Meralco at five percent (5%) lower than the Price ("Replacement Power Price").

Article 10 Assignment or Transfer of Contract Capacity

10.1 Meralco shall, also 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 and Associated Energy that is no longer required by Meralco to any of its business segments or wholly-owned Affiliates without the prior consent of the Power Supplier.

Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity and Associated Energy that is no longer required by Meralco 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. xxx

10.3 Reduction in Contract Capacity and Associated Energy

10.3.1 Subject to the provisions of Section 10.3.2 below, Meralco shall, from time to time, be entitled to a reduction in the Contract Capacity and Associated Energy (the "Reduction in Contract Capacity and Associated Energy") equivalent to the reduction in the demand of its captive customers by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

10.3.2 Meralco shall give a written notice to the Power Supplier of such reduction at least five (5) Days prior to the first Day of the next Billing Period. Upon receipt by Power Supplier of such written notice, Meralco shall cease to have any rights and obligations under this Agreement in respect of such Reduction in Contract Capacity and Associated Energy.

xxx xxx xxx

Article 11 **Billing and Payment**

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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 xxx xxx

Article 12 **Taxes, Fees and Costs**

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") becomes 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 xxx xxx

Article 14 Covenants

xxx

14.3 ERC Approval

14.3.1 Subject to the non-occurrence of the Longstop Date, upon receipt of the ERC Final Approval, Meralco shall provide a copy of such ERC Final Approval to Power Supplier. Power Supplier shall have ten (10) Days from the date of receipt from MERALCO of such 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.

14.3.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration. Any order on a motion for reconsideration shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.3.

14.3.3 Following (i) a written notice of acceptance from Power Supplier with respect to the ERC Final Approval (including upon reconsideration under Section 14.3.2 above), or (ii) the lapse of the period referred to in Section 14.3.1 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 ("Acceptance Date"), 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.

xxx xxx xxx

Article 17 **Force Majeure**

xxx

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 xxx xxx

Article 18 **Events of Default and Termination**

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 in 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:

xxx

If, within one hundred eighty (180) Days after receipt from Meralco of written notice of Power Supplier Event of Default by Power Supplier (the "Curing Period"), Power Supplier Event of Default has not been remedied by Power Supplier, Meralco may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law or in equity.

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 in or is accompanied by an actual failure by Meralco to receive, and pay for, the Contract Capacity and Associated Energy in accordance with this Agreement:

xxx

If, within one hundred eighty (180) Days after receipt from Power Supplier of written notice of Meralco Event of Default by Meralco (the "Curing Period"), Meralco Event of Default has not been remedied by Meralco, Power Supplier may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law or in equity.

xxx

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

“xxx xxx xxx

D. PAYMENT UPON COMMERCIAL OPERATIONS 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), Component D (MVOM), and Component E (MEEP). Other payments consist of Component F (MIFP), and Component G Reimbursable Cost Payment (RCP). Thus, the Monthly Power Bill (“MPB”) payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

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

The MPB is exclusive of the applicable Value Added Tax.”

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 PhP3.7587 per kWh (at plant gate), as shown in the sample calculation below:

A1E PSA - Rate Impact (YEAR 2021)						
BILLING COMPONENT	UNIT	BASE RATE ^[a]	CPI Adj Factor ^[b]	BILLING DETERMINANT ^[c]		AMOUNT (PHP)
A. Capacity Payment (MCP)						
Peso Portion	(Php/kW-yr) ^[b]	14,486.0000		1,200,000	(kW)	17,383,200,000.00
B. Fixed O&M Payment (MFOM)						
US Dollar Portion	(USD/kW-yr) ^[b]	30.3644	1.000000	1,200,000	(kW)	1,678,665,489.60
Peso Portion	(Php/kW-yr) ^[b]	1,594.3749	1.000000	1,200,000	(kW)	1,913,249,880.00
C. Fuel Payment (MFP)						
US Dollar Portion	(USD/kWh) ^[c]	0.0207		8,409,600,000	(kWh)	8,011,098,700.79
D. Variable O&M Payment (MVOM)						
Peso Portion	(Php/kWh)	0.1114	1.000000	8,409,600,000	(kWh)	936,829,440.00
E. Excess Energy Payment (MEEP)						
Peso Portion	(Php/kWh)	-		-	(kWh)	-
F. Interconnection Facilities Payment (MIFP)						
Capital Recovery	(Php/kW-yr) ^[b]	204.0530		1,200,000	(kW)	244,863,600.00
Fixed O&M	(Php/kW-yr) ^[b]	10.5123	1.000000	1,200,000	(kW)	12,614,760.00
G. Reimbursable Cost Payment (RCP) ^[d]						1,428,791,040.00
TOTAL PAYMENT	(Php)					31,609,312,910.39
Effective Rate at Plant Gate	(Php/kWh)					3.7587
WESM Line Rental Rate ^[e]	(Php/kWh)					0.0910
Delivered Rate	(Php/kWh)					3.8498
Effective Cost at WESM Price ^[f]	(Php/kWh)					7.0640
Increase / (Decrease) over WESM Price	(Php/kWh)					(3.2143)
Meralco Captive Energy Demand ^[g]	(kWh)					34,658,621,088
Increase / (Decrease) in Generation Cost	(Php)					(27,030,635,881.69)
Increase / (Decrease) in Generation Cost	(Php/kWh)					(0.7799)
NOTE:						
^[a] Base Rates as set forth in Schedule 1 of Appendix E of the PSA						
^[b] Annual Capacity Rate, Annual Fixed O&M Rate, and Annual Interconnection Facilities Rate are converted into monthly rates by applying the formulas shown in Appendix E of the PSA						
^[c] 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)						
^[d] Reimbursable Payments (pass through costs) based on estimated taxes						
^[e] Assumed estimated A1E line rental rate						
^[f] Cost if equivalent volume of A1E was sourced from the WESM based on forecast average Jan - Dec 2021 hourly prices						
^[g] Meralco Captive Energy Demand based on 2021 forecast						
^[h] Assumed no CPI escalation						
^[i] 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 PhP0.7799 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 A1E 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 Joint 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 the instant Joint Application, the Applicants provide this Honorable Commission with the following documents, which underwent the pre-filing conference of this Honorable Commission:

Description of Document	Annex
A1E’s Certificate of Registration with the Securities and Exchange Commission	C
A1E’s Articles of Incorporation & By-Laws	D
The latest General Information Sheet of A1E	E
The latest Audited Financial Statements of A1E	F
A1E’s Certificate of Registration with the Board of Investments	G
A1E’s Environmental Compliance Certificate	H
Executive Summary of the PSA	I
Source of Funds/Financial Plans	J
Basis Purchased Power Rate	K
Project Cash Flow	L
Operating Expenses	M
Indicative loan agreement documents	N
MERALCO’s procurement process	O
Write-up regarding related contracts/agreements	P
Write-up regarding Department of Energy Certification	Q
Write-up regarding technical description and economic characteristics of project	R

Write-up regarding tangential transmission projects and grid connections	S
DOE Endorsement and Power Outlook Presentation	T
Load Forecast Projections per Distribution Development Plan of MERALCO	U
Sworn Statement on A1E's fuel procurement process	V
Procurement Process Leading to the Execution of the PSA	W
Demand Side Management program	X
Write-up regarding the (i) certification of the net heat rate; (ii) simulation of the operating units necessary to meet the MEOT; and (iii) potential cost of Ancillary Services	Y

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

19. A1E notes that Annexes "J", "K", "L", "M" and "N" of the instant case contain certain non-public information, data and calculations involving business operations and financial trade secrets reflecting A1E'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, the A1E respectfully moves that **Annexes "J" "K," "L," "M," and "N,"** not be disclosed and be treated as confidential documents in accordance with Rule 4 of the ERC Rules.

21. A1E hereby submits one (1) copy of Annexes "J" "K," "L," "M," and "N," in a sealed envelope, with the envelope and each page of the document stamped with the word "Confidential."

PRAYER

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

- a) **ISSUE** an Order: (i) treating Annexes "J", "K", "L", "M", and "N" 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 A1E.

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

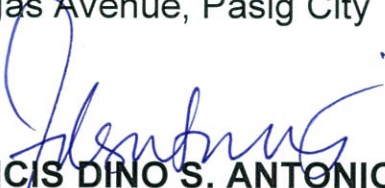
Pasig City, 28 April 2016.

MANILA ELECTRIC COMPANY

Applicant

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By:



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ROY ENRICO C. SANTOS
Roll No. 40571

IBP LRN 02739/Rizal
PTR No. 4761130/1-9-15/Makati City
MCLE Compliance No. V-0010013/8-26-15



RAFAEL A. EVANGELISTA
Roll No. 57284

IBP No. 978622/1-5-15/Makati City
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 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;

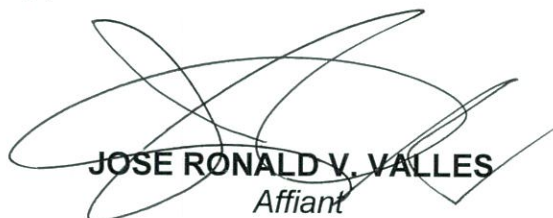
2. Moreover, I have been authorized by the Board of Directors of MERALCO to certify that Applicant has not heretofore filed any similar action, pleading or application involving the same issues before the Supreme Court, the Court of Appeals or any other lower courts or administrative bodies. A copy of 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 “Z”**;

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. 341 ;
Page No. 70 ;
Book No. III ;
Series of 2016.


ATTY. MONICA M. MARTIN
NOTARY PUBLIC
Pasig, Rateros, 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
PTR No. 1473411; 01/21/16; Pasig City
7th Floor, Lopez Bldg., Ortigas Ave., Pasig City

VERIFICATION AND CERTIFICATION

I, **Christopher Rainier Chua**, of legal age, Filipino, with business address at 8F Rockwell Business Center Tower 1, Ortigas, Pasig, after having been duly sworn in accordance with law, depose and say:

1. I am the duly authorized representative of **Atimonan One 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;

4. 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 APR 28 2016.


Christopher Rainier Chua

SUBSCRIBED AND SWORN to before me this APR 28 2016 day of PASIG CITY, Philippines, Affiant exhibiting to me his Passport No: EC0644682 issued at DFA Manila on 23 March 2014.

Doc. No. 109 ;
Page No. 23 ;
Book No. II ;
Series of 2016.


ATTY. GRETCHEL L. TOLOSA
Notary Public

Pasig, San Juan, Taguig and Pateros
Issued on April 20, 2015 at Pasig City
Appointment No. 159 (2015-2016)

~II No. 57464/IBP No. 1020806/ 01-06-16 RCM Chapter
PTR No. 1465700/01-21-16 Pasig City
MCLE V-0002607-06/09/14
8th Floor Lopez Bldg., Ortigas Avenue, Pasig City

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

SECRETARY'S CERTIFICATE

I, RAUL G. CORALDE, a duly elected, qualified and incumbent Assistant Corporate Secretary of ATIMONAN ONE 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 authorizes, the Corporation to negotiate and enter into a long-term Power Supply Agreement (PSA) with Manila Electric Company;

RESOLVED, FURTHER, that Mr. Aaron A. Domingo 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. Chrysogonus F. Herrera or Christopher Rainier O. Chua or Dexter I. Raquel, are hereby authorized:

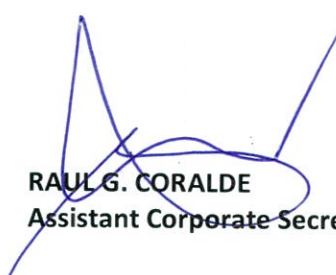
1. to file or cause the filing of the necessary petitions, pleadings, motions and documents, and to represent the Corporation, and to appear for and on its behalf in all proceedings, hearings, meetings and discussions before the ERC, including pre-trial conferences, in respect to the Application, to 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; (vi) 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 APR 28 2016 2016 in Pasig City, Metro Manila, Philippines.


RAUL G. CORALDE
Assistant Corporate Secretary

SUBSCRIBED AND SWORN TO before me in Pasig City this APR 28 2016 2016 by Raul G. Coralde who has satisfactorily proven to me his identity through his TIN 109-267-500, that he is the person who personally signed before me the foregoing Secretary's Certificate and acknowledged that he executed the same.

Doc. No.: 113 ;
Page No: 24 ;
Book No: II ;
Series of 2016


ATTY. GRETCHEL L. TOLOSA
Notary Public
Pasig, San Juan, Taguig and Pateros
Issued on April 20, 2015 at Pasig City
Appointment No. 159 (2015-2016)
Roll No. 57464/ IBP No. 1020806/ 01-06-16 RSM Chapter
PTR No. 1465700/01-21-16 Pasig City
MCLE V-0002607-06/09/14
8th Floor Lopez Bldg., Ortigas Avenue, Pasig City

ANNEX " A "

POWER SUPPLY AGREEMENT

Between

MANILA ELECTRIC COMPANY

and

ATIMONAN ONE ENERGY, INC.

April 26, 2016









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POWER SUPPLY AGREEMENT

This Power Supply Agreement (the “**Agreement**”) is entered into as of April 26, 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. **Atimonan One 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 8th Floor, Tower 1, Rockwell Business Center, Ortigas Avenue, Pasig City, Metro Manila.

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 intends to construct, own, operate, manage and maintain a 2 x 600 MW (net) supercritical pulverized coal-fired power generating facility in the Municipality of Atimonan, Quezon (the “**Plant**”), on the island of Luzon in the Philippines, Unit 1 of which is scheduled to become operational fifty-eight (58) months from the Commencement Date and Unit 2 is scheduled to become operational six (6) months thereafter.
- 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 all of such 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

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 Article 14.3.3.

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.

Annual Maintenance Plan has the meaning given to it in Section 9.2.1.

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.

Associated Energy means energy generated by the Plant and declared at the WESM as BCQ by Power Supplier for Meralco.

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 as declared by Power Supplier at the WESM for Meralco for any Trading Interval/s.

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 Commercial Operations Date and ending on the immediately succeeding twenty-fifth (25th) Day of the month, (ii) each successive period commencing on the 26th Day of the Month and ending on the twenty-fifth (25th) Day of each successive calendar month thereafter, 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 monthly period ending on the twenty-fifth (25th) Day of a calendar month shall be used for calculating and billing for any Commissioning Energy Charges accrued and Replacement Power procured prior to the Commercial Operations Date, and provided, however, 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 Board of Investments.

Business Day means any Day from Monday to Friday on which banking institutions are open for the transaction of business, excluding national holidays in the Philippines and local holidays in Pasig City, as the context may require.

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 the adoption or enactment, or 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 application, enforcement, interpretation or implementation of any Law by a Governmental Instrumentality at any time after the date of this Agreement

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

For the avoidance of doubt, changes or variations over time of the costs of operation of Power Supplier or Meralco or variations over time of the market prices or the values of electricity shall not in themselves constitute a Change in Circumstances.

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 3.3.2 (other than the Commercial Operations Date Certificate), with respect to either Unit 1 or Unit 2, have been satisfied, and Unit 1 or Unit 2, as applicable, shall have consequently entered into commercial operation.

Commercial Operations Date (Unit 1) means the date that the conditions set out in Section 3.3.2 (other than the Commercial Operations Date Certificate Unit 1) have been satisfied and Unit 1 of the Plant shall have consequently entered into commercial operation.

Commercial Operations Date (Unit 2) means the date that the conditions set out in Section 3.3.2 (other than the Commercial Operations Date Certificate Unit 2) have been satisfied and Unit 2 of the Plant shall have consequently entered into commercial operation.

Commercial Operations Date Certificate means a certificate of the Independent Engineer attesting to the occurrence of the Commercial Operations Date.

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.

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 in 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 Transmission Service Provider in respect of the Plant.

Connection Asset means the transmission line and associated facilities connecting the Plant's switchyard to the New Pagbilao Substation.

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

Contract Capacity or CC shall, upon Commercial Operations Date (Unit 1), be initially set at 600 MW, and commencing on the Commercial Operations Date (Unit 2), be increased to 1,200 MW, subject to Article 10.

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.

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.

Delay Limit Date means the date one hundred eighty (180) Days after the Scheduled Commercial Operations Date, subject to any adjustment for each Day of relief afforded to Power Supplier in accordance with Section 3.3.3.

Delivery Point means the high side of the connection of the Power Supplier to the Luzon Grid.

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.

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 Commercial Operations Date has the meaning given to it in Section 3.4.1.

Early COD Notice has the meaning given to it in Section 3.4.1.

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 applicable Legal Requirement or other 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.

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

Equity Interests in the Power Supplier means, at any date, the ownership rights as shareholders of the Power Supplier.

Equity Transfer Procedures means procedures to be agreed between holders of such interests, 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 Equity Interests in the 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 14.2.1.

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 Article 17.

Excused Delay Event has the meaning given to in Section 3.3.3.

Excused Delay Limit has the meaning given to it in Section 3.3.3.

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

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.

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.

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

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

Fixed O&M Payments has the meaning given to it in Appendix E.

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, 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 Section 9.1.1.

Full Load Equivalent Major Maintenance Outage Allowance Days has the meaning given to it in Section 9.1.1.

Full Load Equivalent Outage Day means, by way of example, the equivalent of (i) the entire Contract Capacity being unavailable for one (1) Day, (ii) one-half of the Contract Capacity being unavailable for two (2) Days.

Full Load Equivalent Scheduled Outage Allowance Days has the meaning given to it in Section 9.1.1.

Government means the government of the Philippines.

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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 has the meaning given to it in Section 22.16.

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

Interim Supply Period means, in the event Meralco issues a written notice to exercise its option under Section 3.4.2(b), the period from Early Commercial Operations Date until the Scheduled Commercial Operations Date.

Invoice has the meaning given to it in Appendix I.

ITH means Income Tax Holiday.

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.

LIBOR means the London Interbank Offered Rate for a term equivalent to 90 days posted at approximately 1100H (London time) on the day in which the sum was due and payable on the LIBOR page of Bloomberg (or such successor page or electronic service provider) or if there is no equivalent term, the next longest term will be used. If the rate referred to above is not available on the relevant date, the applicable rate shall be the last rate posted or displayed on such page before the rate became unavailable. In the event that such 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.

Longstop Date means the date falling six (6) months after the date of submission to the ERC by Meralco of the ERC Application.

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, in accordance with Section 9.2.

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 in Appendix B.

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

Monthly Variable O&M Payment has the meaning given to it in Appendix E.

MW means MegaWatt.

MWh means MegaWatt-hour.

NDC Test has the meaning given to it in Section 8.5.1.

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

Net Plant Heat Rate Test has the meaning given to it in Section 8.5.2.

Net Plant Heat Rate Test Certificate means a certificate attesting to the results of the Net Plant Heat Rate Test 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).

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

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.

Operating Procedures means the procedures set out in Appendix H.

Outage means a Forced Outage or Scheduled 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 (3) months, or if there is no equivalent term, the next longest term closest to three (3) 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.

Plant O&M Contract means any operation and maintenance contract entered into between Power Supplier and the Plant O&M Contractor for the operation and maintenance of the Plant.

Plant O&M Contractor means the Person appointed by Power Supplier as the primary contractor for the operation and maintenance of the Plant pursuant to the Plant O&M Contract.

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 as provided in Appendix E are calculated, including any indexation thereof and all adjustments and modifications thereto.

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.

Reduction in Contract Capacity and Associated Energy has the meaning given to it in Section 10.3.

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.

Renewable Energy Law means Republic Act No. 9513 entitled "An Act Promoting the Development, Utilization and Commercialization of Renewable Energy Resources and for Other Purposes."

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.

Replacement Power Price has the meaning given to it in Section 9.1.2.

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

Retail Competition and Open Access or RCOA 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.

Scheduled Commercial Operations Date means the Scheduled Commercial Operations Date (Unit 1) or Scheduled Commercial Operations Date (Unit 2), as applicable.

Scheduled Commercial Operations Date (Unit 1) has the meaning given to it in Section 3.3.1.

Scheduled Commercial Operations Date (Unit 2) has the meaning given to it in Section 3.3.1.

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 9.2.

Second Performance Security has the meaning given to it in Section 4.6.

Second Security Amount has the meaning given to it in Section 4.6.

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) as declared by the System Operator or certified by the GMC and affecting the Luzon Grid, 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.

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 2.1.1.1.

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

Termination Notice has the meaning given to it in Section 18.4(a).

Termination Notice Dispute has the meaning given to it in Section 18.4(c).

Threshold Level 1 has the meaning given to it in Section 12.2.4(d).

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 10.1.

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.

Unit means each of the 600 MW (net) power units of the Plant, together with such Unit's associated facilities.

Unit 1 means the first Unit of the Plant that comes into commercial operations.

Unit 2 means the second Unit of the Plant that comes into commercial operations.

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

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 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.

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 that document as from time to time amended, varied, added to, substituted, renewed, extended, restated, novated or replaced;
- 1.2.6 a reference to any agreement is to that agreement as amended;
- 1.2.7 references to any Law includes any subordinate legislation made under it;
- 1.2.8 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;
- 1.2.9 references to time are to Philippine time;
- 1.2.10 references to "the date of this Agreement" is a reference to the date of this Agreement as shown in the Recitals of this Agreement.
- 1.2.11 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;
- 1.2.12 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;

- 1.2.13 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;
- 1.2.14 a reference to writing includes printing, typing, lithography and other means of reproducing words in a visible form;
- 1.2.15 any reference to a person or entity includes such person or entity's permitted successors and assigns;
- 1.2.16 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

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.

2.2 Term of Agreement

2.1.1 Subject to Article 3, this Agreement shall become effective on the Effective Date.

2.1.1.1 The term of this Agreement (the "Term") shall commence on the Commercial Operations Date (Unit 1), and shall expire on the date falling twenty (20) years and six (6) months thereafter, unless terminated earlier in accordance with the terms of this Agreement or extended by the application of Section 2.1.2 and Section 17.3.3.

2.1.2 The Term may be renewed for an additional period of up to five (5) years under the same terms and conditions, at the option of Meralco, by giving prior written notice to Power Supplier at least one hundred eighty (180) Days prior to the end of the Term.

Article 3 Effective Date, Conditions Precedent, Commencement Date and Commercial Operations Date

3.1 Effective Date

The Effective Date shall be the date the conditions precedent in Section 3.1.1 have been satisfied or waived by the relevant Party (the "Effective Date").

3.1.1 Conditions Precedent

Subject to Section 3.2 and Section 3.3, the Parties' rights and obligations shall commence as of the Effective Date, upon the satisfaction of the following conditions:

- (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 has received from Meralco the documents and evidence set forth in Part 2 of Appendix C.
- (c) Meralco has 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 date of the execution of this Agreement, the Effective Date, the Commencement Date, each of the Scheduled Commercial Operations Date and each of the Commercial Operations Date.

For the avoidance of doubt, notwithstanding the preceding sentences of this Section 3.1.1, the provisions of 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.

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

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 3.1.1 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 issued an ERC Final Approval, 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 shall have occurred.

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 within ninety (90) Days from the Acceptance Date (the “**Required Financial Completion Date**”).

3.2.3 If Financial Close has 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 to terminate this Agreement and Meralco shall have the right

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to forfeit as liquidated damages, an amount equivalent to fifty percent (50%) of the face value of the Performance Security and draw on the Performance Security for the settlement of such amount. However, if the non-occurrence of timely Financial Close by the Required Financial Completion Date is directly due to, or a direct result of,

- (a) any Event of Force Majeure affecting the Philippines electric power sector or financial markets or the Site (including factors which affect liquidity or availability of funds for the financing for the construction of the Plant), or the non-finality of the ERC Final Approval that renders the Power Supplier unable to obtain non-recourse project financing equivalent to the amount of at least One Hundred Five Billion Philippine Pesos (PHP105,000,000,000.00) from reputable multilateral agencies, governmental/export credit agencies, and commercial lenders and financial institutions involved in the Asian power project market on reasonable commercial terms and conditions (including as to pricing); 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 required for the registration of any USD denominated obligations to contractors, suppliers, or other vendors for the construction and initial operation of the Plant,

Meralco shall return the Performance Security to Power Supplier within thirty (30) Days from the date of termination due to (a), (b), and (c) of this Section 3.2.3.

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that the Plant shall achieve Commercial Operations Date fifty-eight (58) months from the Commencement Date for Unit 1 (the "**Scheduled Commercial Operations Date (Unit 1)**") and six (6) months thereafter for Unit 2 (the "**Scheduled Commercial Operations Date (Unit 2)**").

3.3.2 The Plant shall achieve Commercial Operations Date for each Unit of the Plant upon the delivery of the Power Supplier of the documents enumerated below, in form and substance satisfactory to Meralco:

3.3.2.1 With respect to Commercial Operations Date of Unit 1:

- (a) Capacity Test Certificate for Unit 1 dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate for Unit 1 confirming a value of the Net Dependable Capacity of Unit 1;
- (b) a Net Plant Heat Rate Test Certificate for Unit 1 dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate for Unit 1;

- (c) all permits, licenses, authorizations and other approvals from all Government Instrumentalities and third parties needed for the operation of Unit 1 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 for Unit 1; and
- (e) Power Supplier certification that the insurances required for Unit 1 under this Agreement relevant for at least the first Contract Year have been obtained, as certified by Power Supplier's insurance advisor or broker.

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.

Following the Commercial Operations Date (Unit 1), the obligations of Power Supplier and Meralco under this Agreement with respect to sale and purchase of Contract Capacity and Associated Energy from Unit 1, and, subject to Section 3.3.3, Replacement Power, shall become effective.

3.3.2.2 With respect to Commercial Operations Date of Unit 2:

- (a) Capacity Test Certificate for Unit 2 dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate for Unit 2 confirming a value of the Net Dependable Capacity of Unit 2;
- (b) a Net Plant Heat Rate Test Certificate for Unit 2 dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate for Unit 2;
- (c) all permits, licenses, authorizations and other approvals from all Government Instrumentalities and third parties needed for the operation of Unit 2 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 for Unit 2; and
- (e) Power Supplier certification that the insurances required for Unit 2 under this Agreement relevant for at least the first Contract Year have been obtained, as certified by Power Supplier's insurance advisor or broker.

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.

Following the Commercial Operations Date (Unit 2), the obligations of Power Supplier and Meralco under this Agreement with respect to sale and purchase of Contract Capacity and Associated Energy from Unit 2, and, subject to Section 3.3.3, Replacement Power, shall become effective.

- 3.3.3 If the Commercial Operations Date has not occurred by the Scheduled Commercial Operations Date (Unit 1) and Scheduled Commercial Operations Date (Unit 2), as applicable, from and after the Scheduled Commercial Operations Date, Power Supplier shall, for each Day of unexcused delay, (i) procure and cause delivery to Meralco of Replacement Power of up to 600 MW for the applicable Unit, subject to Article 6 and in accordance with Appendix E or (ii) to the extent that such Replacement Power is not available, pay to Meralco Nine Hundred Eight Philippine Pesos (PHP 908.00) multiplied by each MWh during a Day not replaced with Replacement Power (Twenty One Thousand Eight Hundred Philippine Pesos (PHP 21,800.00) per MW per Day if no Replacement Power is available), until the day preceding, the earlier of: (A) the Commercial Operations Date and (B) the date sixty (60) Days after the Delay Limit Date (as the Delay Limit Date may be adjusted in accordance with the succeeding provisions). For purposes of this Section 3.3.3, a fraction of a Day is considered a Day.

For any deliveries of Replacement Power made pursuant to this Section 3.3.3, Meralco shall pay for such Replacement Power at the Price specified in Appendix E.

In the event that Power Supplier (or any contractor of Power Supplier) has, after the Commencement Date, experienced a delay in designing, constructing, testing or commissioning 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 Instrumentality;
- (b) subject to Section 17.6, the occurrence of an Event of Force Majeure;
- (c) any breach or default by Meralco of its material 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 the timely completion of the testing and commissioning of the Plant,

then (i) if the Excused Delay Event occurs prior to the original Scheduled Commercial Operations Date, the Scheduled Commercial Operations shall be extended, Day for

Day, by the same period that any Excused Delay Event subsists; and (ii) if the Excused Delay Event occurs from and after the Scheduled Commercial Operations Date, Power Supplier shall, for each Day of delay due to an Excused Delay Event, be relieved of its obligation to provide Replacement Power or liquidated damages under this Section 3.3.3, provided, in each case, that Power Supplier has exerted due diligence in achieving Commercial Operations Date by the original Scheduled Commercial Operations Date and has no contributory negligence with respect to any Excused Delay Event, and provided further, that any such extension or relief (whether occurring before or after the Scheduled Commercial Operations Date) shall not exceed one hundred eighty (180) Days (the "Excused Delay Limit").

From and after the lapse of the Excused Delay Limit, either Party shall have the right to terminate this Agreement in accordance with Section 18.6.2(a).

3.4 Early Occurrence of the Commercial Operations Date

3.4.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Scheduled Commercial Operations 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.

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

- (a) Consider that the Scheduled Commercial Operations 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 Scheduled Commercial Operations Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

3.4.3 In the event that Meralco elects the option to take, on a non-firm basis, the Contract Capacity and Associated Energy under Section 3.4.2(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, provided that Power Supplier shall notify Meralco of any bilateral power sales agreements Power Supplier intends to enter into during the Interim Supply Period at least five (5) Days before the intended date of signing of the relevant agreement.

3.4.4 Notwithstanding Section 3.4.3, during the Interim Supply Period, (i) Power Supplier shall provide its available and uncontracted binding day-ahead capacity; and (ii) Meralco may respond with its binding day-ahead 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.

- 3.4.5 Notwithstanding Section 3.4.4, 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.
- 3.4.6 Although Meralco has not elected the option under Section 3.4.2(a) at the first instance, Meralco may still be entitled to exercise the option under Section 3.4.2(a) upon giving of written notice to Power Supplier, at least five (5) Days prior to the intended Commercial Operations Date, provided that Power Supplier has no existing bilateral power sales agreement covering all or a portion of the Contract Capacity and Associated Energy at the time of such intended Commercial Operations Date. However, Meralco may still exercise the option under Section 3.4.2(a) even if Power Supplier has contracted all or a portion of its Contract Capacity and Associated Energy under relevant bilateral power sales agreements if Power Supplier failed to comply with its obligation under Section 3.4.3 to notify Meralco of any bilateral power sales agreement it intends to enter into during the Interim Supply Period.

Article 4 Performance Security

- 4.1 Power Supplier shall, within fifteen (15) Days from the Acceptance Date, deliver to Meralco one or more security (each, a "**First Performance Security**," and together with the "**Second Performance Security**," as hereinafter defined, the "**Performance Security**") in an aggregate amount equivalent to Three Billion Four Hundred Fifty Six Million Philippine Pesos (PHP 3,456,000,000.00) (the "**First Security Amount**" and together with the "**Second Security Amount**," as hereinafter defined, 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 that is not an Affiliate of Power Supplier and is 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.

- 4.2 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.

- 4.3 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.
- 4.4 If, at any time, a Downgrade Event occurs in respect of the issuing bank of the Performance Security or the issuing bank ceases to be an Acceptable Bank, 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 Forty Billion Philippine Pesos (PHP40,000,000,000.00) while "**Agreed Rating Agency**" means Standard & Poor's or Moody's Investor Services.
- 4.5 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 until the satisfaction of the conditions for the Commercial Operations Date.
- 4.6 Within thirty (30) Days after the later of the Scheduled Commercial Operations Date (Unit 1) or Commercial Operations Date (Unit 1), (i) Meralco shall return to Power Supplier the First Performance Security less any amount properly due and owing from Power Supplier to Meralco under this Agreement as of the date of the return; and (ii) Power Supplier shall deliver to Meralco one or more security (each a "**Second Performance Security**") in an aggregate amount equivalent to One Billion Seven Hundred Twenty Eight Million Philippine Pesos (PHP1,728,000,000.00) (the "**Second Security Amount**").
- 4.7 Within (30) Days after the later of the Scheduled Commercial Operations Date (Unit 2) or Commercial Operations Date (Unit 2), Meralco shall return to Power Supplier the Second Performance Security less any amount properly due and owing from Power Supplier to Meralco under this Agreement as of the date of the return.
- 4.8 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 Performance Security within the time required under Sections 4.3 and 4.4 above.

Article 5 Commissioning Energy

- 5.1 During Commissioning prior to the Scheduled Commercial Operations Date (Unit 1) and Scheduled Commercial Operations Date (Unit 2), 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 on a take-and-pay basis and at a rate equivalent to the actual landed fuel cost

plus the Monthly Variable O&M Payment plus any value-added tax and any other applicable taxes, fees and charges (the "Commissioning Energy Charge") calculated in accordance with Appendix E. After the Scheduled Commercial Operations Date, such MWh generated by the Plant during Commissioning shall be purchased by Meralco at a rate equivalent to the Commissioning Energy Charge. In addition, the Power Supplier shall provide Meralco with Replacement Power in excess of the Commissioning Energy up to the extent of the Contract Capacity at a rate equivalent to the Price as computed in accordance with Schedule 6 of Appendix E.

Article 6 Sale and Purchase of Contract Capacity and Associated Energy

6.1 Supply of Power

Subject to the terms and conditions of this Agreement:

6.1.1 From the Commercial Operations Date for each Unit of the Plant until the expiration of the Term or earlier termination of this Agreement, 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) deliver and sell 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.

The Dispatch of Contract Capacity and Associated Energy shall meet the requirements set out in Appendix B (*Technical Limits*).

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent:

- (a) 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; or
- (b) provide Meralco with capacity and/or electrical energy from any source other than the Plant.

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.

6.3 Nominations

6.3.1 Not later than fifteen (15) Days prior to the 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 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 Notwithstanding the foregoing, Meralco shall have the option to increase or decrease its day-ahead nominations, subject to the Technical Limits, Operating Procedures and WESM Rules.
- 6.3.5 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 operations of the Plant in relation to Meralco, it may do so provided:
- i. that notice of such suspension shall be provided by Meralco not less than four (4) weeks prior to the first Day of suspension;
 - ii. that the suspension shall last for not less than four (4) weeks; provided that the Parties may agree to end the suspension earlier;
 - iii. 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;
 - iv. that during such suspension, Meralco shall continue to pay Power Supplier Capacity Payments and Fixed O&M payments as provided in Appendix E; and
 - v. 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 6.3.5, any outage resulting therefrom shall not be counted towards the Full Load Equivalent Forced Outage Allowance Days.

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) accurately reflects the nominations of Meralco. 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. If the Market Operator invoices Meralco for any such amounts, Power Supplier shall reimburse Meralco within seven (7) Days from receipt of written demand therefore. Further, Power Supplier shall pay Meralco an administrative fee of Fifty Thousand Philippine 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 for the prior Day. 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, Transmission and Metering

7.1 Connection Agreement, Transmission Service Agreement, and Metering Service Agreement

Power Supplier shall enter into a Connection Agreement, Transmission Service Agreement and Metering 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.

7.2 Copies of Documents; Amendments

Within five (5) Days from execution thereof, Power Supplier shall furnish Meralco with complete copies of the Connection Agreement, the Transmission Service Agreement, and the Metering Service Agreement. Power Supplier shall notify Meralco of any intention and/or proposal to amend the Connection Agreement, Transmission Service Agreement, and/or Metering Service Agreement and shall provide Meralco with a copy of any amendment of the Connection Agreement, Transmission Service Agreement, and Metering Service Agreement 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 Connection Agreement, Transmission Service Agreement and Metering Service Agreement.

7.3 Interconnection and Transmission Undertaking

At all times from 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, Transmission Service Agreements, and Metering Service Agreement) shall be in full force and effect, subject to completion and commissioning of the Connection Asset.

Article 8 Construction, Operation and Maintenance of the Plant

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 six (6) members, three (3) 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.

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.

8.3 [NOT USED]

8.4 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.

8.5 Tests

8.5.1 Power Supplier shall, at its own cost, conduct in connection with achieving commercial operation a Net Dependable Capacity test ("NDC Test"). Power Supplier shall, at its own cost, thereafter conduct on an annual basis an NDC Test at a date scheduled by Meralco (in coordination with the System Operator), during which the Plant is capable of steady state operation. The Parties shall mutually agree on the testing principles, criteria and protocols for the NDC Test. Either Party may call for the conduct of the retest subject to seven (7) Days prior notice. The Party calling for the retest shall bear the cost of such retest, provided that, if Meralco called for such retest, Meralco shall be liable for the cost of the retest only if the results of the retest confirms the results of the immediately preceding NDC Test.

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

8.5.3 The Parties shall mutually agree on the testing principles, criteria and protocols for the NDC Test and the Net Plant Heat Rate Test, provided that the initial heat rate curve for partial load operations and the factor for plant degradation are set out in Appendix E.

If the NDC Test shows a reduction in the NDC, the Monthly Power Bill of Meralco shall be reduced in accordance with the provisions in Appendix E until the next NDC Test.

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

8.6 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.

8.7 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. In the event that Meralco exercises its right under Section 10.1, notwithstanding the 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

9.1 Outage Allowances and Replacement Power

- 9.1.1 After Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages of thirty (30) Full Load Equivalent Outage Days ("**Full Load Equivalent Scheduled Outage Allowance Days**") and Forced Outages of fifteen (15) Full Load Equivalent Outage Days ("**Full Load Equivalent Forced Outage Allowance Days**") each Contract Year; provided that no more than four (4) times during the Term, Power Supplier shall be entitled to an additional twenty (20) Full Load Equivalent Outage Days to undertake major repair, overhaul and maintenance of the Plant not more frequent than once every four (4) years ("**Full Load Equivalent Major Maintenance Outage Allowance Days**"); provided further that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after Commercial Operations Date, and the Major Maintenance Outage of Unit 1 and Unit 2 shall not occur at the same time.
- 9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days, Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities; provided that, upon service of a written notice to Meralco no later than ninety (90) Days prior to a Scheduled Outage or Major Maintenance Outage, Power Supplier shall have the option to purchase Replacement Power during Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, which Replacement Power shall be declared as BCQ and paid by Meralco at five percent (5%) lower than the Price ("**Replacement Power Price**").
- 9.1.3 During Scheduled Outages which exceeds the Full Load Equivalent Scheduled Outage Allowance Days, Forced Outages which exceeds the Full Load Equivalent Forced Outage Allowance Days, and Major Maintenance Outages which exceeds the Full Load Equivalent Major Maintenance Outage Allowance Days, Power Supplier shall purchase Replacement Power, which shall be declared as BCQ and paid by Meralco at the Price.
- 9.1.4 During any period in which an Event of Force Majeure affects Power Supplier or Meralco, Meralco shall procure Replacement Power from the WESM to the extent supply or offtake is so affected.
- 9.1.5 The supply by Power Supplier of quantities of Replacement Power under this Section 9.1 shall be deemed fulfilment of Power Supplier's obligation to make available the Contract Capacity and to deliver the Associated Energy during such period.

9.2 Scheduling Outages

- 9.2.1 By no later than October 31 of every year, Power Supplier shall inform Meralco of the annual Scheduled Outages and Major Maintenance Outages 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 Outages, and procure Meralco's favorable endorsement thereof.

- 9.2.2 In case of Scheduled Outages and Major Maintenance Outages other than those in the Annual Maintenance Plan, Power Supplier shall (i) notify Meralco in writing at least three (3) Days prior to notifying the System Operator and (ii) comply with the requirements of the System Operator, including obtaining Meralco's favorable endorsement.

9.3 **Early Completion of a Scheduled Outage or Major Maintenance Outage**

If a Scheduled Outage or Major Maintenance 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 or Major Maintenance Outage. In such case, subject to Section 9.1.1, the Full Load Equivalent Days of the number of maintenance, inspection and testing hours not used during the Scheduled Outage or Major Maintenance Outage shall not be counted as availments of the Full Load Equivalent Scheduled Outage Allowance Days or Full Load Equivalent Major Maintenance Outage Allowance Days, as applicable.

9.4 **Notification of Forced Outages**

Subject to Article 10 of Appendix H, when a Forced Outage occurs, Power Supplier shall notify Meralco of the existence, nature and expected duration of the Forced Outage as soon as practicable after such occurrence and in any event within one (1) hour from such occurrence. Power Supplier shall inform Meralco promptly of changes in the expected duration of a Forced Outage.

Article 10 Assignment or Transfer of Contract Capacity

- 10.1 Meralco shall, also 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 and Associated Energy that is no longer required by Meralco to any of its business segments or wholly-owned Affiliates without the prior consent of the Power Supplier.

Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity and Associated Energy that is no longer required by Meralco 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 endeavour to cooperate with Power Supplier by providing documents and information in relation to the Transfer as may be reasonably required by the Finance Parties.

- 10.2 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. 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.

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

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

10.3 Reduction in Contract Capacity and Associated Energy

- 10.3.1 Subject to the provisions of Section 10.3.2 below, Meralco shall, from time to time, be entitled to a reduction in the Contract Capacity and Associated Energy (the "**Reduction in Contract Capacity and Associated Energy**") equivalent to the reduction in the demand of its captive customers by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

- 10.3.2 Meralco shall give a written notice to the Power Supplier of such reduction at least five (5) Days prior to the first Day of the next Billing Period. Upon receipt by Power Supplier of such written notice, Meralco shall cease to have any rights and obligations under this Agreement in respect of such Reduction in Contract Capacity and Associated Energy.

Article 11 Billing and Payment

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.

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 I). 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 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 (i) the PDST-R2 plus two hundred (200) basis points for PHP-denominated charges or (ii) LIBOR plus two hundred (200) basis points for USD-denominated payments, pursuant to Section 8 of Appendix I, in each month in which the sum was due and payable; 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 (200) basis points for PHP-denominated charges or LIBOR plus two hundred

(200) basis points for USD-denominated payments, pursuant to Section 8 of Appendix I, 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 11.2.5, 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 (i) the PDST-R2 plus two hundred (200) basis points (for charges denominated in PHP) or LIBOR plus two hundred (200) basis points (for payments denominated in USD pursuant to Section 8 of Appendix I), 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.

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 from or out of this Agreement.

Article 12 Taxes, Fees and Costs

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 value-added tax (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;
- (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.

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 12.1.5 shall not be considered a ground for termination.

12.1.6 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.

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**") becomes 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

14.1 Net Dependable Capacity Test and Net Plant Heat Rate Test

Power Supplier shall, at its own cost, conduct on an annual basis an NDC Test and conduct the Net Plant Heat Rate Test as provided in Article 8.

14.2 ERC Application

- 14.2.1 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.

- 14.2.2 Power Supplier shall fully cooperate with Meralco with respect to the ERC Application and 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.

14.3 ERC Approval

14.3.1 Subject to the non-occurrence of the Longstop Date, upon receipt of the ERC Final Approval, Meralco shall provide a copy of such ERC Final Approval to Power Supplier. Power Supplier shall have ten (10) Days from the date of receipt from MERALCO of such 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.

14.3.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration. Any order on a motion for reconsideration shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.3.

14.3.3 Following (i) a written notice of acceptance from Power Supplier with respect to the ERC Final Approval (including upon reconsideration under Section 14.3.2 above), or (ii) the lapse of the period referred to in Section 14.3.1 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 ("Acceptance Date"), 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.

14.4 Replacement of Plant O&M Contractor

14.4.1 Power Supplier shall serve a written notice to Meralco of any change or replacement of the Plant O&M Contractor or termination of the Plant's O&M Contract (other than the expiration of the Plant O&M Contract at the end of its stated term).

14.5 Coal Supply

14.5.1 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.

14.5.2 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.

14.6 Compliance with Laws

14.6.1 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.

14.6.2 Without limiting the application of Section 14.6.1, 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.

14.7 Other Covenants of the Power Supplier

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

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

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

Article 15 Insurance

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 Five Million United States Dollars (USD5,000,000.00) (or PHP equivalent) per occurrence and in the aggregate;

- (d) automobile liability insurance coverage for all owned, hired, and non-owned vehicles (or the equivalent Philippine coverage) with a combined single limit of liability of Five Million United States Dollars (USD5,000,000.00) (or PHP equivalent). Excess liability and/or umbrella insurance can be used to satisfy such limits;
- (e) workers compensation insurance as required by Governmental Requirements.

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.

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.

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.

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 Five Million United States Dollars (USD5,000,000.00) (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

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.

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.

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.

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.

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 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 Sections 16.1 and Section 16.2.

Article 17 Force Majeure

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:

- (i) 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;
- (ii) such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Agreement;
- (iii) 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;
- (iv) 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 6.3.4 shall not be considered a pre-existing obligation for this purpose); and
- (v) such Party has given the other Party prompt notice in accordance with Section 17.8 describing such event, the effect thereof and the actions being taken in order to comply with this Section 17.1

17.2 Instances of Force Majeure

Subject to the provisions of Sections 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 Instrumentality (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 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); 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, "System Emergency" refers to any unforeseeable condition affecting the System (as defined in the Grid Code), which may cause (i) 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 (ii) suspension of electric energy off-take from Power Supplier in order to prevent or avoid significant disruption of service to Meralco or danger to life or property.

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

For the avoidance of doubt, the Power Supplier shall not be entitled to claim any of its act or omission as Force Majeure.

17.3 Effect of Event 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 and Fixed O&M 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, the applicable provisions of Article 9 shall apply. 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

Event of Force Majeure occurring during the Term or the Term Extension shall be subject to the mutual agreement of the Parties.

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 the Plant, as the case may be, and such failure to repair or operate the Plant 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.

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.

17.6 Force Majeure Prior to Commercial Operations Date

Upon the occurrence of an Event of Force Majeure prior to the Commercial Operations Date, the provisions of Section 3.3.3 shall apply. If the condition persists 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 the 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.

17.7 Certain Events Not Excused

The provisions of this Article 17 shall not excuse:

- (a) 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; or
- (b) delays resulting from reasonably foreseeable unfavorable weather or reasonably foreseeable unsuitable ground or sea conditions or other similar reasonably foreseeable adverse conditions, the effects of which could demonstrate as incapable of being prevented by actions in accordance with Prudent Operating Practices.

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

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 in 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, which failure has not been 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 and such appointment is not 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 and such decree continues undischarged and unstayed for 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 and such petition is not 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, which resolution or petition has not been 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 which consent has not been 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, and such petition or admission is not rescinded, withdrawn or revoked within sixty (60) Days; subject to the terms of Direct Agreements, makes a general assignment of its assets and rights for the benefit of its creditors, which assignment is not rescinded or revoked within sixty (60) Days; or Power Supplier admits in writing its inability to pay its debts generally as they become due, and such admission is not withdrawn or revoked within sixty (60) Days; or
- (e) It shall be illegal for Power Supplier to generate and supply all or a portion of Contract Capacity and Associated Energy due to Power Supplier's fault, and

such illegality shall not be removed, withdrawn or corrected within sixty (60) Days.

- (f) Power Supplier breaches any of its material representations and warranties under this Agreement and such breach is not remedied within one hundred twenty (120) Days after written notice from Meralco to Power Supplier stating that such a breach has occurred.

If, within one hundred eighty (180) Days after receipt from Meralco of written notice of Power Supplier Event of Default by Power Supplier (the "Curing Period"), Power Supplier Event of Default has not been remedied by Power Supplier, Meralco may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law or in equity.

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 in or is accompanied by an actual failure by Meralco to receive, and 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 making of any payment which is due, which failure has not been remedied within sixty (60) Days after receipt from Meralco 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 and such appointment is not discharged within sixty (60) Days; the bankruptcy, insolvency or corporate rehabilitation of Meralco or sequestration of any substantial part of the property of Meralco and such decree continues undischarged and unstayed for 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 and such petition is not 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, which resolution has not been rescinded, withdrawn or revoked within sixty (60) Days; or Meralco consents to the filing of any bankruptcy, corporate rehabilitation or reorganization petition against it which consent has not been 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, and such petition or admission is not rescinded, withdrawn or revoked within sixty (60) Days; Meralco makes a general assignment of its assets and rights for the benefit of its creditors, which assignment is not rescinded or revoked within sixty (60) Days; or Meralco

admits in writing its inability to pay its debts generally as they become due, and such admission is not withdrawn or revoked within sixty (60) Days;

- (e) It shall be illegal for Meralco to accept the Contract Capacity and Associated Energy due to Meralco's fault, and such illegality shall not be 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 in accordance with Article 11 of this Agreement and such payment is not made within thirty (30) Days after the due date of the relevant Final Invoice; or
- (g) Meralco breaches any of its material representations, warranties, covenants or obligations under this Agreement (other than a breach otherwise referred to in this Section 18.2) and such breach is not remedied within one hundred twenty (120) Days after written notice from Power Supplier to Meralco stating that such a breach has occurred.

If, within one hundred eighty (180) Days after receipt from Power Supplier of written notice of Meralco Event of Default by Meralco (the "Curing Period"), Meralco Event of Default has not been remedied by Meralco, Power Supplier may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law or in equity.

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.

18.3 Agreed Damages

18.3.1 Upon the occurrence of a Power Supplier Event of Default that affects the ability of Power Supplier to supply Meralco with Contract Capacity and Associated Energy in accordance with this Agreement and results in the early termination of this Agreement (and without prejudice to any other provisions of this Agreement prior to such termination), Meralco shall, subject to the terms of the Direct Agreement and rights of the Finance Parties, have the right, but not the obligation, by written notice to Power Supplier and in accordance with the Equity Transfer Procedures, to acquire the Equity Interests in the Power Supplier at the price of: Five Hundred Philippine Pesos (PHP500.00). Any tax and levies due on the transfer of the Equity Interest shall be paid by the Power Supplier.

18.3.2 Upon the occurrence of a Meralco Event of Default that affects the ability of Meralco to receive and pay for the Contract Capacity and Associated Energy in accordance with this Agreement and results in the early termination of this Agreement (and without prejudice to any other provisions of this Agreement prior to such termination), Power Supplier shall have the right, but not the obligation, by written notice to Meralco and in accordance with the Equity Transfer Procedures, to require Meralco to acquire the Equity Interests in the Power Supplier at the price of:

- (i) if the underlying Meralco Event of Default occurs on or before the second anniversary of the Commercial Operations 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 Commercial Operations 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/ partner's capital (including accumulated retained earnings/losses and excluding revaluation adjustments).

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.

The remedies in this Section 18.3 are exclusive remedies in cases of termination of this Agreement.

18.4 Termination upon Event of Default

Following the occurrence of an Event of Default, the following procedure shall apply:

- (a) The Party which is not the subject of such Event of Default may give a notice (a "**Termination Notice**") to the other Party, specifying in reasonable detail the Event of Default giving rise to such Termination Notice, and the date on which the Party giving such Termination Notice proposes to terminate this Agreement, which date shall not be less than sixty (60) Days after the date of such notice. If upon the date specified in the Termination Notice, the event giving rise to the Termination Notice is subsisting, then this Agreement shall terminate on such date or such later date as the Parties may agree and Section 18.7 shall apply;
- (b) During the period of sixty (60) Days (or such longer period set out in the Termination Notice or as the Parties may agree) following the giving of such Termination 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 Termination Notice intends to raise a Dispute regarding the right to give effect to the Termination Notice (the "**Termination Notice Dispute**") and to refer such Termination Notice Dispute to resolution pursuant to Article 20, such Party shall within fifteen (15) Days of receipt of the Termination Notice so inform the Party giving the Termination Notice and shall immediately thereafter refer the Termination Notice Dispute to resolution in accordance with Article 20; and
- (d) In circumstances where the Party in receipt of the Termination Notice has referred a Termination 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 Termination Notice has not been remedied; and
- (ii) the Termination Notice Dispute has been determined in favor of the Party who has issued the Termination Notice,

then the Party having given the Termination Notice may terminate this Agreement by giving further written notice thereof to the other Party, whereupon this Agreement shall terminate 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 such later date as the Parties shall have agreed and Section 18.7 shall apply.

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.

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 3.1.1 shall have the unilateral right to waive such condition).

18.6.2 Termination Upon Non-Occurrence of Commencement Date or Commercial Operations Date

- (a) 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, if any such conditions precedent under Section 3.3.3 have not been fulfilled on or before the Longstop Date, the Parties may agree in writing to extend such Longstop Date.

If Financial Close has not occurred by the Required Financial Completion Date, this Agreement shall be terminable in accordance with Section 3.2.3.

If, after the Commencement Date, the Commercial Operations Date does not occur by the Delay Limit Date, the Parties shall meet and confer about the terms on which the Agreement might be continued (provided Power Supplier continues procurements of Replacement Power or payment of delay liquidated damages in accordance with Section 3.3.3). If agreement is not reached within sixty (60) Days of the Delay Limit Date, this Agreement may be terminated by Meralco upon delivery of written notice of termination. In such instance, Meralco shall have the right to exercise its remedies at law or equity and to draw on the Performance Security the proceeds of which Meralco shall apply to set off of its damages. Notwithstanding the foregoing, the Parties may agree in writing to extend the Scheduled Commercial Operations Date or Delay Limit Date.

- (b) If, after the Commencement Date, the Excused Delay Limit is reached, the Parties shall meet and confer about the terms on which the Agreement might be continued (provided Power Supplier procures Replacement Power or pays delay liquidated damages in accordance with Section 3.3.3). If agreement is not reached within sixty (60) days of reaching the Excused Delay Limit, this Agreement may be terminated by Meralco upon delivery of written notice of termination. In such instance, Meralco shall have the right to exercise its remedies at law or equity and to draw on the Performance Security the proceeds of which Meralco shall apply to set off of its damages.

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 2.1.2, 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, Section 17.5 or Section 17.6 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, the Party not prevented from performing 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

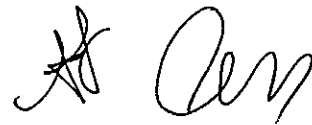
- (a) If a Change in Circumstances occurs under the circumstances and having the consequences described in Section 12.2.2 and Section 12.2.5 and the Parties have failed to agree on a solution satisfactory to each of the Parties, then the Power Supplier may terminate this Agreement upon sixty (60) Days' 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 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.

18.6.7 Consequences of Termination

Upon any termination of this Agreement and without prejudice to Section 18.3 and Section 17.5, 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 termination hereof and remain undischarged as of the date of termination. In any case of termination, the invoice for the last Billing Period shall be due and payable notwithstanding.

18.7 Other Rights and Remedies

- 18.7.1 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

19.1 Representations and Warranties of Power Supplier

Power Supplier represents and warrants as of the date of this Agreement that:

- 19.1.1 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.

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, a bona fide direct trading member of the Luzon WESM.

Article 20 Settlement of Disputes

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.

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 under the Rules. 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, Power Supplier, shall continue so long as payments are current to perform its obligations hereunder to make available and deliver energy 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

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:

- (a) 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, 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;
- (b) 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;

- (c) In the case of 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 10.1 of this Agreement;

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 by the assignee, Power Supplier shall be relieved of any further liability hereunder.

- 21.2 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.

21.3 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

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.

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) 16226656

22.2.2 In the case of Power Supplier, to:

ATIMONAN ONE ENERGY, INC.
8th Floor, Tower 1
Rockwell Business Center, Ortigas Avenue
Pasig City, Metro Manila

Attention: Aaron A. Domingo
President
Facsimile: (63-2) 661-4978
Telephone: (63-2) 422-1900

With copy to:

Attention: Daniel David Niel
Project Manager
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. Any such notice shall be deemed to have been received on the date of delivery.

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.

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.

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.

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.

22.7 Amendment

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

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.

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.

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.

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.

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.

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.

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.

22.15 Governing Law

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

22.16 Independent Engineer

The Parties agree that there shall be an independent firm of engineers of international reputation (the "**Independent Engineer**") that 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:

Poyry Energy
Aecom
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

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.

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.

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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

ATIMONAN ONE ENERGY, INC.

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

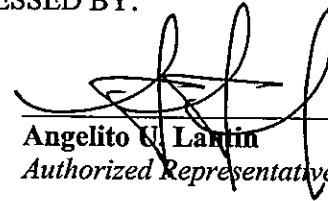
By: 
Name: **Aaron A. Domingo**
Title: *President*

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

WITNESSED BY:

WITNESSED BY:

By: 
Name: **Ciprinilo C. Meneses**
Title: *Head, Energy Sourcing*

By: 
Name: **Angelito U. Lantim**
Title: *Authorized Representative*



ACKNOWLEDGMENT

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

BEFORE ME, a Notary Public for and in Pasig City, Philippines, this
APR 28 2016, personally appeared:

	Competent Evidence of Identity	Date and Place Issued
Aaron A. Domingo	Passport No. EB9967174	Jan. 11, 2014/Manila
Alfredo S. Panlilio	Passport No. EB5654502	Jun. 15, 2012/Manila
Ronnie L. Apercho	Passport No. EB9627487	Nov. 20, 2013/Manila

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 _____ 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 parties and their instrumental witnesses 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: 770 ;
Page No: 68 ;
Book No: 1 ;
Series of 2016.

ATTY. RAYMOND B. YAP
NOTARY PUBLIC
Pasig, Pateros, Teguig & San Juan
Issued on April 6, 2015 at Pasig City
until December 31, 2016
Roll No. 55889; IBP No. 1023728; 01/08/16; Capiz
PTR No. 1473414; 01/21/16; Pasig City
7th Floor, Lopez Bldg., Ortigas Ave., Pasig City

Appendix A
PLANT DESCRIPTION and SITE LOCATION

1. PLANT DESCRIPTION

Power Supplier, a wholly-owned subsidiary of Meralco PowerGen Corporation, is developing a 2x600 MW (net) supercritical pulverized coal power plant (the “**Plant**”) with the necessary balance of plant and auxiliary systems (the “**Project**”). The Project will be located in a land area of approximately 130 hectares in Barangay Villa Ibaba, Municipality of Atimonan in Quezon Province, about 114 aerial kilometers south-east of Quezon City (NCR) and about 30 aerial kilometers east-northeast of Lucena City, the Capital of Quezon Province. See site location map below.

The Project has obtained an Environmental Compliance Certificate (“**ECC**”) from the Department of Environment and Natural Resources (“**DENR**”) in October 2015, and will include modern air pollution control equipment and effluent treatment facilities to meet the DENR environmental emission and discharge standards specified in the ECC.

The Project will include a number of other auxiliary systems necessary for operation. These include a coal handling system, coal crushers and pulverizing mills, a low-NOx boiler burner system, ash handling system, an air preheater, a seawater flue gas desulfurization (FGD) system, electrostatic precipitators for dust capture and removal, continuous emission monitoring (CEMS) system, condensate and feed water systems that include preheating, condensate polishing, chemical dosing and sampling, an auxiliary steam supply system, a once-through seawater cooling water system that includes a condenser with on-line tube cleaning system, chlorine dosing, intake and outfall structures, pumps and piping, primary air, forced draft and induced draft fans, a compressed air system, water and effluent treatment system, service and potable water supply system, a demineralized water supply system, fire-fighting, HVAC, and service gas supply systems, lifting/cranes, lubricating oil system, electrical system, transformers, switchgear, and a distributed control and instrumentation systems.

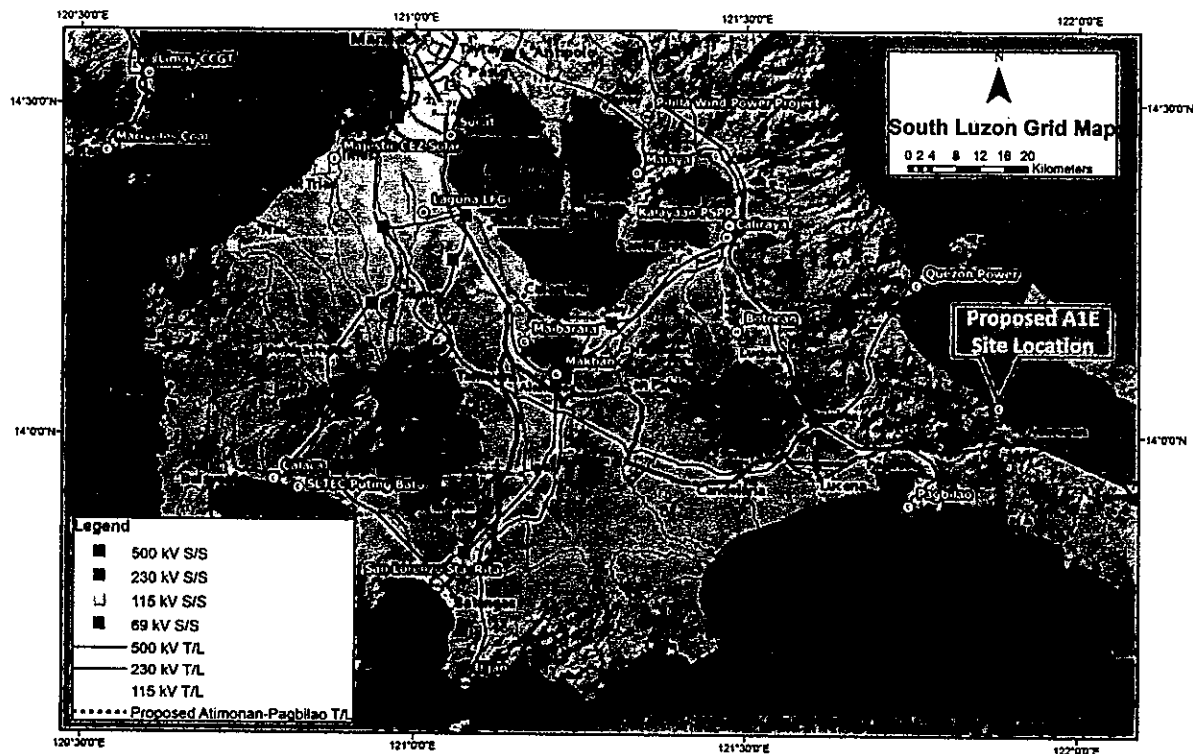
The Plant will be designed to operate as a base load, and will use proven supercritical technology and contract with highly respected construction contractors and equipment manufacturers. Given the size of the Project, the Plant will be designed to utilize a relatively broad range of coal specifications to allow for greater flexibility in coal sourcing, benefitting from the extensive coal reserves of Indonesia, Australia, and the US Powder River Basin, with well-established coal delivery route(s) to the site of the Plant.

The Project has agreed on a connection methodology with the NGCP, with the final route of transmission line consisting wholly of private lands, i.e. no indigenous, public, or protected areas. The approved transmission interconnection of Power Supplier shall be through a new 23-km 500 kV Double Circuit 4-795 MCM ACSR transmission line (“**Power Supplier TL**”). The Power Supplier TL will start from the 500 kV switchyard located within the Power Supplier Plant site and shall pass through the municipalities of Atimonan, Padre Burgos, and Pagbilao, Quezon to connect radially to the New Pagbilao 230/500 kV substation (“**New Pagbilao Substation**”) to be built by the NGCP in Pagbilao, Quezon.

In case of delay in the implementation of the New Pagbilao Substation by NGCP, Power Supplier also has an approved interim connection from NGCP. The interim connection of Power Supplier is to bus-in the existing Naga-Tayabas 230 kV transmission line of NGCP. Such a bus-in connection will require construction of a 500 kV Double Circuit 4-795 MCM ACSR transmission line and a 230 kV Double Circuit 4-795 MCM ACSR transmission line with both lines having an approximate length of nine kilometers. Such an interim connection scheme will convert the Atimonan-Tayabas portion of the Naga-Tayabas line into 500 kV operation while the Atimonan-Naga portion remains at 230 kV.

Details of the Plant's technical design limits, including capacity and other electrical parameters, ramp rates and start times, are provided in Appendix B - Technical Limits.

2. SITE LOCATION



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[Signature]

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)	1200	2 x 600MW net unit generation at TMCR
Frequency Limits (Hertz)	60 $\pm$ 4%	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)	500 $\pm$ 5%	Per unit 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	85ms	
Start-up times (in minutes)* (Times from light off)		Definition of start condition (hrs from unit shut down):
a. Cold Start	a. to Pmin (621min); to TMCR (691min)	a. $\geq$ 36h
b. Warm Start	b. to Pmin (305min); to TMCR (359min)	b. >8h to <36h
c. Hot Start	c. to Pmin (180min); to TMCR (215min)	c. $\leq$ 8h
Dispatch Ramp Rates (MW/min)*		
a. Hot condition	a. Pmin to 50% (3.0MW/min); 50% to 100% (4.5MW/min)	
b. Warm condition	b. Pmin to 50% (3.0MW/min); 50%	

c. Cold condition	to 100% (4.5MW/min) c. Pmin to 50% (2.5MW/min); 50% to 100% (2.5MW/min)	
Pmin (in MWnet) (as registered with the WESM)	240	Minimum Net Unit generation for continuous stable operation – no oil firing

*startup times and ramp rate values are design targets to be confirmed at Commercial Operations Date

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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 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 it execute, sign and deliver this Agreement and all other documents in connection therewith.
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.
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
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Appendix E
CALCULATION OF PAYMENT

A. DEFINITIONS

All capitalized terms used herein shall have the meanings given to them in Article 1 of this Agreement, except that:

Excess Energy means, on a Trading Interval basis, the Metered Quantity declared as BCQ by Power Supplier for Meralco in excess of the energy corresponding to one Trading Interval of the Contract Capacity.

Full Load Equivalent Force Majeure Days Taken means the duration in Days that an Event of Force Majeure that results in (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; or (c) any other unavailability of the Plant for operation, and in each of (a), (b) and (c), stated on a full load equivalent basis. By way of example but not by way of limitation, a Full Load Equivalent Force Majeure Day Taken is the equivalent of (i) the entire Contract Capacity of the Plant being unavailable for one (1) Day due to an Event of Force Majeure, or (ii) one-half of the Contract Capacity of the Plant being unavailable for two (2) Days due to an Event of Force Majeure.

Energy and Environmental Tax means any new tax in the Philippines which may be imposed on Power Supplier in respect of the Plant relating to the environment, the consumption of energy related to generation or the generation of electricity or which Power Supplier is required to charge in respect of electricity delivered by it pursuant to this Agreement, including any carbon or emissions related tax, climate change levy or tax resulting from any Law on the use of renewable energy.

Full Load Equivalent Outage Days Taken means the duration in Days that a full or partial Scheduled Outage or Forced Outage, as applicable, taken by Power Supplier during a Billing Period stated on a full load equivalent basis, and **Full Load Equivalent Scheduled Outage Days Taken** and **Full Load Equivalent Forced Outage Allowance Days Taken** shall be construed similarly with respect to Scheduled Outages and Forced Outages, respectively.

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 3.4, 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 = as defined in C.1 below

Calendar Year = 8784 (for the Contract Years containing February 29)

= 8760 (for the Contract Years not containing February 29)

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

Where:

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

USCPI_i = as defined in C.2 below

USCPI_o = as defined in C.2 below

FX = as defined in C.2 below

AFOM_{PHP} = as defined in C.2 below

PCPI_i = 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

PCPI₀ = 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 3.4.

C. PAYMENT UPON COMMERCIAL OPERATIONS 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), Component D (MVOM), and Component E (MEEP). Other payments consist of Component F (MIFP), and Component G Reimbursable Cost Payment (RCP). Thus, the Monthly Power Bill ("MPB") payment for Contract Capacity and Associated Energy for each Billing Period shall be equal to:

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

The MPB is exclusive of the applicable Value Added Tax.

Capacity Payments

1 *Component A – Monthly Capacity Payment*

Component A is the Capacity payment 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:

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

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

Where:

cm 

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 plus (iii) Full Load Equivalent Major Maintenance Outage Allowance Days. By formula,

$$\begin{aligned} \text{TEDA} &= \text{CYF} * 366 - (\text{SOA} + \text{FOA} + \text{MOA}) \text{ (for the Contract Years containing February 29)} \\ \text{TEDA} &= \text{CYF} * 365 - (\text{SOA} + \text{FOA} + \text{MOA}) \text{ (for the Contract Years not containing February 29)} \end{aligned}$$

Where:

CYF = as previously defined

SOA = Full Load Equivalent Scheduled Outage Allowance Days calculated as base Full Load Equivalent Annual Scheduled Outage Allowance Days, by formula:

$$\text{SOA} = \text{CYF} * \text{BSOA}$$

Where:

BSOA = Base Full Load Equivalent Scheduled Outage Allowance Days for the period set forth in Schedule 1 of this Appendix E

CYF = as previously defined

FOA = Full Load Equivalent Forced Outage Allowance Days calculated as base Full Load Equivalent Annual Forced Outage Allowance Days calculated as:

$$\text{FOA} = \text{CYF} * \text{BFOA}$$

Where:

BFOA = Base Full Load Equivalent Forced Outage Allowance Days for the relevant

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period set forth in Schedule 1 of this
Appendix E

CYF = as previously defined

CC = as defined in Article 1.

EDAM = the Full Load Equivalent Days of Availability achieved in the relevant
Billing Period during Days in the Billing Period, calculated as:

- (1) Gross Full Load Equivalent Days of Availability (GEDAM),
- (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 of FOA,
SOA and MOA (AADU).

By formula:

$$EDAM = GEDAM + AADE - AADU$$

Where:

GEDAM = 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:

$$GEDAM = BPD - SOTM - FOTM - MOTM - FMTM$$

Where:

- BPD = the number of Days in the Billing Period.
- SOTM = the Full Load Equivalent Scheduled Outage Days Taken (in
days) during the Billing Period
- FOTM = the Full Load Equivalent Forced Outage Days Taken (in days)
during the Billing Period
- MOTM = 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 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 :

$$AADE = SOE_M + FOE_M + MOE_M$$

Where:

SOE_M = SOT_M in excess of SOA, wherein,

- i. If (SOT_A ≥ SOA) and [(SOT_A - SOA) ≥ SOT_M], then: SOE_M = SOT_M (in days)
- ii. If (SOT_A ≥ SOA) and [(SOT_A - SOA) < SOT_M], then: SOE_M = SOT_A - SOA (in days)
- iii. If (SOT_A < SOA), then: SOE_M = 0

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

FOE_M = FOT_M in excess of FOA, wherein,

- i. If (FOT_A ≥ FOA) and [(FOT_A - FOA) ≥ FOT_M], then: FOE_M = FOT_M (in days)
- ii. If (FOT_A ≥ FOA) and [(FOT_A - FOA) < FOT_M], then: FOE_M = FOT_A - FOA (in days)
- iii. If (FOT_A < FOA), then: FOE_M = 0

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

$MOE_M =$ MOT_M in excess of MOA, wherein,

- i. If $(MOT_A \geq MOA)$ and $[(MOT_A - MOA) \geq MOT_M]$, then: $MOE_M = MOT_M$ (in days)
- ii. If $(MOT_A \geq MOA)$ and $[(MOT_A - MOA) < MOT_M]$, then: $MOE_M = MOT_A - MOA$ (in days)
- iii. If $(MOT_A < MOA)$, then: $MOE_M = 0$

$MOA =$ 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

$AADU =$ 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: $AADU = [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A)]$ (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:

$$MFOM = MFOM_{USD} + MFOM_{PHP}$$

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:

$$MFOM_{USD} = DFOM_{USD} * USCPI_i / USCPI_o * CC * EDAM * FX$$

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.

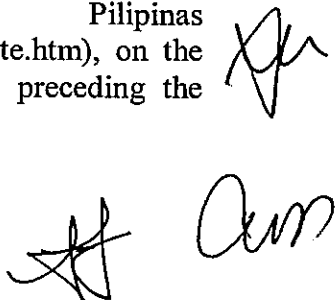
USCPI_o = the US Consumer Price Index City Average for All Urban Consumers – All Items (1982-84=100) as published by the US Bureau of Labor Statistics and indicated in Schedule 1 of Appendix E.

CC = as previously defined.

EDAM = 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), on the date three Business Days immediately preceding the

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Payment Date, as defined in Appendix I, (Invoicing and Payment Procedures) by Meralco of the relevant invoice issued by the Power Supplier.

$MFOM_{PHP}$ = the PHP denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PHP).

$$MFOM_{PHP} = DFOM_{PHP} * PCPI_i / PCPI_o * CC * EDAM$$

Where:

$DFOM_{PHP}$ = the Daily Fixed O&M Fee – PHP denominated portion, (in PHP/kW-day), calculated as:

$$DFOM_{PHP} = CYF * AFOM_{PHP} / TEDA$$

Where:

CYF = as previously defined.

$AFOM_{PHP}$ = Annual Fixed O&M Fee – PHP denominated portion, in PHP/kW-year, set forth in Schedule 1 of this Appendix E

$TEDA$ = as previously defined.

$PCPI_i$ = 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

$PCPI_o$ = the Philippine Consumer Price Index for All Income Households in the Philippines – All Items (2006=100) most recently published prior to the date of execution of this Agreement as published by the National Statistics Office, as indicated in Schedule 1 of Appendix E.

CC = as previously defined.

$EDAM$ = 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:

$$MFP = \Sigma FPh$$

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.

FPh = the Fuel Payment for the relevant Trading Interval (in PHP), calculated as:

$$FPh = (MFCC + MFFC) * (BCQh * GNPHRh / 1,000,000) * FX$$

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 = Monthly Fuel Freight Cost (in USD/MMBtu), calculated as:

$$MFFC = \text{Freight Price}$$

Where:

Freight Price = 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_i = as previously defined.

PCPI_o = as previously defined.

BCQ_h = summation of hourly 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.

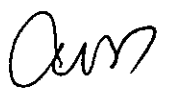
5 **Component E – Monthly Excess Energy Payment**

Component E is the Monthly Excess Energy Payment for the Billing Period calculated as follows:

$$MEEP = \sum BCQ_{EE} * 0.5 * (DCP / 24)$$

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Where:

MEEP = the payment for the Excess Energy for the Billing Period in PHP

BCQ_{EE} = the BCQ declared by Power Supplier with respect to the Excess Energy for each Trading Interval, and shall be calculated as:

If $MQ_h > CC$, then $BCQ_{EE} = (MQ_h - CC) * 1,000$

Otherwise, $BCQ_{EE} = 0$

Where:

MQ_h = Metered Quantity for the relevant Trading Interval

CC = as previously defined

DCP = as previously defined

6 ***Component F – Monthly Interconnection Facilities Payment***

Component F 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:

$MIFCP = (CYF * IFCP / TEDA) * CC * EDA_M$

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_M = 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:

$MIFFOMP = (CYF * IFFOM / TEDA) * PCPI_i / PCPI_o * CC * EDA_M$

Where:

CYF = as previously defined

IFFOM = the Interconnection Facilities Fixed O&M Fee, in Php/kW-year, as set forth in Schedule 1 to this Appendix E.

TEDA = as previously defined

PCPI_i = as previously defined

PCPI_o = as previously defined

CC= as previously defined

EDAM = as previously defined

7 ***Component G – Reimbursable Cost Payment***

Component G is the Reimbursable Cost Payment for each Billing Period which shall be based on the following formula:

$$RCP = RPTP + SDSU + SP + CEC + RP$$

7.1 ***Real Property Tax Payment (RPTP)***

Meralco shall reimburse and pass through the Real Property Tax (in the proportion the Contract Capacity bears to the Net Dependable Capacity) 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.

7.2 ***Shutdown and Startup Payment (SDSU)***

The Startup and Shutdown Payment (SDSU) shall be the actual fuel costs incurred by Power Supplier in connection with any start-up and shut-down of the Plant for reasons requested by Meralco.

7.3 ***Supplemental Payments (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.

7.4 ***Commissioning Energy Charge (CEC)***

The CEC shall be the sum of the actual landed fuel cost incurred during Commissioning and the Monthly Variable O&M Payment (MVOM)

7.5 Replacement Power prior to Commercial Operations Date (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) shall be calculated as follows:

$$RP = RP_{USD} + RP_{PHP}$$

Where:

RP = the total payment for Replacement Power for the relevant Billing Period.

RP_{USD} = the total payment for Replacement Power – USD denominated portion for the Billing Period, calculated as:

$$RP_{USD} = [(AFOM_{USD} * USCPI_i / USCPI_o * FX / 8760) * \Sigma RPQ] + \Sigma FP_h$$

Where:

$AFOM_{USD}$ = as previously defined

$USCPI_i$ = as previously defined

$USCPI_o$ = as previously defined

FX = as previously defined

RPQ = Replacement Power Quantity provided by the Power Supplier after the Scheduled Commercial Operations Date but before the Commercial Operations Date. Replacement Power Quantity for every Trading Interval in which the WEP is higher than CEC, shall be the Meralco nominated quantity less Commissioning Energy. For other Trading Intervals, RPQ equals zero.

FP_h = as previously defined; for energy payments under this Section 7.5, FP_h shall be calculated based on RPQ.

RP_{PHP} = the total payment for Replacement Power – PHP denominated portion for the Billing Period, calculated as:

$$RP_{PHP} = \{[(ACF + AFOM_{PHP} * PCPI_i / PCPI_o) / 8760] + (VOM * PCPI_i / PCPI_o)\} * \Sigma RPQ$$

Where:

ACF = as previously defined

$AFOM_{PHP}$ = as previously defined

$PCPI_i$ = as previously defined

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PCPI₀ = as previously defined

VOM = as previously defined

RPQ = Replacement Power Quantity provided by the Power Supplier after the Scheduled Commercial Operations Date but before the Commercial Operations Date. Replacement Power Quantity for every Trading Interval in which the WEP is higher than CEC, shall be the Meralco nominated quantity less Commissioning Energy. For other Trading Intervals, RPQ equals zero.

A sample calculation of the Replacement Power prior to Commercial Operations Date is set forth in Schedule 6 of this Appendix E.

Provided that any payment of Meralco pursuant to items 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 above.

A sample calculation is set forth in Schedule 3 of this Appendix E.

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SCHEDULE 1

TABLE 1. BASE RATES

Annual Capacity Fee†	ACF ₀	Php/kW-year	14,486.0000
Annual Fixed O&M Fee (USD)‡	AFOM _{USD}	US\$/kW-year	30.3644
Annual Fixed O&M Fee (PHP)‡	AFOM _{PHP}	PHP/kW-year	1,594.3749
Variable O&M Fee (PHP)	VOM	PHP/kW-hour	0.1114
Annual Interconnection Facilities Capacity Fee	IFCP	PHP/kW-year	204.0530
Annual Interconnection Facilities FOM Fee	IFFOM	PHP/kW-year	10.5123
Base USCPI ₀ (1982-84=100) (December 2015)	USCPI ₀		236.525
Base PCPI ₀ (2006=100) (December 2015)	PCPI ₀		142.600
Base Full Load Equivalent Scheduled Outage Allowance Days	BSOA	Days / Year	30.00
Full Load Equivalent Major Maintenance Outage Allowance Days	MOA	Days / Major Maintenance Cycle	20.00
Base Full Load Equivalent Forced Outage Allowance Days	BFOA	Days / Year	15.00
Net Plant Guaranteed Heat Rate (NPGHR) @ year 1 and 91% plant capacity factor		Btu/kWh	8918.0104

†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 7th anniversary of the Financial Close: $ACF = ACF_0$

After the 7th anniversary of the Financial Close: $ACF = ACF_0 + AA$

where:

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- ACF = the Annual Capacity Fee in PHP/kW-year
- ACF₀ = 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:

Based on 8Y PDST-R2	Movement in 8Y PDST-R2	Adjustment in Php/MW-Year	Adjustment in Php/kw-year
	500 bps	2,428,793.22	2,428.79
	475 bps	2,307,588.95	2,307.59
	450 bps	2,185,943.48	2,185.94
	425 bps	2,064,334.65	2,064.33
	400 bps	1,942,729.19	1,942.73
	375 bps	1,821,131.43	1,821.13
	350 bps	1,699,563.72	1,699.56
	325 bps	1,577,968.70	1,577.97
	300 bps	1,456,347.15	1,456.35
	275 bps	1,332,503.33	1,332.50
	250 bps	1,211,052.17	1,211.05
	225 bps	1,089,682.50	1,089.68
	200 bps	968,312.58	968.31
8Y PDST-R2 4.35%	175 bps	846,941.39	846.94
	150 bps	724,300.00	724.30
	125 bps	606,367.13	606.37
	100 bps	484,971.23	484.97
	75 bps	363,609.88	363.61
	50 bps	242,275.33	242.28
	40 bps	193,746.52	193.75
	30 bps	145,220.38	145.22
	20 bps	96,696.05	96.70
	10 bps	48,172.64	48.17
	0 bps	-	-
	-10 bps	(51,060.40)	(51.06)
	-20 bps	(99,605.23)	(99.61)
	-30 bps	(148,323.37)	(148.32)
	-40 bps	(196,696.13)	(196.70)
	-50 bps or lower	(245,243.23)	(245.24)

The movement in the 8 year PDST-R2 will be determined by:

Δ = 8 year PDST-R2 at the 7th anniversary of the Financial Close – 414bps

If the 8 year PDST-R2 is not available on 7th 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 Δ falls between the values in the foregoing table, adjustment amount will be interpolated using the formula:

$$AA = \left[\left(\frac{(y_{upper}) - (y_{lower})}{x_{upper} - x_{lower}} \right) * (\Delta x - x_{lower}) \right] + y_{lower}$$

Sample Calculation, when Δ is 115 bps:

	x	y
Δ	115	
lower	100	291.76
upper	125	364.70

$$AA = \left[\left(\frac{(364.70) - (291.76)}{125 - 100} \right) * (115 - 100) \right] + 291.76$$

$$AA = 335.5196$$

‡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.

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SCHEDULE 2
GUARANTEED NET PLANT HEAT RATE
[LIFETIME AND LOAD FACTOR VALUES]

Load	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
100%	8,852.46	8,892.97	8,915.38	8,937.84	8,960.37	8,982.95	8,996.06	8,971.51	8,986.99	9,002.49
99%	8,859.75	8,900.28	8,922.71	8,945.20	8,967.74	8,990.34	8,963.43	8,978.89	8,994.38	9,009.90
98%	8,867.03	8,907.60	8,930.04	8,952.55	8,975.11	8,997.73	8,970.80	8,986.27	9,001.77	9,017.30
97%	8,874.31	8,914.91	8,937.38	8,959.90	8,982.48	9,005.12	8,978.17	8,993.65	9,009.17	9,024.71
96%	8,881.60	8,922.23	8,944.71	8,967.26	8,989.85	9,012.51	8,985.54	9,001.04	9,016.56	9,032.12
95%	8,888.88	8,929.55	8,952.05	8,974.61	8,997.22	9,019.90	8,992.90	9,008.42	9,023.96	9,039.52
94%	8,896.16	8,936.86	8,959.38	8,981.96	9,004.60	9,027.29	9,000.27	9,015.80	9,031.35	9,046.93
93%	8,903.44	8,944.18	8,966.72	8,989.31	9,011.97	9,034.68	9,007.64	9,023.18	9,038.74	9,054.34
92%	8,910.73	8,951.50	8,974.05	8,996.67	9,019.34	9,042.07	9,015.01	9,030.56	9,046.14	9,061.74
91%	8,918.01	8,958.81	8,981.39	9,004.02	9,026.71	9,049.46	9,022.38	9,037.94	9,053.53	9,069.15
90%	8,925.29	8,966.13	8,988.72	9,011.37	9,034.08	9,056.85	9,029.74	9,045.32	9,060.92	9,076.55
89%	8,932.57	8,973.45	8,996.09	9,018.79	9,041.54	9,064.34	9,037.24	9,052.82	9,068.43	9,084.08
88%	8,939.85	8,980.78	9,003.47	9,026.21	9,048.99	9,071.82	9,044.74	9,060.32	9,075.93	9,091.58
87%	8,947.13	8,988.11	9,010.85	9,033.63	9,056.46	9,079.34	9,052.20	9,067.78	9,083.40	9,099.06
86%	8,954.41	8,995.44	9,018.23	9,041.06	9,063.94	9,086.87	9,059.70	9,075.28	9,090.91	9,106.58
85%	8,961.69	9,002.76	9,025.59	9,048.46	9,071.38	9,094.35	9,067.16	9,082.74	9,098.37	9,114.04
84%	8,968.97	9,010.08	9,032.96	9,055.88	9,078.85	9,101.86	9,074.55	9,090.13	9,105.76	9,121.43
83%	8,976.25	9,017.40	9,040.33	9,063.30	9,086.32	9,109.38	9,082.04	9,097.62	9,113.25	9,128.92
82%	8,983.53	9,024.72	9,047.70	9,070.77	9,093.89	9,117.05	9,100.00	9,115.58	9,131.21	9,146.88
81%	8,990.81	9,032.04	9,055.12	9,078.29	9,101.50	9,124.75	9,107.66	9,123.24	9,138.87	9,154.52
80%	8,998.09	9,039.36	9,062.50	9,085.77	9,109.07	9,132.41	9,115.30	9,130.88	9,146.50	9,162.16
79%	9,005.37	9,046.68	9,069.87	9,093.21	9,116.60	9,140.04	9,122.91	9,138.49	9,154.11	9,169.77
78%	9,012.65	9,053.99	9,077.23	9,100.62	9,124.06	9,147.55	9,130.41	9,146.00	9,161.62	9,177.28
77%	9,019.93	9,061.31	9,084.60	9,108.09	9,131.63	9,155.22	9,138.07	9,153.66	9,169.28	9,184.94
76%	9,027.21	9,068.64	9,091.98	9,115.57	9,139.21	9,162.90	9,145.73	9,161.32	9,176.94	9,192.60
75%	9,034.49	9,075.96	9,099.35	9,123.09	9,146.88	9,170.72	9,153.54	9,169.13	9,184.75	9,200.41
74%	9,041.77	9,083.28	9,106.72	9,130.61	9,154.55	9,178.54	9,161.35	9,176.94	9,192.56	9,208.22
73%	9,049.05	9,090.60	9,114.09	9,138.13	9,162.22	9,186.36	9,169.15	9,184.74	9,200.36	9,216.02
72%	9,056.33	9,097.92	9,121.46	9,145.65	9,169.89	9,194.18	9,176.97	9,192.56	9,208.18	9,223.84
71%	9,063.61	9,105.24	9,128.83	9,153.17	9,177.56	9,202.00	9,184.79	9,200.38	9,215.99	9,231.65
70%	9,070.89	9,112.56	9,136.21	9,160.71	9,185.26	9,210.00	9,192.79	9,208.38	9,223.99	9,239.65
69%	9,078.17	9,119.88	9,143.67	9,168.32	9,193.02	9,217.87	9,200.66	9,216.25	9,231.86	9,247.52
68%	9,085.45	9,127.20	9,151.03	9,175.82	9,200.67	9,225.67	9,208.46	9,224.05	9,239.66	9,255.32
67%	9,092.73	9,134.52	9,158.40	9,183.29	9,208.24	9,233.24	9,216.03	9,231.62	9,247.23	9,262.89
66%	9,099.99	9,141.83	9,165.85	9,190.85	9,215.90	9,241.00	9,223.79	9,239.38	9,254.99	9,270.65
65%	9,107.27	9,149.15	9,173.22	9,198.33	9,223.49	9,248.70	9,231.49	9,247.08	9,262.69	9,278.35
64%	9,114.55	9,156.47	9,180.64	9,205.88	9,231.17	9,256.51	9,239.30	9,254.89	9,270.50	9,286.16
63%	9,121.83	9,163.80	9,188.01	9,213.32	9,238.68	9,264.18	9,246.97	9,262.56	9,278.17	9,293.83
62%	9,129.11	9,171.16	9,195.42	9,220.88	9,246.39	9,271.95	9,254.74	9,270.33	9,285.94	9,301.60
61%	9,136.39	9,178.48	9,202.88	9,228.45	9,254.07	9,279.74	9,262.53	9,278.12	9,293.73	9,309.39
60%	9,143.67	9,185.80	9,210.34	9,236.03	9,261.77	9,287.56	9,270.35	9,285.94	9,301.55	9,317.21
59%	9,150.95	9,193.12	9,217.71	9,243.52	9,269.38	9,295.29	9,278.08	9,293.67	9,309.28	9,324.94
58%	9,158.23	9,199.44	9,224.18	9,250.13	9,276.13	9,302.18	9,284.97	9,300.56	9,316.17	9,331.83
57%	9,165.51	9,206.76	9,231.55	9,257.64	9,283.78	9,309.97	9,292.76	9,308.35	9,323.96	9,339.62
56%	9,172.79	9,214.08	9,238.92	9,265.17	9,291.47	9,317.82	9,300.61	9,316.20	9,331.81	9,347.47
55%	9,180.07	9,221.31	9,246.20	9,272.61	9,299.07	9,325.58	9,308.37	9,323.96	9,339.57	9,355.23
54%	9,187.35	9,228.54	9,253.58	9,280.25	9,306.87	9,333.54	9,316.33	9,331.92	9,347.53	9,363.19
53%	9,194.63	9,235.77	9,260.96	9,287.78	9,314.65	9,341.57	9,324.36	9,340.00	9,355.61	9,371.27
52%	9,201.91	9,243.00	9,268.29	9,295.26	9,322.39	9,349.56	9,332.35	9,347.94	9,363.55	9,379.21
51%	9,209.19	9,250.23	9,275.67	9,302.85	9,329.68	9,356.96	9,339.75	9,355.34	9,370.95	9,386.61
50%	9,216.47	9,257.46	9,283.05	9,310.48	9,337.96	9,365.49	9,348.28	9,363.87	9,379.48	9,395.14
49%	9,223.75	9,264.69	9,290.33	9,317.92	9,345.66	9,373.45	9,356.24	9,371.83	9,387.44	9,403.10
48%	9,231.03	9,271.92	9,297.71	9,325.55	9,353.44	9,381.38	9,364.17	9,379.76	9,395.37	9,411.03
47%	9,238.31	9,279.15	9,305.09	9,333.08	9,361.12	9,389.21	9,371.90	9,387.49	9,403.10	9,418.76
46%	9,245.59	9,286.38	9,312.46	9,340.65	9,368.89	9,397.18	9,379.87	9,395.46	9,411.07	9,426.73
45%	9,252.87	9,293.61	9,319.84	9,348.28	9,376.77	9,405.31	9,387.90	9,403.49	9,419.10	9,434.76
44%	9,260.15	9,300.84	9,327.22	9,355.81	9,384.55	9,413.34	9,395.93	9,411.52	9,427.13	9,442.79
43%	9,267.43	9,308.07	9,334.60	9,363.34	9,392.23	9,421.17	9,393.76	9,409.35	9,424.96	9,440.62
42%	9,274.71	9,315.30	9,342.07	9,371.06	9,400.11	9,429.21	9,401.80	9,417.39	9,432.99	9,448.65
41%	9,282.00	9,322.54	9,349.45	9,378.69	9,408.00	9,437.26	9,409.85	9,425.44	9,441.05	9,456.71
40%	9,289.28	9,329.77	9,356.84	9,386.33	9,415.98	9,445.68	9,418.27	9,433.86	9,449.47	9,465.13

for

OH

At

Am

Load	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
100%	9,018.02	9,033.58	9,015.51	9,025.88	9,036.26	9,046.65	9,057.05	9,067.47	9,053.87	9,064.28
99%	9,025.44	9,041.01	9,022.93	9,033.30	9,043.69	9,054.09	9,064.50	9,074.93	9,061.31	9,071.73
98%	9,032.86	9,048.44	9,030.34	9,040.73	9,051.12	9,061.53	9,071.95	9,082.39	9,068.76	9,079.19
97%	9,040.28	9,055.87	9,037.76	9,048.15	9,058.56	9,068.98	9,079.41	9,089.85	9,076.21	9,086.65
96%	9,047.70	9,063.30	9,045.18	9,055.58	9,065.99	9,076.42	9,086.86	9,097.31	9,083.66	9,094.11
95%	9,055.12	9,070.74	9,052.59	9,063.00	9,073.43	9,083.86	9,094.31	9,104.77	9,091.11	9,101.56
94%	9,062.53	9,078.17	9,060.01	9,070.43	9,080.86	9,091.30	9,101.76	9,112.23	9,098.56	9,109.02
93%	9,069.95	9,085.60	9,067.43	9,077.86	9,088.30	9,098.75	9,109.21	9,119.69	9,106.01	9,116.48
92%	9,077.37	9,093.03	9,074.85	9,085.28	9,095.73	9,106.19	9,116.66	9,127.15	9,113.46	9,123.94
91%	9,084.79	9,100.46	9,082.26	9,092.71	9,103.16	9,113.63	9,124.11	9,134.61	9,120.90	9,131.39
90%	9,092.21	9,107.90	9,089.68	9,100.13	9,110.60	9,121.08	9,131.56	9,142.07	9,128.35	9,138.85
89%	9,102.84	9,118.54	9,100.31	9,110.77	9,121.25	9,131.74	9,142.24	9,152.75	9,139.02	9,149.53
88%	9,113.47	9,129.19	9,110.93	9,121.41	9,131.90	9,142.40	9,152.92	9,163.44	9,149.70	9,160.22
87%	9,124.10	9,139.84	9,121.56	9,132.05	9,142.55	9,153.06	9,163.59	9,174.13	9,160.37	9,170.90
86%	9,134.73	9,150.49	9,132.19	9,142.69	9,153.20	9,163.73	9,174.27	9,184.82	9,171.04	9,181.59
85%	9,145.36	9,161.13	9,142.81	9,153.33	9,163.85	9,174.39	9,184.94	9,195.50	9,181.71	9,192.27
84%	9,155.99	9,171.78	9,153.44	9,163.97	9,174.50	9,185.05	9,195.62	9,206.19	9,192.38	9,202.95
83%	9,166.62	9,182.43	9,164.07	9,174.60	9,185.15	9,195.72	9,206.29	9,216.88	9,203.05	9,213.64
82%	9,177.25	9,193.08	9,174.69	9,185.24	9,195.81	9,206.38	9,216.97	9,227.57	9,213.73	9,224.32
81%	9,187.88	9,203.73	9,185.32	9,195.88	9,206.46	9,217.04	9,227.64	9,238.26	9,224.40	9,235.01
80%	9,198.51	9,214.37	9,195.94	9,206.52	9,217.11	9,227.71	9,238.32	9,248.94	9,235.07	9,245.69
79%	9,217.31	9,233.21	9,214.75	9,225.34	9,235.95	9,246.57	9,257.21	9,267.85	9,253.95	9,264.59
78%	9,236.12	9,252.06	9,233.55	9,244.17	9,254.80	9,265.44	9,276.10	9,286.76	9,272.83	9,283.50
77%	9,254.93	9,270.89	9,252.35	9,262.99	9,273.64	9,284.31	9,294.99	9,305.68	9,291.72	9,302.40
76%	9,273.74	9,289.73	9,271.15	9,281.82	9,292.49	9,303.18	9,313.87	9,324.59	9,310.60	9,321.31
75%	9,293.11	9,309.14	9,290.53	9,301.21	9,311.91	9,322.62	9,333.34	9,344.07	9,330.05	9,340.78
74%	9,316.42	9,332.50	9,313.83	9,324.54	9,335.26	9,346.00	9,356.75	9,367.51	9,353.46	9,364.21
73%	9,339.73	9,355.85	9,337.13	9,347.87	9,358.62	9,369.38	9,380.16	9,390.95	9,376.86	9,387.64
72%	9,363.06	9,379.21	9,360.45	9,371.21	9,381.99	9,392.78	9,403.58	9,414.39	9,400.27	9,411.08
71%	9,386.37	9,402.56	9,383.75	9,394.54	9,405.35	9,416.16	9,426.99	9,437.83	9,423.68	9,434.51
70%	9,409.68	9,425.91	9,407.06	9,417.87	9,428.70	9,439.55	9,450.40	9,461.27	9,447.08	9,457.94
69%	9,434.97	9,451.24	9,432.34	9,443.19	9,454.05	9,464.92	9,475.81	9,486.70	9,472.47	9,483.37
68%	9,460.27	9,476.59	9,457.64	9,468.51	9,479.40	9,490.30	9,501.22	9,512.15	9,497.88	9,508.80
67%	9,485.57	9,501.93	9,482.93	9,493.83	9,504.75	9,515.68	9,526.62	9,537.58	9,523.27	9,534.22
66%	9,510.86	9,527.27	9,508.21	9,519.15	9,530.09	9,541.05	9,552.02	9,563.01	9,548.67	9,559.65
65%	9,536.15	9,552.60	9,533.50	9,544.46	9,555.44	9,566.43	9,577.43	9,588.44	9,574.06	9,585.07
64%	9,561.44	9,577.94	9,555.41	9,566.40	9,577.40	9,588.41	9,599.44	9,610.48	9,596.06	9,607.10
63%	9,579.98	9,596.51	9,577.31	9,588.33	9,599.35	9,610.39	9,621.44	9,632.51	9,618.06	9,629.12
62%	9,601.89	9,618.45	9,599.21	9,610.25	9,621.31	9,632.37	9,643.45	9,654.54	9,640.05	9,651.14
61%	9,623.80	9,640.40	9,621.12	9,632.18	9,643.26	9,654.35	9,665.45	9,676.56	9,662.05	9,673.16
60%	9,645.71	9,662.35	9,643.03	9,654.12	9,665.22	9,676.34	9,687.46	9,698.60	9,684.06	9,695.19
59%	9,668.14	9,714.87	9,695.44	9,706.59	9,717.75	9,728.92	9,740.11	9,751.31	9,736.69	9,747.88
58%	9,750.56	9,767.38	9,747.84	9,759.05	9,770.28	9,781.51	9,792.76	9,804.02	9,789.32	9,800.58
57%	9,802.98	9,819.89	9,800.25	9,811.52	9,822.81	9,834.10	9,845.41	9,856.73	9,841.95	9,853.27
56%	9,855.42	9,872.42	9,852.67	9,864.00	9,875.35	9,886.70	9,898.07	9,909.45	9,894.59	9,905.97
55%	9,907.84	9,924.93	9,905.08	9,916.47	9,927.87	9,939.29	9,950.72	9,962.16	9,947.22	9,958.66
54%	9,952.30	9,969.47	9,949.53	9,960.97	9,972.43	9,983.90	9,995.38	10,006.87	9,991.86	10,003.35
53%	9,996.78	10,014.02	9,994.00	10,005.49	10,017.00	10,028.52	10,040.05	10,051.59	10,036.52	10,048.06
52%	10,041.25	10,058.57	10,038.45	10,049.99	10,061.55	10,073.12	10,084.71	10,096.30	10,081.16	10,092.75
51%	10,085.71	10,103.11	10,082.90	10,094.50	10,106.11	10,117.73	10,129.36	10,141.01	10,125.80	10,137.45
50%	10,130.19	10,147.66	10,127.37	10,139.01	10,150.67	10,162.35	10,174.03	10,185.73	10,170.45	10,182.15
49%	10,209.17	10,226.78	10,206.33	10,218.06	10,229.81	10,241.58	10,253.36	10,265.15	10,249.75	10,261.54
48%	10,288.15	10,305.90	10,285.28	10,297.11	10,308.95	10,320.81	10,332.68	10,344.56	10,329.04	10,340.92
47%	10,367.13	10,385.01	10,364.24	10,376.16	10,388.09	10,400.04	10,412.00	10,423.97	10,408.34	10,420.31
46%	10,446.11	10,464.13	10,443.20	10,455.21	10,467.23	10,479.27	10,491.32	10,503.39	10,487.63	10,499.69
45%	10,525.09	10,543.24	10,522.16	10,534.26	10,546.37	10,558.50	10,570.64	10,582.80	10,566.93	10,579.08
44%	10,598.21	10,616.49	10,595.26	10,607.44	10,619.64	10,631.85	10,644.08	10,656.32	10,640.34	10,652.57
43%	10,671.33	10,689.74	10,668.36	10,680.62	10,692.91	10,705.20	10,717.51	10,729.84	10,713.75	10,726.07
42%	10,744.45	10,762.98	10,741.45	10,753.81	10,766.17	10,778.56	10,790.95	10,803.36	10,787.16	10,799.56
41%	10,817.57	10,836.23	10,814.55	10,826.99	10,839.44	10,851.91	10,864.39	10,876.88	10,860.56	10,873.05
40%	10,890.68	10,909.47	10,887.65	10,900.17	10,912.71	10,925.26	10,937.82	10,950.40	10,933.97	10,946.55

**SCHEDULE 3
SAMPLE CALCULATIONS**

Agreed Values

Contract Capacity (CC)	KW	1,200,000
Annual Capacity Fee(ACF ₀)	PHP/kW-year	14,486.0000
Annual Fixed O&M Fee (AFOM _{USD})	USD/kW-year	30.3644
Annual Fixed O&M Fee (AFOM _{PHP})	PHP/kW-year	1,594.3749
Variable O&M Fee (VOM)	PHP/kWh	0.1114
Interconnection Facilities Capacity Fee	PHP/kW-year	204.0530
Interconnection Facilities FOM Fee	PHP/kW-year	10.5123
Scheduled Outage Allowance (SOA)	Days	30.00
Forced Outage Allowance (FOA)	Days	15.00
Base US CPI (USCPI ₀)	(1982-84=100)	236.525
Base Philippine CPI (PCPI ₀)	(2006=100)	142.600

Assumed Values

Contract Year		2021
Days in the Contract Year		365
Contract Effectivity		December 26, 2020
Billing Period		December 26, 2020 - January 25, 2021
Billing Period Days	Days	31
ΣBCQ _h	kWh	722,140,000.00
RP	kWh	7,900,000.00
ΣBCQ _{EE}	kWh	500,000.00
Heat Rate (HR) @ 80%LF	BTU/kWh	9,029.64
Scheduled Outage Taken (SOT _M)	Days	0.00
Forced Outage Taken (FOT _M)	Days	5.00
USCPI _i	(2006=100)	236.196
PCPI _i	(2006=100)	142.900
Newcastle Index (Fli)	USD/MT	50.38
Forex rate	PHP/USD	46.07
Real Property Tax Payment (RPTP)	PHP	20,000,000.00
Shutdown and Start-up Payment (SDSU)	PHP	0.00
Supplemental Payments (SP)	PHP	10,000,000.00
Commissioning Energy Charge (CEC)	PHP	0.00
Replacement Power prior to Commercial Operations Date (RP)	PHP	0.00

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Component A - MONTHLY CAPACITY PAYMENT

$$MCP_{PHP} = DCP * CC * EDA_M$$

1. Calculation of Capacity Fees for each Full Load Equivalent Day Available

$$TEDA = \text{Days in the Contract Year} - SOA - FOA$$

$$= 365 - 30 - 15$$

$$= 320$$

$$DCP = CYF * ACF / TEDA$$

$$= 1 * 14,486.00 / 320$$

$$= 45.268750$$

2. Contract Capacity (kW)

$$= 1,200,000$$

3. Calculation of Full Load Equivalent Days Availability (EDA_M) - Refer to Schedule 3

$$EDA_M$$

$$= 26$$

$$MCP_{PHP} = DCP_{PHP} * CC * EDA_M$$

$$= 45.268750 * 1200000 * 26$$

$$= \text{PHP } 1,412,385,000.00$$

Component B - MONTHLY FIXED O&M PAYMENT

$$MFOM = MFOM_{USD} + MFOM_{PHP}$$

1. Calculation of FOM payment - USD denominated portion

$$DFOM_{USD} = CYF * AFOM_{USD} / TEDA$$

$$= 1 * 30.3644 / 320$$

$$= 0.0949$$

$$MFOM_{USD} = DFOM_{USD} * USCPI_i / USCPI_o * CC * EDA_M * FX$$

$$= 0.0949 * (236.20 / 236.53) * 1,200,000 * 26 * 46$$

$$= 136,201,853.97$$

2. Calculation of FOM payment - PHP denominated portion

$$DFOM_{PHP} = CYF * AFOM_{PHP} / TEDA$$

$$= 1 * 1,594.3749 / 320$$

$$= 4.982422$$

$$MFOM_{PHP} = DFOM_{PHP} * PCPI_i / PCPI_o * CC * EDA_M$$

$$= 4.9824 * (142.90 / 142.60) * 1,200,000 * 26$$

$$= 155,778,589.68$$

$$MFOM = MFOM_{USD} + MFOM_{PHP}$$

$$= 136,201,853.97 + 155,778,589.68$$

$$= \text{PHP } 291,980,443.65$$

Component C - MONTHLY FUEL PAYMENT

$MFP = \sum FP_h$

$FP_h = (MFCC + MFFC) * (BCQ_h * GNPHR_h / 1,000,000) * FX$

1. Calculation of MFCC and MFFC

$MFCC = \text{Coal Price}$

$= 50.38 * 0.040$

$= 2.0152 \text{ USD/MMBTU}$

$MFFC = \text{Freight Price}$

$= 0.4800 \text{ USD/MMBTU}$

$MFP = (MFCC + MFFC) * (\sum BCQ_h * GNPHR_h / 1,000,000) * FX$

Typical Daily Calculation

Hr	MFCC + MFFC (USD/MMBTU)	BCQh (kWh)	Load Factor (%)	GNPHR (MMBTU/kWh)	FX	FP _h (PHP)
1	2.49520	792,000	66%	9,336.26	46.07	850,005.06
2	2.49520	792,000	66%	9,336.26	46.07	850,005.06
3	2.49520	792,000	66%	9,336.26	46.07	850,005.06
4	2.49520	792,000	66%	9,336.26	46.07	850,005.06
5	2.49520	792,000	66%	9,336.26	46.07	850,005.06
6	2.49520	792,000	66%	9,336.26	46.07	850,005.06
7	2.49520	792,000	66%	9,336.26	46.07	850,005.06
8	2.49520	792,000	66%	9,336.26	46.07	850,005.06
9	2.49520	792,000	66%	9,336.26	46.07	850,005.06
10	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
11	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
12	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
13	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
14	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
15	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
16	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
17	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
18	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
19	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
20	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
21	2.49520	1,200,000	100%	8,852.46	46.07	1,221,149.83
22	2.49520	792,000	66%	9,336.26	46.07	850,005.06
23	2.49520	792,000	66%	9,336.26	46.07	850,005.06
24	2.49520	792,000	66%	9,336.26	46.07	850,005.06
TOTAL		23,904,000				24,853,858.65

$= \sum FP_h$

$= 24,853,858.65 * 31$

$= \text{PHP } 770,469,618.17$

Component D - MONTHLY VARIABLE O&M PAYMENT

MVOM = VOM * PCPIi / PCPIo * ΣBCQ_h

1. Calculation of Monthly VOM Payments
MVOM = VOM * PCPIi / PCPIo * ΣBCQ
= 0.1114 * (142.90 / 142.60) * 722,140,000
= **PHP 80,615,638.07**

MVOM_{PHP} = Annual Variable O&M_{PHP} * (ΣBCQ – RP) * AF_{PHP}
= 0.1114 * (722,140,000 – 7,900,000) * 4.982422
= **PHP 396,433,028.14**

Component E - MONTHLY EXCESS ENERGY PAYMENT

MEEP = ΣBCQ_{EE} * 0.5 * (DCP / 24)

1. Calculation of MEEP
MEEP = ΣBCQ_{EE} * 0.5 * (DCP / 24)
= 500,000 * 0.5 * (45.268750 / 24)
= **PHP 471,549.48**

Component F - MONTHLY INTERCONNECTION FACILITIES PAYMENT

MIFP = MIFCP + MIFFOMP

1. Calculation of MIFCP
MIFCP = (CYF * IFCP / TEDA) * CC * EDAM
= 1 * (204.0530 / 320) * 1,200,000 * 26
= 19,895,167.50

1. Calculation of MIFFOMP
MIFFOMP = (CYF * IFFOM / TEDA) * (PCPIi / PCPIo) * CC * EDAM
= 1 * (10.5123 / 320) * (142.900 / 142.600) * 1,200,000 * 26
= 1,027,105.52

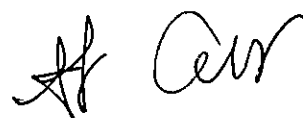
MIFP = MIFCP + MIFFOMP
= 19,895,167.50 + 1,027,105.52
= **PHP 20,922,273.02**

Component G - MONTHLY REIMBURSIBLE COST PAYMENT

RCP = RTPP + SDSU + SP + CEC + RP
= 20,000,000.00 + 0.00 + 10,000,000.00 + 0.00 + 0.00
= **PHP 30,000,000.00**

TOTAL MONTHLY PAYMENT

MPB = MCP + MFOM + MFP + MVOM + MEEP + MIFP + RCP
= 1,412,385,000.00 + 291,980,443.65 + 770,469,618.17 + 396,433,028.14 + 471,549.48 +
20,922,273.02 + 30,000,000.00
= **PHP 2,922,661,912.46**



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:

$$\begin{aligned} \text{CYF} &= \text{CYD} / 365 \\ &= 365 / 365 = 1.00 \end{aligned}$$

$$\begin{aligned} \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 1.00 * 30 \\ &= 30.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 1.00 * 15 \\ &= 15.00 \text{ Days} \end{aligned}$$

CASE 2: Operations Effective Date at May 26, 20YY

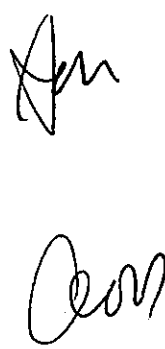
Other Assumed Values

Contract Year Days for Year 20YY	CYD _{FIRST}	214	Days
Contract Year Days for Year 20YY+20	CYD _{LAST}	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:

$$\begin{aligned} \text{CYF} &= \text{CYD}_{\text{FIRST}} / 365 \\ &= 214 / 365 = 0.59 \\ \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 0.59 * 30 \\ &= 17.59 \text{ Days} \\ \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 0.59 * 15 \\ &= 8.79 \text{ Days} \end{aligned}$$

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:

$$\begin{aligned} \text{CYF} &= \text{CYD}_{\text{LAST}} / 365 \\ &= 151 / 365 = 0.41 \\ \text{SOA} &= \text{CYF} * \text{BSOA} \\ &= 0.41 * 30 \\ &= 12.41 \text{ Days} \\ \text{FOA} &= \text{CYF} * \text{BFOA} \\ &= 0.41 * 15 \\ &= 6.21 \text{ Days} \end{aligned}$$

B. Calculation of EDAM

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

$$\begin{aligned} GEDAM &= BPD - SOTM - FOTM - FMTM \\ &= 30 - 0 - 0 - 0 \\ &= 30.00 \text{ Days} \end{aligned}$$

2. Calculation of AADE

$$\begin{aligned} AADE &= SOEM + FOEM \\ &= 0.00 + 0.00 \\ &= 0.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} SOEM &= \text{Maximum} [\text{Minimum} (SOTA - SOA, SOTM), 0] \\ &= \text{Maximum} [\text{Minimum} (0 - 30, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-30, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} FOEM &= \text{Maximum} [\text{Minimum} (FOTA - FOA, FOTM), 0] \\ &= \text{Maximum} [\text{Minimum} (0 - 15, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-15, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

3. Calculation of AADU

$$\begin{aligned} AADU &= \text{Maximum} [(EDAA(M-1) + GEDAM) - (TEDA - FMTA), 0] \\ &= \text{Maximum} [(182 + 30) - (320 - 0), 0] \\ &= \text{Maximum} [-108, 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

$$EDAM = GEDAM + AADE - AADU$$

$$\begin{aligned} &= 30 + 0 - 0 \\ &= 30.00 \text{ Days} \end{aligned}$$

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	EDAA(M-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 [(EDAA(M-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

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CASE 3: OUTAGES BEYOND THE ALLOWANCE

Other Assumed Values

Previous Months

	EDAM	SOTM	FOTM	FMTM
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	EDAA(M-1)	SOTA	FOTA	FMTA
	157	20	13	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 (20 - 30, 5), 0]
= Maximum [Minimum (-10, 5), 0]
= 0.00 Days

FOEM = Maximum [Minimum (FOTA - FOA, FOTM), 0]
= Maximum [Minimum (13 - 15, 3), 0]
= Maximum [Minimum (-2, 3), 0]
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAA(M-1) + GEDAM) - (TEDA - FMTA), 0]
= Maximum [(157 + 22) - (320 - 0), 0]
= Maximum [-141, 0]
= 0.00 Days

EDAM = GEDAM + AADE - AADU

= 22 + 0 - 0
= 22.00 Days

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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	EDAA(M-1)	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

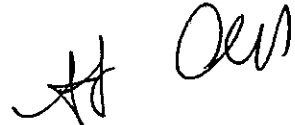
3. Calculation of AADU

AADU = Maximum [(EDAA(M-1)+ 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

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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
Current Month: December		0	0	0
TOTAL	EDAA(M-1)	SOTA	FOTA	FMTA
	318	10	7	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 (10 – 30, 0), 0]
= Maximum [Minimum (-20, 0), 0]
= 0.00 Days

FOEM = Maximum [Minimum (FOTA – FOA, FOTM), 0]
= Maximum [Minimum (7 – 15, 0), 0]
= Maximum [Minimum (-8, 0), 0]
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAA(M-1) + GEDAM) – (TEDA – FMTA), 0]
= Maximum [(318 + 30) – (320 – 0), 0]

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= Maximum [28, 0]
= 28.00 Days

EDA_M = GEDA_M + AADE – AADU
= 30 + 0 – 28
= 2.00 Days

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SCHEDULE 5

CALCULATION OF FULL LOAD EQUIVALENT OUTAGE DAYS

1. Full Load Equivalent Forced Outages Days Taken

The Full Load Equivalent Forced Outages Days Taken (FOT) for each Billing Period shall be calculated based on the following formula:

$$FOT = FOT_1 + FOT_2$$

$$FOT_1 = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (SQ_{ij} - MQ_{ij})}{(CC * Int)} \text{ for all } SQ > MQ$$

$$FOT_2 = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CFO_{ij})}{(CC * Int)}$$

$$CFO = CC - ACFO$$

Where:

FOT = Full Load Equivalent Forced Outages Days Taken

FOT₁ = Forced Outages days taken without revised available capacity

FOT₂ = Forced Outages days taken with revised available capacity

SQ = Scheduled Quantity equivalent to Ex-Ante Quantity or CC, whichever is lower

Ex-Ante Quantity = as defined in the WESM Rules

MQ = as determined in Appendix E

CC = as provided in Appendix E

CFO = capacity on Forced Outage

ACFO = Available Capacity resulting from Forced 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 determined in Appendix E

2. 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:

$$SOT = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CSO_{ij})}{(CC * Int)}$$

$$CSO = CC - ACSO$$

Where:

SOT = Full Load Equivalent Scheduled Outages Days Taken

CSO = capacity on Scheduled Outage
 ACSO = Available Capacity resulting from Scheduled Outage as declared in the Day-ahead Capacity Availability of the Power Supplier
 CC = as provided in Appendix E
 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:

$$FMT = FMT_1 + FMT_2$$

$$FMT_1 = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (SQ_{ij} - MQ_{ij})}{(CC * Int)} \text{ for all } SQ > MQ$$

$$FMT_2 = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CFM_{ij})}{(CC * Int)}$$

$$CFM = CC - ACFM$$

Where:

FMT = Full Load Equivalent Force Majeure Days Taken

FMT₁ = Force Majeure days taken without revised available capacity

FMT₂ = Force Majeure days taken with revised available capacity

SQ = Scheduled Quantity equivalent to Ex-Ante Quantity or CC, whichever is lower

Ex-Ante Quantity = as defined in the WESM Rules

MQ = as determined in Appendix E

CC = as provided in Appendix E

CFM = capacity on Force Majeure

ACFM = Available Capacity resulting from Force Majeure 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 determined in Appendix E

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SCHEDULE 6
Sample Computation of Replacement Power prior to Commercial
Operations Date (RP)

$$RP = RP_{USD} + RP_{PHP}$$

$$RP_{USD} = [(AFOM_{USD} * USCPI_i / USCPI_o * FX / 8760) * \Sigma RPQ] + \Sigma FPh$$

$$RP_{PHP} = \{[(ACF + AFOM_{PHP} * PCPI_i / PCPI_o) / 8760] + (VOM * PCPI_i / PCPI_o)\} * \Sigma RPQ$$

Agreed Values

Contract Capacity (CC)	kW	1,200,000
Annual Capacity Fee (ACF ₀)	PHP/kW-year	14,486.0000
Annual Fixed O&M Fee (AFOM _{USD})	USD/kW-year	30.3644
Annual Fixed O&M Fee (AFOM _{PHP})	PHP/kW-year	1,594.3749
Variable O&M Fee (VOM)	PHP/kWh	0.1114
Base US CPI (USCPI ₀)	(1982-84=100)	236.525
Base Philippine CPI (PCPI ₀)	(2006=100)	142.600

Assumed Values

Contract Year		Year 2
Contract Year Days (CYD)	Days	365
Billing Period		December 26, 20YY - January 25, 20YY+1
Billing Period Days (BPD)	Days	31
ΣRPQ	kWh	10,550,000
USCPI _i	(1982-84=100)	240.000
PCPI _i	(2006=100)	140.000
Newcastle Index (Fli)	USD/MT	50.38
Freight Price	USD/MMBtu	0.2800
Forex rate (FX)	PHP/USD	46.07
Commissioning Energy Charge (CEC)	PHP/kWh	1.5009

1. Calculation of Replacement Power Quantity (RPQ)

Trading Interval	WESM Ex-ante Price (PHP/kwh)	Meralco Nomination (kWh)	Commissioning Energy (kWh)	Replacement Power Quantity (kWh)	Atimonan BCQ Declaration (kWh)
1	1.3000	480,000	0	0	0
2	1.2000	480,000	0	0	0
3	1.1000	480,000	0	0	0
4	1.0000	480,000	0	0	0
5	1.5000	480,000	0	0	0
6	2.0000	480,000	0	480,000	480,000
7	2.5000	480,000	0	480,000	480,000
8	3.5000	480,000	250,000	230,000	480,000
9	4.0000	480,000	250,000	230,000	480,000
10	5.0000	1,200,000	500,000	700,000	1,200,000
11	6.0000	1,200,000	500,000	700,000	1,200,000
12	5.5000	1,200,000	500,000	700,000	1,200,000
13	5.7000	1,200,000	500,000	700,000	1,200,000
14	7.0000	1,200,000	500,000	700,000	1,200,000
15	6.8000	1,200,000	500,000	700,000	1,200,000
16	6.5000	1,200,000	500,000	700,000	1,200,000
17	6.0000	1,200,000	500,000	700,000	1,200,000
18	5.7000	1,200,000	500,000	700,000	1,200,000
19	5.5000	1,200,000	500,000	700,000	1,200,000
20	5.2000	1,200,000	500,000	700,000	1,200,000
21	4.0000	1,200,000	250,000	950,000	1,200,000
22	3.0000	480,000	0	480,000	480,000
23	1.4000	480,000	0	0	0
24	1.3000	480,000	0	0	0
Total		20,160,000	6,250,000	10,550,000	16,800,000

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2. Calculation of ΣFP_h

Hour	MFCC + MFFC (USD/MMBtu)	RPQ _h (kWh)	Load Factor (%)	GNPHRh (Btu/kWh)	FP _h (PHP)
1	2.4952	-	-	-	-
2	2.4952	-	-	-	-
3	2.4952	-	-	-	-
4	2.4952	-	-	-	-
5	2.4952	-	-	-	-
6	2.4952	480,000	40%	10,739.66	592,591.49
7	2.4952	480,000	40%	10,739.66	592,591.49
8	2.4952	230,000	19%	10,739.66	283,950.09
9	2.4952	230,000	19%	10,739.66	283,950.09
10	2.4952	700,000	58%	9,615.35	773,724.92
11	2.4952	700,000	58%	9,615.35	773,724.92
12	2.4952	700,000	58%	9,615.35	773,724.92
13	2.4952	700,000	58%	9,615.35	773,724.92
14	2.4952	700,000	58%	9,615.35	773,724.92
15	2.4952	700,000	58%	9,615.35	773,724.92
16	2.4952	700,000	58%	9,615.35	773,724.92
17	2.4952	700,000	58%	9,615.35	773,724.92
18	2.4952	700,000	58%	9,615.35	773,724.92
19	2.4952	700,000	58%	9,615.35	773,724.92
20	2.4952	700,000	58%	9,615.35	773,724.92
21	2.4952	950,000	79%	9,089.50	992,629.03
22	2.4952	480,000	40%	10,739.66	592,591.49
23	2.4952	-	-	-	-
24	2.4952	-	-	-	-
TOTAL		10,550,000			11,849,277.79

3. Calculation of Replacement Power Payment

$$\begin{aligned} RP_{USD} &= [(AFOM_{USD} * USCPI_i / USCPI_o * FX / 8760) * \Sigma RPQ] + \Sigma FP_h \\ &= [(30.3644 * 240.000 / 236.525 * 46.07 / 8760) * 10,550,000] + 11,849,277.79 \\ &= \text{PHP } 13,558,763.45 \\ \\ RP_{PHP} &= \{[(ACF + AFOM_{PHP} * PCPI_i / PCPI_o) / 8760] + (VOM * PCPI_i / PCPI_o)\} * \Sigma RPQ \\ &= \{[(14,486.00 + 1,594.3749 * 140.000 / 142.600) / 8760] + (0.1114 * 140.000 / 142.600)\} * 10,550,000 \\ &= \text{PHP } 20,485,036.40 \\ \\ RP &= RP_{USD} + RP_{PHP} \\ &= 13,558,763.45 + 20,485,036.40 \\ \\ &= \text{PHP } 34,043,799.85 \end{aligned}$$

Appendix F
LIST OF ACCEPTABLE BANKS

Initial 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)

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 =	1,825	$[1,000 * (1-15\%)^{(1,825/365)}]$		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 =	1,096	$[3,000 * (1-15\%)^{(1,096/365)}]$		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 =	1,825	$[2,000 * (1-15\%)^{(1,825/365)}]$		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.

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 has the meaning given to it in Section 6.2, below.

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 [•] 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, 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.

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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:

3.2.2 In case of discrepancies on the Provisional Invoice, reconciliation of nomination and Delivery of BCQs and Allowed Outages prior to issuance of a Final Invoice and payment;

3.2.3 coordination of maintenance schedules;

3.2.4 coordination of short range and long range forecasts of load and capabilities; and

3.2.5 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 Section 20.1.

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.

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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 Energy Sourcing Office
Address:	Meralco Center, Ortigas Avenue, Pasig City	Meralco Center, Ortigas 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

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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 (1st) 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 price and 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 price and quantity offers 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 nomination of price and quantity offers (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 the price and quantity offers, which must be consistent with the day-ahead nomination of Meralco, 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, provided that, should the Imbalance is the result of the Buyer's compliance with the Meralco's Price and Quantity Nomination in accordance with the WESM Rules, the same should be for the account of the Buyer.
- 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 Day-After 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

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shall ensure that such BCQ declaration is equal to the Metered Quantities of the Plant, 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 when the WEP is greater than the price offer stated in such day-ahead nomination of Meralco. In the 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 day-after 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 (28th) 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 its 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 9.2 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. 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 immediately inform Meralco 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). Power Supplier shall furnish Meralco a copy of any incident report that Power Supplier is required to submit to the DOE.
- 10.2 Any Energy Imbalance Fees imposed by the Market Operator as a result of the Forced Outage shall be for the account of Power Supplier.
- 10.3 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 so inform Meralco immediately.
- 10.4 Power Supplier shall keep track of the cumulative FOT days it has declared against its Forced Outage Allowance 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
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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
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Check Sum: -

Remark:

NOMINATED BY: ACKNOWLEDGED BY:

Firstname M. Surname
[Title]
[Name of Power Supplier]

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] 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
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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
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Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total for the month	-
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Remark:

NOMINATED BY:

Firstname M. Surname
[Title]
MERALCO

ACKNOWLEDGED BY:

Firstname M. Surname
[Title]
[Name of Power Supplier]

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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
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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
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Check Sum: -

Remark:

NOMINATED BY:

Firstname M. Surname
[Title]
[Name of Power Supplier]

ACKNOWLEDGED BY:

Firstname M. Surname
[Title]
MERALCO

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 of Week]	[Day of Week]	[Day of Week]	[Day of Week]	[Day of Week]	[Day of Week]	[Day of Week]
0000H-							
0100H-							
0200H-							
0300H-							
0400H-							
0500H-							
0600H-							
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1600H-							
1700H-							
1800H-							
1900H-							
2000H-							
2100H-							



2200H-										
2300H-										
Check Sum										

Remark:

NOMINATED BY:

ACKNOWLEDGED BY:

Firstname M. Surname
[Title]
[Name of Power Supplier]

Firstname M. Surname
[Title]
MERALCO

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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	1-Month	2-Month	3-Month	4-Month	5-Month	6-Month	7-Month	8-Month	9-Month
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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
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Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Total for the month	-
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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____



HOUR	Saturday - _____, 20____								Sunday - _____, 20____							
	BLOCK 1		BLOCK 2		BLOCK 3		BLOCK 4		BLOCK 1		BLOCK 2		BLOCK 3		BLOCK 4	
	MW	PRICE	MW	PRICE	MW	PRICE	MW	PRICE	MW	PRICE	MW	PRICE	MW	PRICE	MW	PRICE
0001-0100																
0101-0200																
0201-0300																
0301-0400																
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1701-1800																
1801-1900																
1901-2000																
2001-2100																

[illegible]

Remark:

NOMINATED BY:

ACKNOWLEDGED BY:

Firstname M. Surname{Title}MERALCO

Firstname M. Surname[Title][Name of Power Supplier]

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Ans

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-	
0200H-	
0300H-	
0400H-	
0500H-	
0600H-	
0700H-	
0800H-	
0900H-	
1000H-	
1100H-	
1200H-	
1300H-	
1400H-	
1500H-	
1600H-	
1700H-	
1800H-	
1900H-	
2000H-	
2100H-	
2200H-	
2300H-	
Check Sum	

Remark:

NOMINATED BY: ACKNOWLEDGED BY:

Firstname M. Surname
[Title]
[Name of Power Supplier]

Firstname M. Surname
[Title]
MERALCO

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SCHEDULE 8

FORM OF MERALCO'S DAY-AHEAD NOMINATION SCHEDULE

MANILA ELECTRIC COMPANY (MERALCO)

Nomination of Day-Ahead Price and Quantity Offers for [Name of Power Supplier]
For _____, 20__ ([Day of Week])

Hour	Block 1		Block 2		Block 3		Block 4		Block 5		Block 6		Block 7		Block 8	
	M	Pric	M	Pric	M	Pric	M	Pric	M	Pric	M	Pric	M	Pric	M	Pric
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

Firstname M. Surname

[Title]
MERALCO

[Title]
[Name of Power Supplier]

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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 2 below.

Payment Date shall have the meaning given to it in Section 3 below.

Provisional Invoice means any Provisional Invoice rendered according to Section 1.1 below.

Receipt means any Receipt issued according to Section 6 below.

2 Provisional Invoice

2.1 Any Invoice rendered by Power Supplier to Meralco 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.

2.2 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 (15th) 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 the 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 (200) 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

5.1 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 following accounts:

[account numbers/names]

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.

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FORM OF DIRECT AGREEMENT

NOTICE TO COUNTERPARTY

Date []

To: Manila Electric Company (**Counterparty**)

Re: Power Supply Agreement dated 26 Apr 2016 (the **Agreement**) between Counterparty and [], 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 Collateral 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 the Security Agreement dated [] (the **Assignment**) made between the Company and [*Name of Collateral Trustee*] (the **Collateral Trustee**) as Collateral Trustee on behalf of the Secured Parties, the Company has assigned to the Collateral 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 Collateral Trustee all of its rights and benefits under the Agreement (which assignment shall become effective upon the Collateral 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 Collateral 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.

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4. The Company and the Collateral Trustee have agreed that:
- (i) subject to the assignment provision under the Agreement (and Section 2.02 and 2.03 of the Assignment) and upon the issuance of the Transfer Notice, the Substituted Party shall be bound by all the terms and conditions of the Agreement and shall, from and after such time, 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 "[Name of Collateral Trustee], for the account of [], Inc." or such other account as the Collateral Trustee may otherwise specify to Counterparty from time to time.
5. We request you:
- (i) to give to the Collateral 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 Collateral 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 New York.
8. The terms of this notice and the Direct Agreement shall remain in effect until the Collateral 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 Collateral Trustee.

[], INC.

By: _____

an 

Name:
Title:

By: _____
Name:
Title:

**[Name of Collateral Trustee],
as Collateral Trustee on behalf of the Secured Parties**

By: _____
Name:
Title:

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.

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ATTACHMENT A TO THE NOTICE TO COUNTERPARTY

Form of Transfer Notice to Counterparty
after the Effectiveness of Transfer/Novation

Date []

To: Manila Electric Company
Attention: [Name and position of responsible officer]
(Counterparty)

Re: Power Supply Agreement dated 26 Apr 2016 (the Agreement) between Counterparty
and [], INC. (the Company)

Dear Sirs,

We refer to the Security Agreement made between ourselves and the Company dated []
(the Assignment). We hereby give you notice that the conditional transfer and novation under
the Assignment became effective on _____.

From the said date, we designate [the Substituted Party] (the Substituted Party) to assume by
way of transfer and novation all rights and obligations of the Company under the Agreement,
and the Substituted Party agreed to be bound by all the terms and conditions of the Agreement
as same as the Company.

For and on behalf of the Collateral Trustee

[NAME OF COLLATERAL TRUSTEE]

By: _____
Name: _____
Title: _____

For and on behalf of the Substituted Party

[Name of the Substituted Party]

By: _____
Name: _____
Title: _____

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ATTACHMENT B

Form of REPLY

Date []

To: [Name of Collateral Trustee] (the **Collateral Trustee**)

From: Manila Electric Company (**Counterparty**)

Re: Power Supply Agreement dated 26 Apr 2016 (the **Agreement**) between Counterparty and [], 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 Collateral 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 Collateral 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

(a) require any consent, approval, authorization or permit which has not been obtained,

(b) violate any provision of any law, rule, regulation, cabinet resolution, order, writ, judgment, injunction, decree, determination or award which applies to Counterparty,

(c) 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

- (d) 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

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 Collateral 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 [], 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 Collateral 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 Collateral 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 Collateral Trustee or such Substituted Party as the Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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 Collateral 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, 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 Collateral 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 Collateral Trustee and to the extent allowed by the governing law, enter into a new agreement with such Substituted Party as the Collateral Trustee may designate (including the purchaser or other transferee of the rights and obligations of the Company or the Collateral 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 Collateral Trustee.

For and on behalf of
Manila Electric Company

By: _____
Name: _____
Title: _____

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 Meralco 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. Meralco 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 Meralco 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 Meralco 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 Meralco 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 Meralco. 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 Meralco

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 Meralco 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 Meralco shall have the right to dispute the results of the test. If the test results are not acceptable to Meralco, 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 Meralco.

- 6.3 The results of such re-test shall be notified to Meralco 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 Meralco shall have the right to dispute the results of the re-test. If the re-test results are not acceptable to Meralco, 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 Meralco 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.

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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 Meralco 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.

5.4 **[Not Used]**

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 (O₂) 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 O₂ 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 1 Quart each	30 min.	
Bottom Ash	Drag chain conveyor	Sampler 1 Quart each	30 min.	Use hot material gloves and boots
Fly Ash	ESP Hoppers	Sampler 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) duplicate 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)

Πf_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,

$P_{\text{meas}} = P_{\text{corrected, generator}} - P_{\text{measured, aux}} - P_{\text{transformer losses}} - P_{\text{line losses}}$

And creating the new equation,

$P_{\text{corrected, generator}} = P_{\text{measured, generator}} \times \Pi \alpha_j$

So that becomes,

$P_{\text{meas}} = \{P_{\text{measured, generator}} \times \Pi \alpha_j\} - P_{\text{measured, aux}} - P_{\text{transformer losses}} - P_{\text{line losses}}$

Note, this is the reason why P_{meas} cannot be the directly measured net power.

Since,

- $P_{\text{measured, aux}}$ is calculated using measured gross and measured net MW, $P_{\text{transformer losses}}$ are inherently included in $P_{\text{measured, aux}}$
- $P_{\text{measured, aux}} = P_{\text{measured, generator}} - P_{\text{measured net}}$
- $P_{\text{line losses}}$ 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"

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
ATIMONAN ONE ENERGY, INC.
(A1E), WITH MOTION FOR
CONFIDENTIAL TREATMENT OF
INFORMATION

ERC CASE NO. 2016 – __ RC

MANILA ELECTRIC COMPANY
(MERALCO) AND ATIMONAN ONE
ENERGY, INC.,

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 4th Floor, Technical Services Building, MERALCO Compound, Ortigas Avenue, Pasig City, who is an employee of the Manila Electric Company ("MERALCO") as the Head of the Energy Sourcing Office, was conducted by Atty. Raymond B. Yap, counsel for the Applicant, at the 7th Floor, Lopez Building, Ortigas Avenue, Pasig City, this April 26, 2016.

The testimony of Mr. Ciprinilo C. Meneses is being offered to prove the following:

1. He is employed with MERALCO as the Head of the Energy Sourcing Office;
2. The necessity for entering into a Power Supply Agreement ("PSA") with A1E, 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. All other matters pertinent to this Joint Application.

I, **CIPRINILO C. MENESES**, of legal age, Filipino, with office address at 4th Floor, Technical Services Building, MERALCO Compound, Ortigas Avenue, Pasig City, after being sworn to in accordance with law, hereby depose and state:

Q1: What are your educational and professional qualifications?

A1: 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 in MERALCO?

A3: I have been employed in 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 the Company'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 between Manila Electric Company (MERALCO) and Atimonan One Energy, Inc. (A1E) with Motion for Confidential Treatment of Information"* jointly filed by Applicants MERALCO and A1E?

A5: Yes, I am.

Q6: Why are you familiar with present case?

A6: 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 A1E.

Q7: For what purpose is your Judicial Affidavit being taken?

A7: My Judicial Affidavit is being taken in support of the aforesaid Joint Application for the Approval of the PSA between MERALCO and A1E and the prayer for the immediate approval of the same.

Q8: What are the salient features of the PSA between MERALCO and A1E?

A8: The salient features of the PSA between MERALCO and A1E are as follows:

"2.2 Term of Agreement

2.1.1 [sic] Subject to Article 3, this Agreement shall become effective on the Effective Date.

2.1.1.1 [sic] The term of this Agreement (the "Term") shall commence on the Commercial Operations Date (Unit 1), and shall expire on the date falling twenty (20) years and six (6) months thereafter xxx xxx

xxx xxx xxx

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 3.1.1 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 issued an ERC Final Approval, 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 shall have occurred.

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

within ninety (90) Days from the Acceptance Date (the "Required Financial Completion Date").

xxx xxx xxx

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that the Plant shall achieve Commercial Operations Date fifty-eight (58) months from the Commencement Date for Unit 1 (the "Scheduled Commercial Operations Date (Unit 1)") and six (6) months thereafter for Unit 2 (the "Scheduled Commercial Operations Date (Unit 2)").

3.3.2 The Plant shall achieve Commercial Operations Date for each Unit of the Plant upon the delivery of the Power Supplier of the documents enumerated below, in form and substance satisfactory to Meralco:¹

xxx xxx xxx

3.4 Early Occurrence of the Commercial Operations Date

3.4.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Scheduled Commercial Operations 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.

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

- (a) Consider that the Scheduled Commercial Operations Date shall occur on the Early Commercial Operations Date or on such other date as the Parties may agree; or

¹ With respect to Commercial Operations Date of Unit 1 and Unit 2:

- (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 Instrumentalities and third parties needed for the operation Meralco, xxx;
- (d) a Commercial Operations Date Certificate; and
- (e) Power Supplier Certification that the insurances required under this Agreement relevant for at least the first Contract Year have been obtained.

- (b) Elect to have Power Supplier deliver, on a non-firm basis during the Interim Supply Period and until the occurrence of the Scheduled Commercial Operations Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price.

xxx xxx xxx

6.1 Supply of Power

Subject to the terms and conditions of this Agreement:

6.1.1 From the Commercial Operations Date for each Unit of the Plant until the expiration of the Term or earlier termination of this Agreement, 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) deliver and sell 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.

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

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent:

- (a) 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; or
- (b) provide Meralco with capacity and/or electrical energy from any source other than the Plant.

xxx xxx xxx

Article 9 Outages

9.1 Outage Allowances and Replacement Power

9.1.1 After Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages of thirty (30) Full Load Equivalent Outage Days ("Full Load Equivalent Scheduled Outage Allowance Days") and Forced Outages of fifteen (15) Full Load Equivalent Outage Days ("Full Load Equivalent Forced Outage Allowance Days") each Contract Year; provided that no more than four (4) times during the Term, Power Supplier shall be entitled to an additional twenty (20) Full Load Equivalent Outage Days to undertake major repair, overhaul and maintenance of the Plant not more frequent than once every four (4) years ("Full Load Equivalent Major Maintenance Outage Allowance Days"); provided further that the first Major Maintenance Outage shall occur no earlier than the fourth (4th) year after Commercial Operations Date, and the Major Maintenance Outage of Unit 1 and Unit 2 shall not occur at the same time.

9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days, Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities; provided that, upon service of a written notice to Meralco no later than ninety (90) Days prior to a Scheduled Outage or Major Maintenance Outage, Power Supplier shall have the option to purchase Replacement Power during Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Major Maintenance Outages within the Full Load Equivalent Major Maintenance Outage Allowance Days, which Replacement Power shall be declared as BCQ and paid by Meralco at five percent (5%) lower than the Price ("Replacement Power Price").

xxx xxx xxx

Article 10 Assignment or Transfer of Contract Capacity

10.1 Meralco shall, also 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 and Associated Energy that is no longer required by Meralco to any of its business segments or wholly-owned Affiliates without the prior consent of the Power Supplier.

Meralco shall also be entitled to Transfer its rights and obligations to purchase a portion of Contract Capacity and

Associated Energy that is no longer required by Meralco 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. xxx

10.3 Reduction in Contract Capacity and Associated Energy

10.3.1 Subject to the provisions of Section 10.3.2 below, Meralco shall, from time to time, be entitled to a reduction in the Contract Capacity and Associated Energy (the "Reduction in Contract Capacity and Associated Energy") equivalent to the reduction in the demand of its captive customers by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

10.3.2 Meralco shall give a written notice to the Power Supplier of such reduction at least five (5) Days prior to the first Day of the next Billing Period. Upon receipt by Power Supplier of such written notice, Meralco shall cease to have any rights and obligations under this Agreement in respect of such Reduction in Contract Capacity and Associated Energy.

xxx xxx xxx

Article 11 Billing and Payment

xxx

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 xxx xxx

Article 12 Taxes, Fees and Costs

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") becomes 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 xxx xxx

Article 14 Covenants

xxx

14.3 ERC Approval

14.3.1 Subject to the non-occurrence of the Longstop Date, upon receipt of the ERC Final Approval, Meralco shall provide a copy of such ERC Final Approval to Power Supplier. Power Supplier shall have ten (10) Days from the date of receipt from MERALCO of such 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.

14.3.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration. Any order on a motion for reconsideration shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.3.

14.3.3 Following (i) a written notice of acceptance from Power Supplier with respect to the ERC Final Approval (including upon reconsideration under Section 14.3.2 above), or (ii) the lapse of the period referred to in Section 14.3.1 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 ("Acceptance Date"), 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.

xxx xxx xxx

Article 17 **Force Majeure**

xxx

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 xxx xxx

Article 18 **Events of Default and Termination**

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 in 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:

xxx

If, within one hundred eighty (180) Days after receipt from Meralco of written notice of Power Supplier Event of Default by Power Supplier (the "Curing Period"), Power Supplier Event of Default has not been remedied by Power Supplier, Meralco may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law

or in equity.

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 in or is accompanied by an actual failure by Meralco to receive, and pay for, the Contract Capacity and Associated Energy in accordance with this Agreement:

xxx

If, within one hundred eighty (180) Days after receipt from Power Supplier of written notice of Meralco Event of Default by Meralco (the "Curing Period"), Meralco Event of Default has not been remedied by Meralco, Power Supplier may, subject to a Direct Agreement, terminate this Agreement and pursue any remedy available to it under this Agreement, at law or in equity.

xxx

A copy of the PSA between MERALCO and A1E, including its attachments, is attached to the Joint Application as Annex "A".

Q9: What is the Contract Capacity and/or Associated Energy contracted under the PSA with A1E?

A9: The PSA is for the purchase of 1,200 MW Contract Capacity and Associated Energy.

Q10: What is the effective rate under the PSA?

A10: Given a certain set of assumptions, the annual effective rate under the PSA is PhP3.7587 per kWh.

Q11: If approved, how much will be the simulated delivered price under the PSA?

A11: Given a similar set of certain assumptions provided in getting the effective rate, the simulated delivered price under the PSA would result in the reduction of MERALCO's generation charge by about PhP0.7799 per kWh.

Q12: How did you derive the effective rate and simulated delivered rate?

A12: I prepared a Rate Impact for the A1E and MERALCO PSA.

Q13: Where is this Rate Impact document that you prepared?

A13: I have it with me and it is attached herein as **ANNEX "A."**

Q14: Do you affirm and confirm the truthfulness and veracity of your answers to the questions asked?

A14: Yes.

IN WITNESS WHEREOF, I have hereunto affixed my signature this 26 April 2016 at Pasig City, Philippines.



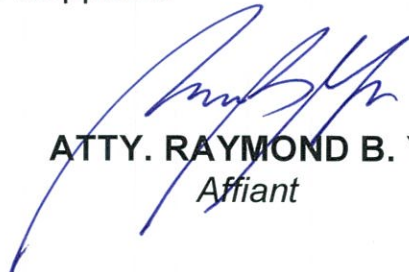
CIPRINILO C. MENESES
Affiant

ATTESTATION

I, **ATTY. RAYMOND B. YAP**, of legal age, Filipino, with office address at 7th 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 26 April 2016 at Pasig City, Philippines.



ATTY. RAYMOND B. YAP
Affiant

SUBSCRIBED AND SWORN TO before me this APR 27 2016 by Engr. Ciprinilo C. Meneses and Atty. Raymond B. Yap, exhibiting their SSS ID with Nos. 03-6515286-8 and 3411178612, respectively, as proof of their identities.

Doc. No.: 191 ;
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
7th Floor, Lopez Bldg., Ortigas Ave., Pasig City

BILLING COMPONENT	UNIT	BASE RATE ^[a]	CPI Adj Factor ^[b]	BILLING DETERMINANT ^[i]	AMOUNT (PHP)
A. Capacity Payment (MCP)					
Peso Portion	(Php/kW-yr) ^[b]	14,486.0000		1,200,000 (kW)	17,383,200,000.00
B. Fixed O&M Payment (MFOM)					
US Dollar Portion	(USD/kW-yr) ^[b]	30.3644	1.000000	1,200,000 (kW)	1,678,665,489.60
Peso Portion	(Php/kW-yr) ^[b]	1,594.3749	1.000000	1,200,000 (kW)	1,913,249,880.00
C. Fuel Payment (MFP)					
US Dollar Portion	(USD/kWh) ^[c]	0.0207		8,409,600,000 (kWh)	8,011,098,700.79
D. Variable O&M Payment (MVOM)					
Peso Portion	(Php/kWh)	0.1114	1.000000	8,409,600,000 (kWh)	936,829,440.00
E. Excess Energy Payment (MEEP)					
Peso Portion	(Php/kWh)	-		(kWh)	-
F. Interconnection Facilities Payment (MIFP)					
Capital Recovery	(Php/kW-yr) ^[b]	204.0530		1,200,000 (kW)	244,863,600.00
Fixed O&M	(Php/kW-yr) ^[b]	10.5123	1.000000	1,200,000 (kW)	12,614,760.00
G. Reimbursable Cost Payment (RCP) ^[d]					1,428,791,040.00
TOTAL PAYMENT	(Php)				31,609,312,910.39
Effective Rate at Plant Gate	(Php/kWh)				3.7587
WESM Line Rental Rate ^[e]	(Php/kWh)				0.0910
Delivered Rate	(Php/kWh)				3.8498

Effective Cost at WESM Price ^[f]	(Php/kWh)	7.0640
Increase / (Decrease) over WESM Price	(Php/kWh)	(3.2143)
Meralco Captive Energy Demand ^[g]	(kWh)	34,658,621,088
Increase / (Decrease) in Generation Cost	(Php)	(27,030,635,881.69)
Increase / (Decrease) in Generation Cost	(Php/kWh)	(0.7799)

NOTE:

- ^[a] Base Rates as set forth in Schedule 1 of Appendix E of the PSA
- ^[b] Annual Capacity Rate, Annual Fixed O&M Rate, and Annual Interconnection Facilities Rate are converted into monthly rates by applying the formulas shown in Appendix E of the PSA
- ^[c] 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)
- ^[d] Reimbursable Payments (pass through costs) based on estimated taxes
- ^[e] Assumed estimated A1E line rental rate
- ^[f] Cost if equivalent volume of A1E was sourced from the WESM based on forecast average Jan - Dec 2021 hourly prices
- ^[g] Meralco Captive Energy Demand based on 2021 forecast
- ^[h] Assumed no CPI escalation
- ^[i] Energy Payments based on 80.00% plant capacity factor


Prepared by: Ryan S. Morales


Reviewed by: Ciprinillo Meneses



REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
SEC Building, EDSA, Greenhills
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS201300427
COMPANY TIN 008-444-777

ANNEX "C"

CERTIFICATE OF INCORPORATION

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the Articles of Incorporation and By-Laws of

LUZON NATURAL GAS ENERGY CORPORATION

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), 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 11th day of January, Twenty Thirteen. PM

www.sec.gov.ph

User Name: 6secexpresd

FERDINAND B. SALES

Acting Director

Company Registration and Monitoring Department

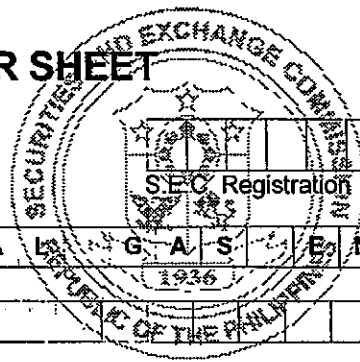
For SEC use only:
E40100 (PSC AS reserved)

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Page <u>1</u> of <u>13</u> pages	3
Verified by: <u>L. ALDAY</u> Date Issued: <u>APR 07 2013</u>	

Mr. Undero

1-9
9:00

COVER SHEET



SEC Registration Number
L U Z O N N A T U R A L G A S E N E R G Y
C O R P O R A T I O N

(Company's Full Name)

8 T H F L O O R R O C K W E L L
B U S I N E S S C E N T E R T O W E R 1
O R T I G A S A V E . , P A S I G C I T Y
(Business Address: No. Street City / Town / Province)

Martin C. Lopez 632-422-1900
Contact Person Company Telephone Number

1 2 3 1
Month Day Fiscal Year FORM TYPE Month Day

Secondary License Type, if Applicable

Dept. Requiring this Doc. Amended Articles Number/Section

SIX (6) Total Amount of Borrowings
Total No. of Stockholders Domestic Foreign

To be accomplished by SEC Personnel concerned

File Number LCU

Date: 6-4-2016 Time: 1:55:23 PM
Document I.D. Cashier

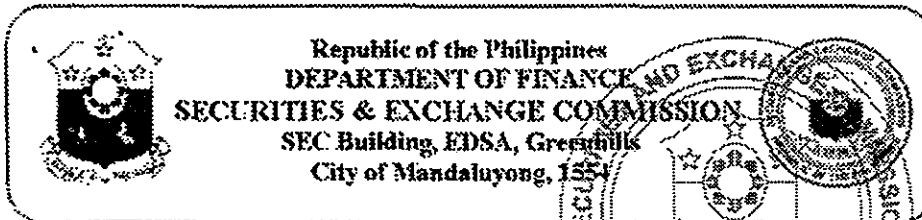
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Page 2 of 73 pages
Verified by L. ALDAY Date Issued

**PAYMENT ASSESSMENT FORM**

No. 01092013-574268

DATE 01/09/2013	RESPONSIBILITY CENTER (DEPARTMENT) GRMD	
PAYOR: LUZON NATURAL GAS ENERGY CORP. PASIG CITY		
NATURE OF COLLECTION	ACCOUNT CODE	AMOUNT
REGISTRATION	606	800,000.00
LRF (A0823)	131	8,010.00
BY LAWS	606	500.00
TOTAL AMOUNT TO BE PAID		Php 808,510.00
Assessed by: 11AMIL20		
Machine Validation: CS201300427		

Date: 6-4-2016 Time: 1:55:24 PM

www.sec.gov.ph

User Name: 6secexpressdk

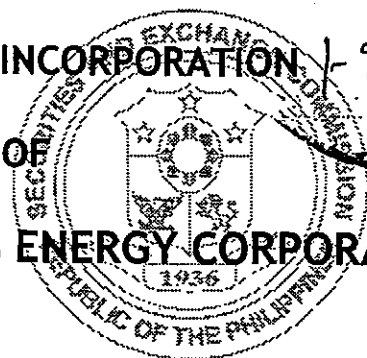
<http://150.150.150.130:8686/secireport/epayment/downloadforms.sx>

1/9/2013

Page 3 of 73 pages		3
Verified by L. ALDAY		Date Issued

APR 14 2016

ARTICLES OF INCORPORATION 1-7-12
OF
LUZON NATURAL GAS ENERGY CORPORATION



KNOW ALL MEN BY THESE PRESENTS:

WE, the undersigned incorporators, all of legal age and all of whom are residents of the Republic of the Philippines, have this day voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the Republic of the Philippines.

AND WE HEREBY CERTIFY:

FIRST: The name of this Corporation shall be:

LUZON NATURAL GAS ENERGY CORPORATION

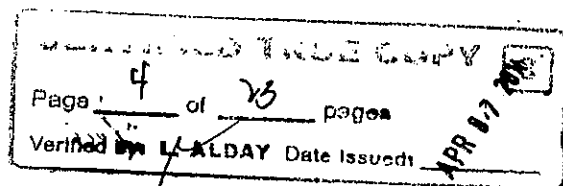
SECOND: That the purposes for which the said Corporation is formed are:

PRIMARY PURPOSE

To develop, acquire, build, construct, erect, assemble, commission, install, own, maintain, operate, rehabilitate and manage all necessary and convenient facilities, plants, buildings, structures, equipment, machineries, sub-stations, transmission lines, poles, wires and other properties used in the generation, delivery, and/or transmission of electricity, including but not limited to natural gas-fired power generating plants, gas receiving terminal, regasification facility, gas-turbine and other plants and facilities used in connection therewith; to carry on the general business of generation, delivery and/or transmission of electric energy and other sources for lighting and power purposes and wholesale of electricity to power companies, distribution utility companies, electric cooperatives, retail electricity suppliers, aggregators, and other customers to such extent, and in such manner as may be permitted by applicable laws and regulations;

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and to enter into contracts either alone or jointly with other companies or persons for the purpose of carrying out the business under which this Corporation is created.

SECONDARY PURPOSES

1. To acquire or obtain from the pertinent government agency, national or local, or any corporation, partnership or person, such charter, contract, franchise, privilege, exemption, license, permit, registration, authority, and concession, as may be reasonably necessary to carry out the business of the Corporation and accomplish the purposes for which it was created;

2. To purchase, acquire, own, lease, sell and convey, within the limits allowed by law, real properties such as lands, buildings, substations, plants, warehouses, facilities, equipments, machineries, and other personal properties as may be reasonably necessary or incidental to the conduct of the business of the Corporation;

3. To acquire, lease, hold, occupy or use rights-of-way, foreshore leases and easements on such public or private properties, in accordance with the requirements of law and regulations, as may be required in the conduct of business;

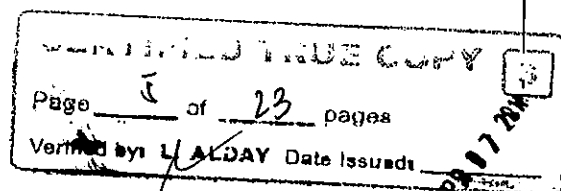
4. To invest in, hold, own, purchase, acquire, lease, contract, operate, develop, manage, grant, sell, exchange, or otherwise dispose of real and personal properties of every kind and description, tangible or intangible, including shares of stock, bonds and other securities of any power generation corporation, partnership, association, firm or entity, domestic or foreign, for any legal purpose or purposes the same may have been organized;

5. To borrow or raise funds necessary to meet the financial requirements of its business through the incurrence of bank loans, credit facilities, and the issuance of promissory notes, bills of exchange, bonds and other evidence of indebtedness, and as necessary or required to secure repayment thereof by mortgage, pledge, deed of trust, trust receipt, letter of credit, surety, guaranty or lien upon the properties of the Corporation or to issue, subject to compliance with pertinent requirements of law and regulations, shares of its capital stock, debentures and other evidence of indebtedness in payment for the facilities, equipment, machineries and other properties acquired by the Corporation or for money loaned in the prosecution of its lawful business;

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6. To open and maintain bank deposits and to invest in financial instruments, products and services;



7. To enter into, negotiate, or compromise for any contract or agreement, and collect and retain money and other properties in respect of obligations, liabilities, claims, penalties, losses, damages, charges, suits, expenses incurred or suffered by reason of or in relation to the businesses of the Corporation;

8. To enter into or engage in build-operate-transfer arrangements involving power generation and/or transmission with the government, its branches, agencies and instrumentalities, as well as private entities;

9. To aid, in any lawful manner, in the creation, organization, reorganization, merger or consolidation, management, rehabilitation and liquidation of persons, firms, associations, corporations, partnerships and other entities engaged in generation and/or distribution of electricity and related businesses;

10. To act as advisor, contractor or principal in the business of developing, constructing, operating, repairing, rehabilitating and maintaining of power plants and systems and other generating stations and facilities;

11. To enter into any lawful agreement for profit sharing, combination of interests or reciprocal concession or cooperation, with any corporation, association, partnership, entity, person or entity, private or public, domestic or foreign, in the conduct of any business or transaction necessary, convenient or incidental to the accomplishment of the purposes of this Corporation;

12. To establish and operate one or more extension offices and to conduct any or all of its operations and business anywhere in the Philippines, subject to such limitations as may be prescribed by law; and

13. To conduct and transact any and all lawful activities, to do or cause to be done any one of the acts and things herein set forth as its purposes, within or without the Philippines, and in any or all foreign countries, subject to reciprocity, and to do everything necessary, desirable or incidental to the accomplishment of the purposes or the exercise of any or one or more of the powers herein enumerated, or which shall at any time appear convenient or beneficial to the Corporation.

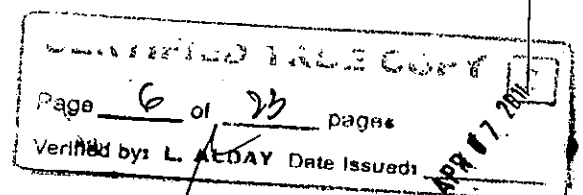
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THIRD: That the place where the principal office of the Corporation is at the 8th Floor of Rockwell Business Center, Tower I, Ortigas Avenue, Pasig City.

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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 are as follows:

NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 Mckinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal Street, Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines
Ricardo V. Buencamino	Filipino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines

SIXTH: That the number of DIRECTORS of the said Corporation shall be five (5) 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:

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Page 7 of 13 pages	
Verified by: L. ALDAY Date Issued: APR 07 2016	

NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 McKinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal St., Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines
Ricardo V. Buencamino	Filipino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines

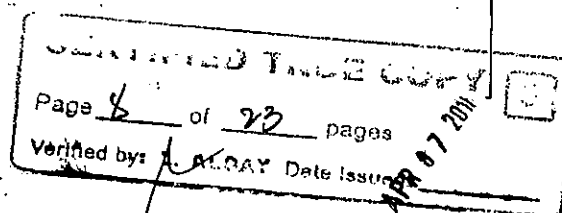
SEVENTH: That the authorized capital stock of the Corporation is FOUR HUNDRED MILLION PESOS (Php400,000,000.00) in lawful money of the Philippines, divided into Four Million (4,000,000) shares with the par value of One Hundred Pesos (Php100) per share.

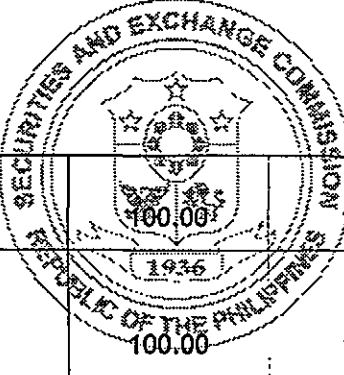
EIGHTH: That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

Date: 6-4-2016 Time: 1:55:29 PM

Name	Nationality	No. of Shares Subscribed	Amount Subscribed	Amount Paid
PowerGen Corporation	Filipino	999,995	99,999,500.00	24,999,500.00

www.smeralco.v.ph





Oscar S. Reyes	Filipino	1	100.00	100.00
Aaron A. Domingo	Filipino	1	100.00	100.00
Jesus P. Franciso	Filipino	1	100.00	100.00
Betty C. Siy-Yap	Filipino	1	100.00	100.00
Ricardo V. Buencamino	Filipino	1	100.00	100.00

TOTAL 1,000,000 100,000,000.00 25,000,000.00

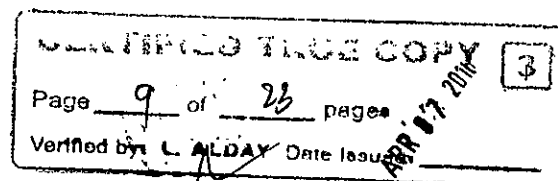
NINTH: That no transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of corporation and this restriction shall be indicated in the stocks certificates issued by the corporation.

TENTH: That MR. RAFAEL L. ANDRADA 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 subscribers.

Date: 6-4-2016 Time: 1:55:29 PM.

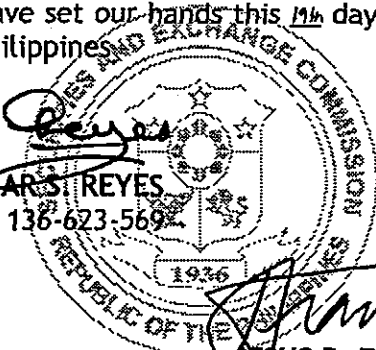
ELEVENTH: That the incorporators undertake to change the name of the Corporation as herein provided or as amended thereafter immediately upon receipt of notice or directive from the Securities and Exchange Commission that another corporation, partnership, or person has acquired a prior right to the use of that name or that the name has been declared misleading, deceptive, confusingly similar to a registered name, or contrary to public morals, good customs or public policy.

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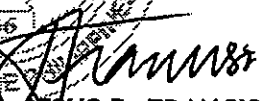


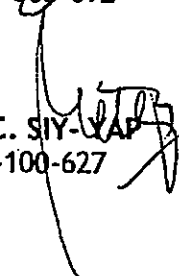
IN WITNESS WHEREOF, we have set our hands this 14 day of October
2012 at Pasig City, Metro Manila, Philippines

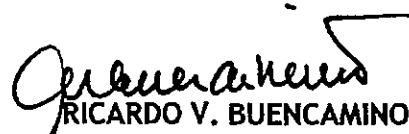

OSCAR S. REYES
TIN: 136-623-5692




AARON A. DOMINGO
TIN: 170-803-692


JESUS P. FRANCISCO
TIN: 100-748-716


BETTY C. SIY
TIN: 102-100-627


RICARDO V. BUENCAMINO
TIN: 100-748-283

Signed In The Presence Of:


WILLIAM S. PAMINTUAN


RAFAEL L. ANDRADA

Date: 6-4-2016 Time: 1:55:30 PM

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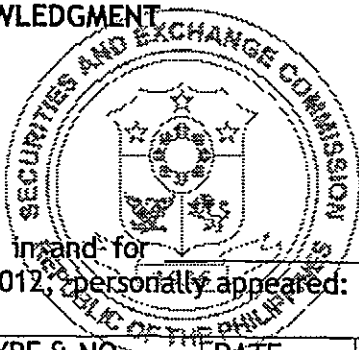
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Page <u>10</u> of <u>73</u> pages	
Verified by: <u>L. ALDAY</u> Date Issued: <u>APR 07, 2016</u>	

ACKNOWLEDGMENT

REPUBLIC OF THE PHILIPPINES)
S.S.



BEFORE ME, a Notary Public in and for
Philippines, this 1 day of October 2012, personally appeared:

NAME	I.D. TYPE & NO.	DATE OF EXPIRY	PLACE OF ISSUE
OSCAR S. REYES	Passport No. XX2143931	09-28-13	Manila
AARON A. DOMINGO	Passport No. EB1677351	01-07-16	Manila
JESUS P. FRANCISCO	Passport No. XX0524656	02-12-13	Manila
BETTY C. SIY-YAP	Passport No. EA0009230	12-07-14	Manila
RICARDO V. BUENCAMINO	Passport No. XX2825523	01-19-14	Manila

all known to me and to me known to be the same persons who executed the foregoing ARTICLES OF INCORPORATION, consisting of eight (8) pages, including this Acknowledgment page, 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.

Doc. No. 402 ;
Page No. 83 ;
Book No. III
Series of 2012.

Date: 6-4-2016

ATTY. FREEDOM M. NAVARRO
NOTARY PUBLIC
PASIG, PATEROS, TAGUIG, AND SAN JUAN
ISSUED ON FEBRUARY 10, 2012 AT PASIG CITY
APPOINTMENT NO. 77 (2012-2013)
ROLL NO. 81818 / I.D. NO. 878018 / 8181818 RNM CHAPTER
P.I.D. NO. 7578238 / 8110712 PASIG CITY
5TH FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY

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User Name: 6secexpressdc

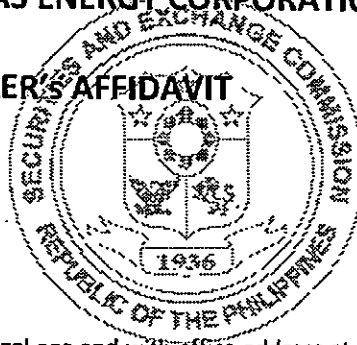
VERIFIED TRUE COPY

Page 11 of 23 pages

Verified by: L. A. DAY Date Issued: APR 04 2016

LUZON NATURAL GAS ENERGY CORPORATION

TREASURER'S AFFIDAVIT



REPUBLIC OF THE PHILIPPINES)
Pasig City, M. M.) S.S

I, **RAFAEL L. ANDRADA**, Filipino, of legal age and with office address at the 11th floor Lopez Building, Meralco Compound, Ortigas Avenue, Pasig City, M. M., after having duly sworn in accordance with law, hereby depose and say:

I have been elected by the subscribers of Luzon Natural Gas Energy Corporation as Treasurer thereof, to act as such until my successor has been duly elected and qualified in accordance with the By-laws of the Corporation, and as Treasurer, I hereby certify under oath that at least twenty-five percent (25%) of the authorized capital stock of the Corporation has been subscribed and at least twenty-five percent (25%) of the subscription has been paid, and received by me in cash for the benefit and credit of the Corporation.

This is also to authorize the Securities and Exchange Commission and Bangko Sentral ng Pilipinas to examine and verify the deposit in BANCO DE ORO, located at the Meralco Compound, Ortigas Avenue, Pasig City, in my name as Treasurer-in-Trust for LUZON NATURAL GAS ENERGY CORPORATION in the amount of TWENTY-FIVE MILLION PESOS ONLY (PHP25,000,000.00), Philippine currency, 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 the incorporation, this will serve as authority to verify and examine the same. The representative of the Securities and Exchange Commission is also authorized to examine the pertinent books and records of accounts of the Corporation as well as all the supporting papers to determine the utilization and disbursement of the said paid-up capital.

In case the said paid-up capital is not deposited or withdrawn prior to the approval of the articles of the incorporation, I, in behalf of the above-named Corporation, waive our right to a notice and hearing in the revocation of our Certificate of Incorporation.


RAFAEL L. ANDRADA
Treasurer-in-Trust

TIN: 127-415-866

SUBSCRIBED AND SWORN to before me this OCT 09 2012 day of 2012 in
Date: 8-4-2016 Time: 1:55:32 PM
affiant exhibiting to me his

Doc. No. 380
Page No. 67
Book No. III

Series of 2012

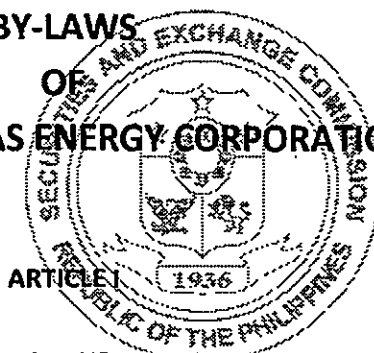
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User Name: 6secexpressd


ATTY. FREEDOM IANFE M. NAVIDAD
NOTARY PUBLIC
PASIG, PATEROS, TAGUIG, AND SAN JUAN
ISSUED ON FEBRUARY 20 2012 AT PASIG CITY
APPOINTMENT NO. 77 (2012-2013)
ROLL NO. 53555 / REP. NO. 879916 / 0102012 RSM CHAPTER
PTR NO. 7575332 / 0104012 PASIG CITY
2nd FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY

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Verified by <u>L. A. DAY</u> Date Issued <u>8-17-2016</u>	

BY-LAWS
OF
LUZON NATURAL GAS ENERGY CORPORATION



SUBSCRIPTION, ISSUANCE AND TRANSFER OF SHARES

Section 1. Subscriptions - Subscribers to the capital stock of the Corporation shall pay the value of the stock in accordance with the terms and conditions prescribed by the Board of Directors. Unpaid subscriptions shall not earn interest unless determined by the Board of Directors.

Section 2. Certificate - The stockholder shall be entitled to one or more certificates for 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 certificate shall be signed by the President, countersigned by the Secretary or Assistant Secretary, 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, assigned or pledged by delivery of the certificates duly indorsed by the stockholder, 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 Secretary shall cancel the stock certificates and issue new certificates 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 stock certificate 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.

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Page <u>13</u> of <u>22</u> pages
Verified by <u>L. ALDAY</u> Date Issued <u>17 Oct 2016</u>

Section 5. **Addresses** - Every stockholder and transferee, or any proxy, shall furnish the Secretary in writing, with an address at which notice of meeting and all other notices from any officer of the Corporation may be served upon or mailed to him, and in default thereof, notice may be addressed to him either at his last known address or at the office of the Corporation.

ARTICLE II

MEETINGS OF STOCKHOLDERS

Section 1. **Annual/Regular Meetings** - The annual/regular meetings of stockholders of the Corporation, for the election of Directors and for the transaction of such other business as may properly come before the meeting, shall be held at the principal office of the Corporation or at such place as may be fixed by the Board of Directors or the President, and specified on the notice, shall be on the **third (3rd) Monday of May** of each and every year. If the said day is a holiday, then on the next working day.

Section 2. **Special Meetings** - Special meetings of stockholders, for any purpose or purposes, may be called at any time, as the need arises, by any of the following: (a) the Board of Directors, at its own instance, or at the written request of stockholders representing a majority of the outstanding capital stock, or (b) the President.

Section 3. **Notice of Meetings** - The notice of the time and place of the regular and special meetings shall be served either personally or by mail, upon a stockholder of record of the Corporation who is entitled to vote at such meeting at least five (5) days before the date fixed in such notice for the meeting. If mailed, it shall be directed, except as otherwise provided by law, to each stockholder to his post office address at it appears in the stock and transfer books of the Corporation. 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 the stockholders is adjourned to another time or place, it shall not be necessary to give any notice of the adjourned meeting, if the time and place to which the meeting is adjourned are announced at the meeting in which the adjournment is taken. At the reconvened meeting, any business may be transacted that might have been transacted on the original date of the meeting.

Section 4. **Quorum** - At all meetings of stockholders, regular or special, other than meetings the quorum of which is fixed by law, in order to constitute a quorum, there shall be present either in person or by proxy the holders of record of the majority of the stock issued and outstanding and entitled to vote. If no quorum is constituted, the meeting shall be adjourned until a quorum is constituted.

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 Verified by: L. ALDAY Date Issued: APR 07 2016

Section 5. **Conduct of Meetings** - Meeting of the stockholders shall be presided over by the Chairman of the Board of Directors, or in his absence, by the President or, if none of the foregoing is in office present and acting, by a chairman to be chosen by the stockholders. The Secretary, shall act as Secretary of every meetings, but if not present, the Chairman of the meeting shall appoint a secretary of the meeting.

Section 6. **Manner of Voting** - Except as otherwise provided by law, each stockholder of record shall be entitled at every meeting of stockholders to one vote for each share of stock outstanding in his name on the stock and transfer books of the Corporation. In the election of directors, each stockholder entitled to vote for directors may accumulate and distribute his votes in accordance with the provisions of law applicable in such case. At all meetings of stockholders, a stockholder may vote in person or by proxy. 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 not later than ten (10) days before the time set for the meeting. Proxies filed with the Secretary may be revoked by the stockholders either in an instrument in writing duly presented and recorded with the Secretary, prior to a scheduled meeting or by stockholder's personal presence at the meeting.

Section 7. **Closing of Transfer Books or Fixing of Record Date** - For the purpose of determining the stockholders entitled to notice of, or to vote at, any meeting of stockholders or any adjournment thereof or to receive payment of any dividend, the Board of Directors may provide that the stock and transfer books be closed for a stated period at least ten (10) working days immediately preceding such meeting. 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 fifteen (15) working days prior to the date on which the particular action requiring such determination of stockholders is to be taken, except in instances where applicable rules and regulations provide otherwise.

ARTICLE III

BOARD OF DIRECTORS

Section 1. **Powers of the Board of Directors** - Unless otherwise provided by law, the corporate powers of the Corporation shall be exercised, and all business and all property of the Corporation shall be controlled and held by the Board of Directors to be elected by and from among the stockholders. Without prejudice to its powers as may be granted by law, the Board of Directors shall also have the following 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

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Verified by: L. ALDAY Date issued: APR 07 2018

business and affairs;

b. To purchase, receive, take or otherwise acquire for and in the name of the Corporation, any and all properties, rights, interest or privileges, including securities and bonds of other corporations, for such consideration and upon such terms and conditions as the Board of Directors may deem proper or convenient;

c. To invest the funds of the Corporation in other corporations or for purposes other than those for which the Corporation was organized, subject to such stockholders' approval as may be required by law;

d. To incur such indebtedness as the Board of Directors may deem necessary, to issue evidence of the indebtedness including without limitation, notes, deeds of trust, bonds, debentures, or securities, subject to such stockholders approval as may be required by law, and/or pledge, mortgage, or otherwise encumber all or part of the properties of the Corporation;

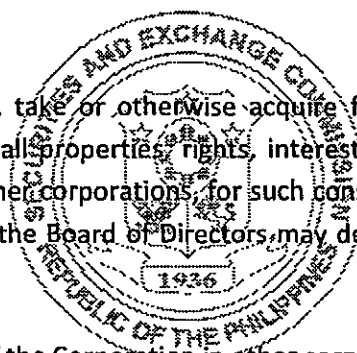
e. To establish pension, retirement, bonus, or other types of incentives or compensation plans for the employees, including officers and directors of the Corporation;

f. To prosecute, maintain, defend, compromise or abandon any lawsuit in which the Corporation or any of its officer are either plaintiffs or defendants in connection with the business of the Corporation;

g. To delegate, from time to time, any of the powers of the Board of Directors which may lawfully be delegated in the course of the current business of the Corporation to any standing or special committee or to any officer or agent and to appoint any person to be agent of the Corporation with such powers and upon terms as may be deemed fit;

h. 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 stockholders under the Corporation Code; and

i. To perform any and all acts which will foster the long-term success of the Corporation and secure its sustained competitiveness in a manner consistent with its fiduciary responsibility, which it shall exercise in the best interest of the Corporation, and in proper cases, its shareholders as a whole.



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Verified by: L/ALDAY	Date Issued: APR 07 2016

Section 2. Number, Qualifications and Nominations. The Board of Directors of the Corporation shall be five (5) in number, subject to such changes as may be determined by the stockholders in accordance with law. All directors shall be stockholders in their own right, and shall be elected during each Annual Meeting of the stockholders. They shall hold offices for one (1) year and until their successors are elected and qualified.

The qualifications and nominations of the members of the Board of Directors shall be in accordance with the Corporation Code, the rules and regulations prescribed by the Securities and Exchange Commission or such other relevant governmental agency or body.

Section 3. Vacancies - Any vacancy occurring in the Board of Directors other than by removal by the stockholders or by expiration of term may be filled by the vote of at least a majority of the remaining directors, if still constituting a quorum; otherwise, the vacancy must be filled by the stockholders at a regular or at any special meeting of stockholders called for the purpose. A director so elected to fill the vacancy shall be elected only for the unexpired term of his predecessor in office.

The vacancy resulting from the removal of a director by the stockholders in the manner provided by law may be filled by election in the same meeting of stockholders without further notice, or at any regular or at any special meeting of stockholders called for the purpose, after giving notice as prescribed in these by-laws.

Section 4. Meetings - There shall be an organizational meeting of the Board of Directors immediately after their election, of which no notice shall be required. Thereafter, the Board of Directors shall hold meetings as the need arises, on such dates and at places as may be called by the Chairman of the Board, or upon the request of a majority of the Directors, or as the Board of Directors may, by resolution, prescribe.

Section 5. Notices - Notice of the meetings of the Board of Directors, specifying the date, time and place of the meeting shall be communicated by the Secretary to each director by letter, telegram, facsimile transmission or electronic mail. A director may waive this notice requirement, either expressly or impliedly.

Section 6. Quorum. The directors shall act only as a Board of Directors, and the individual directors shall have no power as such. 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 wherein there is a quorum shall be valid as a corporate act, except for the election of officers which shall require the vote of majority of all the members of the Board of Directors. If no quorum is constituted, the meeting shall be adjourned from time to time until a quorum is constituted, and no notice of such adjourned meeting is required.

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Verified by: L. ALDAY Date Issued: APR 07 2018

Section 7. **Conduct of the Meetings** - Meetings of the Board of Directors shall be presided over by Chairman of the Board, or in his absence, the President, or if none of the foregoing is in office and present and acting, by any other director chosen by the Board of Directors. The Secretary, shall act as secretary of every meeting, if not present, the Chairman of the meeting, shall appoint a secretary for that meeting.

Section 8. **Meetings by Teleconferencing or Videoconferencing** - Meetings of the Board of Directors may be conducted through tele/videoconferencing, provided that good tele/videoconference equipment or facilities are available and the conduct of such meeting is made in accordance with law and pertinent rules and regulations.

Section 9. **Compensation; Per Diem** - By resolution of the Board of Directors, each director shall receive a reasonable per diem allowance for his attendance at each meeting of the Board of Directors or other committees created by the Board of Directors.

Section 10. **Creation of Other Committees** - The Board of Directors shall have the power, among other things, to create Committees and other bodies as may be necessary or beneficial in the operation and internal regulation of the Corporation. Such Committees shall have such powers and functions as may be delegated to them by the Board of Directors or as defined in the Corporation's Manual for Corporate Governance, except those that may not be delegated under the Corporation Code. The Board of Directors shall have the power to appoint and remove the members of such Committees and may at any time, with or without cause, dissolve any of such Committees.

Section 11. **Manual for Corporate Governance** - To aid the Board of Directors in the promotion of and adherence to the principles of good governance, the Board of Directors shall adopt a Manual for Corporate Governance which may be amended from time to time as may be deemed fit by the Board of Directors and such Manual shall be suppletory to these By-Laws.

ARTICLE IV

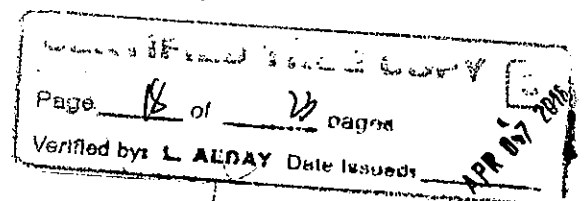
OFFICERS

Section 1. **Election/Appointment, Term and Removal** - The Officers of the Corporation shall be the Chairman of the Board, President, Executive Vice President and General Manager, Vice President, Treasurer and Secretary and such other officers as shall from time to time be appointed by the Board of Directors.

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They shall be elected at the organizational meeting of the Board of Directors after the annual election of directors, and shall hold office for one (1) year, and until their respective successors shall have been duly elected and qualified. They may be removed by an affirmative



vote of two-thirds (2/3) of the members of the Board of Directors

The Chairman and the President must come from the members of the Board of Directors; other officers need not be stockholders or directors. 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. The Chairman of the Board of Directors - The Chairman of the Board shall preside at all meetings of the stockholders and of the Board of Directors. The Chairman shall exercise powers as may be conferred upon him by the Board of Directors.

Section 3. The President - The President shall be the Chief Executive Officer of the Corporation and shall exercise the following functions:

a. To preside at the meetings of the stockholders, in the absence of the Chairman;

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 supervise and manage the business affairs of the Corporation upon the direction of the Board of Directors;

d. To implement the administrative and operational policies of the Corporation under his supervision and control;

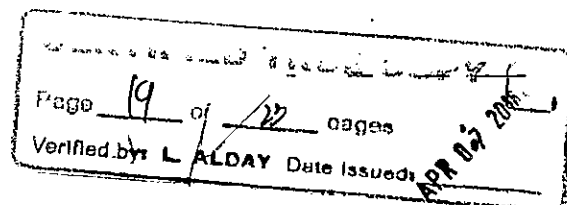
e. To appoint, remove, suspend or discipline employees of the Corporation, prescribe their duties and to determine their salaries;

f. To oversee the preparation of the budgets and the statements of accounts of the Corporation;

g. **Date: 6-4-2016 Time: 1:55:39 PM**
To represent the Corporation at all functions and proceedings;

h. 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;

i. To make reports to the Board of Directors and stockholders;



- j. To sign Certificates of Stock; and
- k. To perform such other duties as are incidental to his office or are entrusted to him by the Board of Directors.

Section 4. The Executive Vice President and General Manager - He shall, if qualified, act as President in the absence of the latter. He shall be in charge of the day-to-day affairs of the Corporation, and execute the policies, decisions, orders and resolutions as directed by the Board of Directors. He shall have such other powers and duties as may from time to time be assigned to him by the Board of Directors or by the President.

Section 5. The Vice President - He shall have other powers and duties as may from time to time be assigned to him by the Board of Directors, the President or by the Executive Vice President and General Manager. The Board of Directors may elect more than one Vice President.

Section 6. The Secretary - The Secretary must be a resident and a citizen of the Philippines. He shall have the following specific powers and duties:

a. To record the minutes and transactions of all meetings of the directors and the stockholders and to maintain minute books of such meetings in the form and manner required by law;

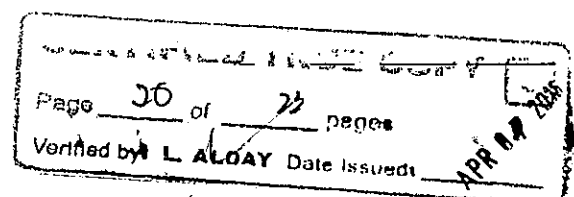
b. To keep record books showing the details required by law with respect to the stock certificates of the Corporation, including ledgers and transfer books showing all shares of the Corporation subscribed, issued and transferred;

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;

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 questions in connection with the right to vote, count and tabulate all votes, determine the result and do such acts as are proper to conduct the election; and

g. To perform such other duties as are incident to his office or as may be assigned to him by the Board of Directors or the President.

Section 7. The Treasurer - The Treasurer of the Corporation 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 the annual statements showing the financial condition of the Corporation and such other financial reports as the Board of Directors or the President may 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 appropriate government agencies; and

f. To exercise such powers and perform such duties and functions as may be assigned to him by the President.

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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 may by majority vote, elect a successor to hold office for the unexpired term.

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Section 9. Compensation - The officers shall receive such remuneration as the Board of Directors may determine. A director shall not be precluded from serving the Corporation in any

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Verified by L. ALDAY	Date Issued: APR 04 2016

other capacity as an officer, agent or otherwise receiving compensation therefor.

ARTICLE V

OFFICES

Section 1. The principal office of the Corporation shall be located in 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.

ARTICLE VI

AUDIT OF BOOKS, FISCAL YEAR AND DIVIDENDS

Section 1. **External Auditor** - At the Annual Stockholders' meeting, the External Auditor of the Corporation for the ensuing year shall be appointed.

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.

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 stockholders on the basis of outstanding stock held by them, as often and at such time as the Board of Directors may determine and in accordance with law.

ARTICLE VII

SEAL

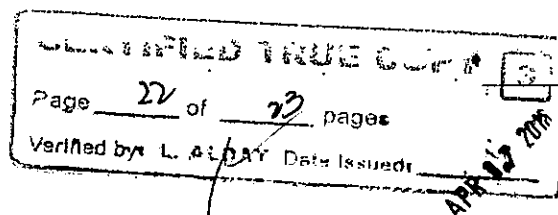
Section 1. **Form and Inscriptions** - The corporate seal, unless otherwise ordered by the Board of Directors, shall be an impression upon paper or wax or other material bearing the words:

LUZON NATURAL GAS ENERGY CORPORATION

Metro Manila, Philippines, 2012

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User Name: 6secexpressdc



ARTICLE VIII

AMENDMENTS

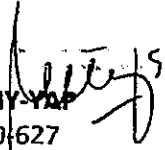
Section 1. These By-Laws may be amended or repealed by the affirmative vote of at least a majority of the Board of Directors and the stockholders representing a majority of the outstanding capital stock at any stockholders' meeting called for that purpose. However, the power to amend, modify, repeal or adopt new By-laws may be delegated to the Board of Directors by the affirmative vote of the stockholders representing not less than two-thirds (2/3) of the outstanding capital stock; provided, however, that such delegation of powers to the Board of Directors to amend, repeal or adopt new By-laws may be revoked only by the vote of stockholders representing a majority of the outstanding capital stock at a regular or special meeting.

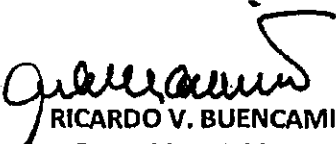
IN WITNESS WHEREOF, we have hereunto subscribed our names and affixed our signatures this 19th day of October 2012 at Pasig City, Metro Manila, Philippines.


OSCAR S. REYES
TIN: 136-623-569


AARON A. DOMINGO
TIN: 170-803-692


JESUS P. FRANCISCO
TIN: 100-748-716


BETTY C. SIY-YAN
TIN: 102-100-627


RICARDO V. BUENCAMINO
TIN: 100-748-283

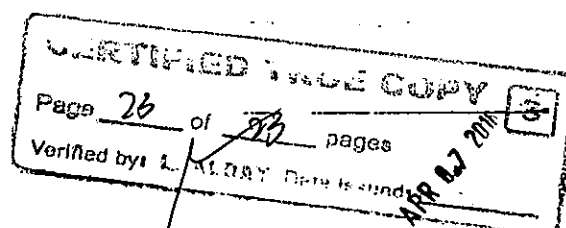
Signed In The Presence Of:
Date: 6-4-2016 Time: 1:55:43 PM


WILLIAM S. PAMINTUAN


RAFAEL L. ANDRADA

www.sec.gov.ph

User Name: 6secexpressdc





ANNEX " D "
REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
SEC Building, EDSA, Greenhills
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS201300427

**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

ATIMONAN ONE ENERGY, INC.
[Amending Article III thereof.]

copy annexed, adopted on May 19, 2014 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 8th day of October, Twenty Fourteen.

Date: 6-4-2016 Time: 2:0:31 PM

FERDINAND B. SALES

Director

Company Registration and Monitoring Department

EVnclly

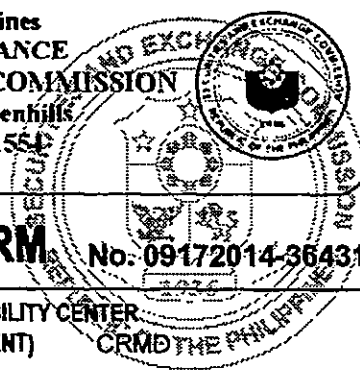
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Page	1	of	19	pages
Verified by:	L. ALDAY Date Issued: <u>APR 07 2016</u>			

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19

No. 09172014-364317

20140926-30

Page 2 of 14 pages
 Verified by L. ALDAY Date Issued APR 07 1964

COVER SHEET
COMPANY REGISTRATION AND MONITORING DEPARTMENT

Nature of Application:

SEC Registration Number

CS 2015 300427

Former Company Name

LUZON NATURAL GAS ENERGY
CORPORATION

AMENDED TO:
New Company Name

ATIMONAN DNE ENERGY
CORPORATION

Principal Office (No./Street/Berangay/City/Town/Province)

8TH FLOOR, ROCKWELL BUSINESS
CENTER TOWER 1 ORTIGAS AVENUE

Company's Email Address

COMPANY INFORMATION
Company's Telephone Number/s

422-1900

Company's Facsimile Number/s

661-4978

Name of Contact Person

Alicia G. Brion

CONTACT PERSON INFORMATION
Email Address

Abtion@meraleco.com.ph

Telephone Number/s

422-1900

Facsimile Number/s

661-4978

Contact Person's Address

8TH Flr Rockwell Business Center Tower 1 Ortigas Avenue Pasig City

To be accomplished by CRMD Personnel

Assigned Processor Am-Villegas

Date

9-26-14

Signature

[Signature]

Document I.D.

201409 Date 6-4-2016 Time: 2:0:34 PM

Received by Corporate Filing and Records Division (CFRD)

Forwarded to:

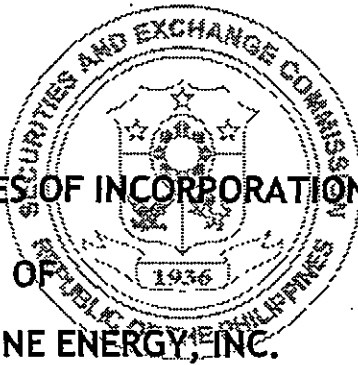
- ☒ Corporate and Partnership Registration Division
☐ Green Lane Unit
☐ Financial Analysis and Audit Division
☐ Licensing Unit
☐ Compliance Monitoring Division

www.sec.gov.ph

9-26-14
User Name bssecexpressd

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Page 3 of 14 pages
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AMENDED ARTICLES OF INCORPORATION



ATIMONAN ONE ENERGY, INC.

(FORMERLY LUZON NATURAL GAS ENERGY CORPORATION

SEC REG. NO. CS201300427)

KNOW ALL MEN BY THESE PRESENTS:

WE, the undersigned incorporators, all of legal age and all of whom are residents of the Republic of the Philippines, have this day voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the Republic of the Philippines.

AND WE HEREBY CERTIFY:

FIRST: The name of this Corporation shall be:

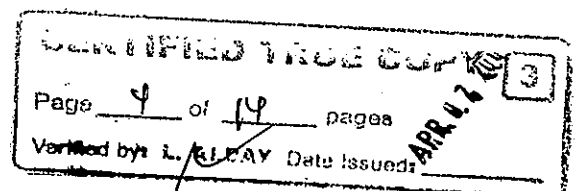
ATIMONAN ONE ENERGY, INC. ¹

SECOND: That the purposes for which the said Corporation is formed are:

PRIMARY PURPOSE

To develop, design, acquire, build, construct, erect, assemble, commission, PM install, own, maintain, operate, rehabilitate and manage all necessary and convenient facilities, plants, buildings, structures, equipment, machineries, sub-stations, transmission lines, poles, wires and other properties used in

www.sec.gov.ph 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 21 March 2014). User Name: Graceexpressc



the generation, delivery, and/or transmission of electricity, including but not limited to natural gas-fired power generating plants, gas receiving terminal, regasification facility, gas turbine and other plants and facilities used in connection therewith; to carry on the general business of generation, delivery and/or transmission of electric energy and other sources for lighting and power purposes and wholesale of electricity to power companies, distribution utility companies, electric cooperatives, retail electricity suppliers, aggregators, and other customers to such extent, and in such manner as may be permitted by applicable laws and regulations; and to enter into contracts either alone or jointly with other companies or persons for the purpose of carrying out the business under which this Corporation is created.

SECONDARY PURPOSES

1. To acquire or obtain from the pertinent government agency, national or local, or any corporation, partnership or person, such charter, contract, franchise, privilege, exemption, license, permit, registration, authority, and concession, as may be reasonably necessary to carry out the business of the Corporation and accomplish the purposes for which it was created;

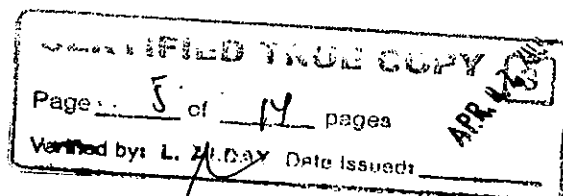
2. To purchase, acquire, own, lease, sell and convey, within the limits allowed by law, real properties such as lands, buildings, sub-stations, plants, warehouses, facilities, equipments, machineries, and other personal properties as may be reasonably necessary or incidental to the conduct of the business of the Corporation;

3. To acquire, lease, hold, occupy or use rights-of-way, foreshore leases and easements on such public or private properties, in accordance with the requirements of law and regulations, as may be required in the conduct of business;

4. To invest in, hold, own, purchase, acquire, lease, contract, operate, develop, manage, grant, sell, exchange, or otherwise dispose of real and personal properties of every kind and description, tangible or intangible, including shares of stock, bonds and other securities of any power generation corporation, partnership, association, firm or entity, domestic or foreign, for any legal purpose or purposes the same may have been

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organized; ph

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5. To borrow or raise funds necessary to meet the financial requirements of its business through the incurrence of bank loans, credit facilities, and the issuance of promissory notes, bills of exchange, bonds and other evidence of indebtedness, and as necessary or required to secure repayment thereof by mortgage, pledge, deed of trust, trust receipt, letter of credit, surety, guaranty or lien upon the properties of the Corporation or to issue, subject to compliance with pertinent requirements of law and regulations, shares of its capital stock, debentures and other evidence of indebtedness in payment for the facilities, equipment, machineries and other properties acquired by the Corporation or for money loaned in the prosecution of its lawful business;

6. To open and maintain bank deposits and to invest in financial instruments, products and services;

7. To enter into, negotiate, or compromise for any contract or agreement, and collect and retain money and other properties in respect of obligations, liabilities, claims, penalties, losses, damages, charges, suits, expenses incurred or suffered by reason of or in relation to the businesses of the Corporation;

8. To enter into or engage in build-operate-transfer arrangements involving power generation and/or transmission with the government, its branches, agencies and instrumentalities, as well as private entities;

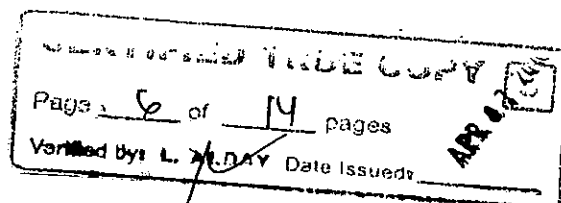
9. To aid, in any lawful manner, in the creation, organization, reorganization, merger or consolidation, management, rehabilitation and liquidation of persons, firms, associations, corporations, partnerships and other entities engaged in generation and/or distribution of electricity and related businesses;

10. To act as advisor, contractor or principal in the business of developing, constructing, operating, repairing, rehabilitating and maintaining of power plants and systems and other generating stations and facilities;

11. To enter into any lawful agreement for profit sharing, combination of interests or reciprocal concession or cooperation, with any corporation, association, partnership, entity, person or entity, private or public, domestic or foreign, in the conduct of any business or transaction necessary, convenient or incidental to the accomplishment of the purposes of this Corporation;

12. To establish and operate one or more extension offices and to conduct any or all of its operations and business anywhere in the Philippines, subject to such limitations as may be prescribed by law; and

13. To conduct and transact any and all lawful activities, to do or cause to be done any one of the acts and things herein set forth as its purposes,



within or without the Philippines, and in any or all foreign countries, subject to reciprocity, and to do everything necessary, desirable or incidental to the accomplishment of the purposes or the exercise of any or one or more of the powers herein enumerated, or which shall at any time appear convenient or beneficial to the Corporation.

THIRD: That the place where the principal office of the Corporation is at the Rockwell Business Center Tower 1, Ortigas Avenue, Barangay Ugong, Pasig City².

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 are as follows:

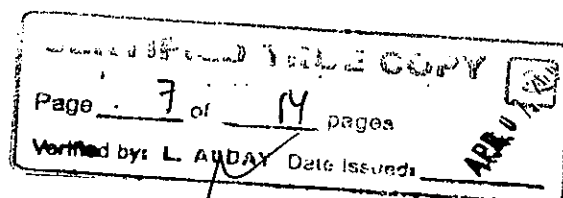
NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 Mckinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal Street, Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines

Date: 6-4-2016 Time: 2:0:40 PM

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²As 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 May 19, 2014.



Ricardo V. Buencamino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines
-----------------------	--

SIXTH: That the number of DIRECTORS of the said Corporation shall be five (5) 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:

NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 Mckinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal St., Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines
Ricardo V. Buencamino	Filipino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines

Date: 6-4-2016 Time: 2:42 PM

SEVENTH: That the authorized capital stock of the Corporation is FOUR HUNDRED MILLION PESOS (Php400,000,000.00) in lawful money of the Philippines, divided into Four Million (4,000,000) shares with the par value of One Hundred Pesos (Php100) per share.

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Page 8 of 14 pages
Verified by: L. ALDAY Date Issued: 6/4/2016

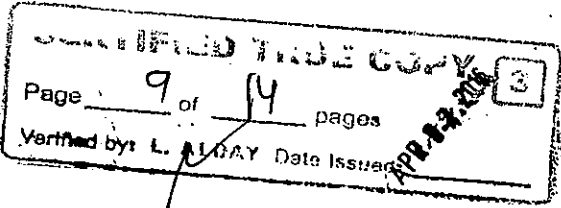
EIGHTH: That at least 25% of the authorized capital stock has been subscribed and at least 25% of the total subscription has been paid as follows:

Name	Nationality	No. of Shares Subscribed	Amount Subscribed	Amount Paid
MERALCO PowerGen Corporation(TIN: 214664682000)	Filipino	999,995	99,999,500.00	24,999,500.00
Oscar S. Reyes	Filipino	1	100.00	100.00
Aaron A. Domingo	Filipino	1	100.00	100.00
Jesus P. Franciso	Filipino	1	100.00	100.00
Betty C. Siy-Yap	Filipino	1	100.00	100.00
Ricardo V. Buencamino	Filipino	1	100.00	100.00

TOTAL **1,000,000** **100,000,000.00** **25,000,000.00**

NINTH: That no transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of corporation and this restriction shall be indicated in the stocks certificates issued by the corporation.

TENTH: That MR. RAFAEL L. ANDRADAS 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 subscribers.

ELEVENTH: That the incorporators undertake to change the name of the Corporation as herein provided or as amended thereafter immediately upon receipt of notice or directive from the Securities and Exchange Commission that another corporation, partnership, or person has acquired a prior right to the use of that name or that the name has been declared misleading, deceptive, confusingly similar to a registered name, or contrary to public morals, good customs or public policy.

IN WITNESS WHEREOF, we have set our hands this 12th day of October 2012 at Pasig City, Metro Manila, Philippines

(SGD)
OSCAR S. REYES
TIN: 136-623-569

(SGD)
AARON A. DOMINGO
TIN: 170-803-692

(SGD)
JESUS P. FRANCISCO
TIN: 100-748-716

(SGD)
BETTY C. SIY- YAP
TIN: 102-100-627

(SGD)
RICARDO V. BUENCAMINO
TIN: 100-748-283

Signed In The Presence Of:

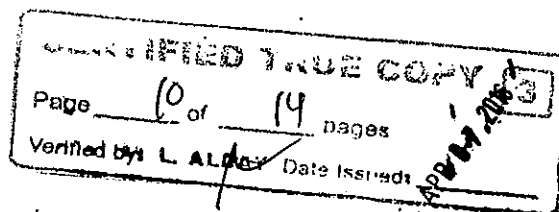
(SGD)
WILLIAM S. PAMINTUAN

(SGD)
RAFAEL L. ANDRADA

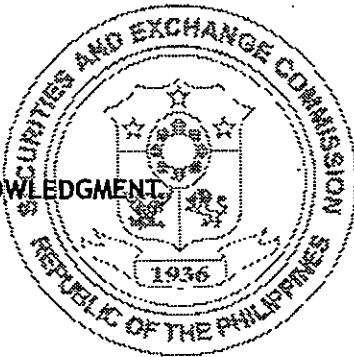
Date: 10-14-2016 Time: 2:00 PM

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ACKNOWLEDGMENT



REPUBLIC OF THE PHILIPPINES)
S.S.

BEFORE ME, a Notary Public in and for _____
Philippines, this Nov 14 2012, personally appeared:

NAME	I.D. TYPE & NO.	DATE OF EXPIRY	PLACE OF ISSUE
OSCAR S. REYES	Passport No. XX2143931	09-28-13	Manila
AARON A. DOMINGO	Passport No. EB1677351	01-07-16	Manila
JESUS P. FRANCISCO	Passport No. EB6431764	09-26-17	Manila
BETTY C. SIY-YAP	Passport No. EA0009230	12-07-14	Manila
RICARDO V. BUENCAMINO	Passport No. XX2825523	01-19-14	Manila

all known to me and to me known to be the same persons who executed the foregoing ARTICLES OF INCORPORATION, consisting of eight (8) pages, including this Acknowledgment page, and they acknowledged to me that the same is their free and voluntary act and deed.

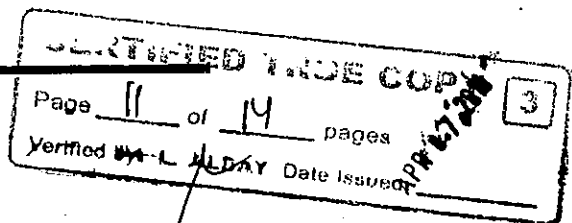
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

(SGD)
ATTY. FREEDOM IAN FE M. NAVIDAD
NOTARY PUBLIC
PASIG, PATEROS, TAGUIG AND SAN JUAN
ISSUED ON FEBRUARY 20, 2012 AT PASIG CITY
APPOINTMENT NO. 77 (2012-2013)
ROLL NO. 5285/ABP NO. 870016/01702/12 RSM/CHARTER
PTR NO. 75752332/01/14/12 PASIG CITY
8TH FLOOR LOPEZ BLDG., ORTIGAS AVENUE, PASIG CITY

Date: 2012 Nov 14 2:00 PM

Doc. No. 402;
www.secexpress.com Page No. 83;
Book No. 111;
Series of 2012.

User Name: 6secexpressd



DIRECTORS' CERTIFICATE

WE, the undersigned, being members of the Board of Directors and Corporate Secretary of ATIMONAN ONE ENERGY, INC. (formerly LUZON NATURAL GAS ENERGY CORPORATION) ("the Corporation"), do hereby certify that the accompanying Amended Articles of Incorporation of the Corporation embodying the amendment to Article III thereof which changes the place of the Corporation's principal office from "8th Floor, Rockwell Business Center, Tower 1, Ortigas Avenue, Pasig City" to "Rockwell Business Center Tower 1, Ortigas Avenue, Barangay Ugong, Pasig City" to be compliant with SEC Memorandum Circular No. 6, Series 2014, is true and correct and was approved by at least a majority of the members of the Board of Directors in its regular meeting held on 19 May 2014 and ratified by the affirmative vote representing at least two-thirds (2/3) of the total outstanding capital stock of the Corporation during their annual regular meeting also held on 19 May 2014 both held at the 8th Floor, Legal Conference Room, Lopez Building, Ortigas Avenue, Pasig City.

The amended provision of the attached Articles of Incorporation of the Corporation is quoted hereunder:

"THIRD: That the place where the principal office of the Corporation is at the Rockwell Business Center Tower 1, Ortigas Avenue, Barangay Ugong, Pasig City".

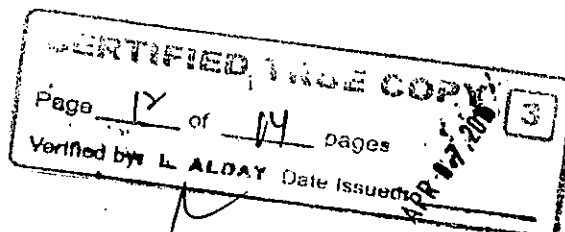
IN WITNESS WHEREOF, we have hereunto set our hands on this 22 day of JULY 2014 in Pasig, City.

[Signature page follows]

Date: 6-4-2016 Time: 2:0:49 PM

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User Name: 6secexpressd





Attested by:

OSCAR S. REYES

Chairman/Chairman of the Stockholders Meeting
TIN 136-623-569

AARON A. DOMINGO

Director
TIN 170-803-692

ANGELITO M. LANTIN

Director
TIN 106-447-777

JESUS P. FRANCISCO

Director
TIN 100-748-716

BETTY C. SIYAP

Director
TIN 102-100-627

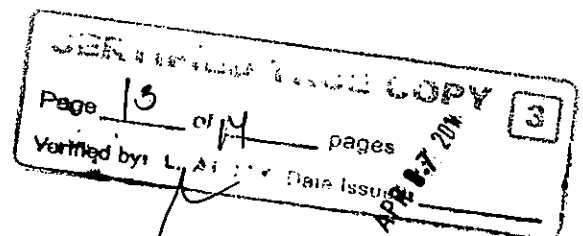
WILLIAM S. PAMINTUAN

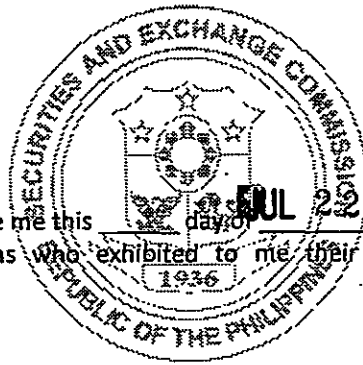
Corporate Secretary/Secretary of the Stockholders Meeting
TIN 146-473-562

Date: 6-4-2016 Time: 2:0:50 PM

www.sec.gov.ph

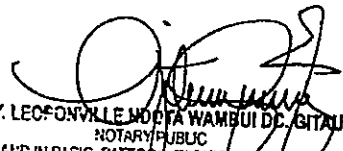
User Name: 6secexpressd





SUBSCRIBED AND SWORN to before me this 22 day of JUL 2014, in Pasig City, by the above-named persons who exhibited to me their respective Tax Identification Number as indicated above.

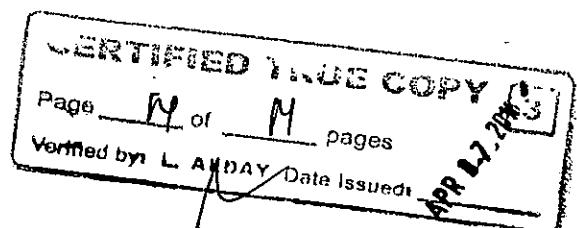
Doc. No. 71 ;
Page No. 16 ;
Book No. I ;
Series of 2014


ATTY. LEONVILLE NOOTA WAMBUI DE GITAN
NOTARY PUBLIC
FOR AND IN PASIG, PATEROS, TAGUIG AND SAN JUAN
APPOINTMENT NO. 207 (2014-2015) ON APRIL 24, 2014
AT PASIG CITY UNTIL DECEMBER 31, 2015
8TH FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY
ATTORNEY'S ROLL NO. 61388
IBP NO. 847483 / 01/02/2014 CAGAYAN
PTR NO. 9884866 / 01/21/2014 PASIG CITY

Date: 6-4-2016 Time: 2:0:52 PM

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REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION

SEC Building, EDSA, Greenhills
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS201300427

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

ATIMONAN ONE ENERGY, INC.
(Formerly: Luzon Natural Gas Energy Corporation)
(Amending Article I thereof.)

copy annexed, adopted on March 21, 2014 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 9th day of June, Twenty Fourteen.

Date: 6-4-2016 Time: 2:3:22 PM


FERDINAND B. SALES
Director

Company Registration and Monitoring Department

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User Name: 6secexpr

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Page	1	of 15 pages
Verified by	L. ALDAY	Date Issued: 6/7/2016

COVER SHEET

for Applications at
COMPANY REGISTRATION AND MONITORING DEPARTMENT

Nature of Application

SEC Registration Number

CS 01300427

Former Company Name

LUZON NATURAL GAS ENERGY CORP
RATION

AMENDED TO:

New Company Name

ATIMONAN ONE ENERGY INC

Principal Office (No./Street/Barangay/City/Town/Province)

8TH FLOOR ROCKWELL BUSINESS CE
NTER TOWER 1 PASIG CITY

Company's Telephone Number

422-1900

Contact Person

Alicia G Btion

Contact Person's Telephone Number

422-1900

Contact Person's Address

8th Floor Rockwell Bus Ctr. Ortigas Ave Pasig City

To be accomplished by CRMD Personnel

Assigned Processor

Mr. Ardiente

Date

6/2

11:20

Signature

Document I.D.

20140603-14

Received by Corporate Filing and Records Division (CRMD)

6-4-2016 Time: 2:32 PM

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Corporate and Partnership Registration Division

Green Lane Unit

Financial Analysis and Audit Division

Licensing Unit

Compliance Monitoring Division

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CRMD 4012# 1108063 dated 6/2/14

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Page 3 of 3 pages

Verified by LALDAY Date Issued 6/2/14

COVER SHEET

for Applications at
COMPANY REGISTRATION AND MONITORING DEPARTMENT

Nature of Application

SEC Registration Number

CS201300927

Former Company Name

LUZON NATURAL GAS ENERGY CORP
RATION

AMENDED TO:

New Company Name

ATIMONAN ONE ENERGY INC

Principal Office (No./Street/Barangay/City/Town/Province)

8TH FLOOR ROCKWELL BUSINESS CE
NTER TOWER 1 PASIG CITY

Company's Telephone Number/s

422-1900

Contact Person

Alicia G. Dron

Contact Person's Telephone Number

422-1900

Contact Person's Address

8th Floor Rockwell Bus. Ctr. Ortigas Ave Pasig, City

To be accomplished by CRMD Personnel

Assigned Processor

Date

Signature

Document I.D.

Received by Corporate Filing and Records Division (CRMD) : 6-4-2016 Time: 2:3:25 PM

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Corporate and Partnership Registration Division

Green Lane Unit

Financial Analysis and Audit Division

Licensing Unit

Compliance Monitoring Division

User Name: csecexpressc

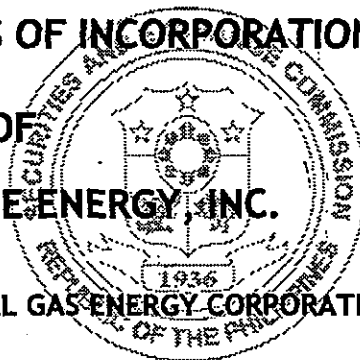
Page 4 of 15 pages
Verified by L. ALDAY Date Issued: APR 07 2016

AMENDED ARTICLES OF INCORPORATION

OF

ATIMONAN ONE ENERGY, INC.

(FORMERLY LUZON NATURAL GAS ENERGY CORPORATION)



KNOW ALL MEN BY THESE PRESENTS:

WE, the undersigned incorporators, all of legal age and all of whom are residents of the Republic of the Philippines, have this day voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the Republic of the Philippines.

AND WE HEREBY CERTIFY:

FIRST: The name of this Corporation shall be:

ATIMONAN ONE ENERGY, INC. ¹

SECOND: That the purposes for which the said Corporation is formed are:

PRIMARY PURPOSE

To develop, design, acquire, build, construct, erect, assemble, commission, install, own, maintain, operate, rehabilitate and manage all necessary and convenient facilities, plants, buildings, structures, equipment, machineries, sub-stations, transmission lines, poles, wires and other properties used in

¹ 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 21 March 2014).

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Page <u>5</u> of <u>15</u> pages
Verified by <u>L. ALDAY</u> Date Issued: <u>APR 07 2014</u>

the generation, delivery, and/or transmission of electricity, including but not limited to natural gas-fired power generating plants, gas receiving terminal, regasification facility, gas-turbine and other plants and facilities used in connection therewith; to carry on the general business of generation, delivery and/or transmission of electric energy and other sources for lighting and power purposes and wholesale of electricity to power companies, distribution utility companies, electric cooperatives, retail electricity suppliers, aggregators, and other customers to such extent, and in such manner as may be permitted by applicable laws and regulations; and to enter into contracts either alone or jointly with other companies or persons for the purpose of carrying out the business under which this Corporation is created.

SECONDARY PURPOSES

1. To acquire or obtain from the pertinent government agency, national or local, or any corporation, partnership or person, such charter, contract, franchise, privilege, exemption, license, permit, registration, authority, and concession, as may be reasonably necessary to carry out the business of the Corporation and accomplish the purposes for which it was created;

2. To purchase, acquire, own, lease, sell and convey, within the limits allowed by law, real properties such as lands, buildings, substations, plants, warehouses, facilities, equipments, machineries, and other personal properties as may be reasonably necessary or incidental to the conduct of the business of the Corporation;

3. To acquire, lease, hold, occupy or use rights-of-way, foreshore leases and easements on such public or private properties, in accordance with the requirements of law and regulations, as may be required in the conduct of business;

4. To invest in, hold, own, purchase, acquire, lease, contract, operate, develop, manage, grant, sell, exchange, or otherwise dispose of real and personal properties of every kind and description, tangible or intangible, including shares of stock, bonds and other securities of any power generation corporation, partnership, association, firm or entity, domestic or foreign, for any legal purpose or purposes the same may have been organized;

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2

Continued Inventory 3

Page 6 of 11 pages

Verified by: L. ALDAY Date Issued: APR 01 2014

5. To borrow or raise funds necessary to meet the financial requirements of its business through the incurrence of bank loans, credit facilities, and the issuance of promissory notes, bills of exchange, bonds and other evidence of indebtedness, and as necessary or required to secure repayment thereof by mortgage, pledge, deed of trust, trust receipt, letter of credit, surety, guaranty or lien upon the properties of the Corporation or to issue, subject to compliance with pertinent requirements of law and regulations, shares of its capital stock, debentures and other evidence of indebtedness in payment for the facilities, equipment, machineries and other properties acquired by the Corporation or for money loaned in the prosecution of its lawful business;

6. To open and maintain bank deposits and to invest in financial instruments, products and services;

7. To enter into, negotiate, or compromise for any contract or agreement, and collect and retain money and other properties in respect of obligations, liabilities, claims, penalties, losses, damages, charges, suits, expenses incurred or suffered by reason of or in relation to the businesses of the Corporation;

8. To enter into or engage in build-operate-transfer arrangements involving power generation and/or transmission with the government, its branches, agencies and instrumentalities, as well as private entities;

9. To aid, in any lawful manner, in the creation, organization, reorganization, merger or consolidation, management, rehabilitation and liquidation of persons, firms, associations, corporations, partnerships and other entities engaged in generation and/or distribution of electricity and related businesses;

10. To act as advisor, contractor or principal in the business of developing, constructing, operating, repairing, rehabilitating and maintaining of power plants and systems and other generating stations and facilities;

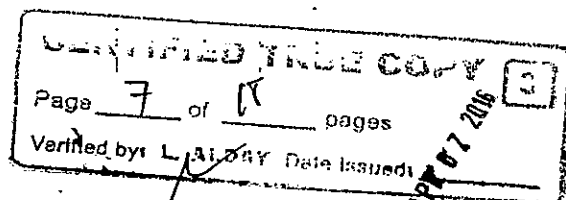
11. To enter into any lawful agreement for profit sharing, combination of interests or reciprocal concession or cooperation, with any corporation, association, partnership, entity, person or entity, private or public, domestic or foreign, in the conduct of any business or transaction necessary, convenient or incidental to the accomplishment of the purposes of this Corporation;

12. To establish and operate one or more extension offices and to conduct any or all of its operations and business anywhere in the Philippines, subject to such limitations as may be prescribed by law; and

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13. To conduct and transact any and all lawful activities, to do or cause to be done any one of the acts and things herein set forth as its purposes, within or without the Philippines, and in any or all foreign countries, subject to reciprocity, and to do everything necessary, desirable or incidental to the accomplishment of the purposes or the exercise of any or one or more of the powers herein enumerated, or which shall at any time appear convenient or beneficial to the Corporation.

THIRD: That the place where the principal office of the Corporation is at the 8th Floor of Rockwell Business Center, Tower I, Ortigas Avenue, Pasig City.

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 are as follows:

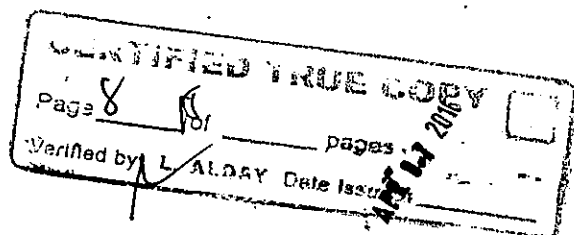
NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 Mckinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal Street, Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines

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Ricardo V. Buencamino	Filipino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines
-----------------------	----------	--

SIXTH: That the number of DIRECTORS of the said Corporation shall be five (5) 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:

NAME	NATIONALITY	RESIDENCE
Oscar S. Reyes	Filipino	Unit 6 Kasiyahan Village, No. 58 Mckinley Road, Forbes Park, Makati City, Philippines
Aaron A. Domingo	Filipino	No. 2803-A Regent Parkway Condominium, Fort Global City, Taguig City, Philippines
Jesus P. Francisco	Filipino	No. 25 Rizal St., Ayala Heights, Old Balara, Quezon City
Betty C. Siy-Yap	Filipino	No. 7 Caroline Street, Parkway Village, Quezon City, Philippines
Ricardo V. Buencamino	Filipino	No. 49 Mahogany Road, Pilar Village, Las Pinas City, Philippines

Date: 6-4-2016 Time: 2:3:29 PM

SEVENTH: That the authorized capital stock of the Corporation is FOUR HUNDRED MILLION PESOS (Php400,000,000.00) in lawful money of the Philippines, divided into Four Million (4,000,000) shares with the par value of One Hundred Pesos (Php100) per share.

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Verified by: L. ALBAY Date Issued: APR 12 2016

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:

Name	Nationality	No. of Shares Subscribed	Amount Subscribed	Amount Paid
MERALCO PowerGen Corporation(TIN: 214664682000)	Filipino	999,995	99,999,500.00	24,999,500.00
Oscar S. Reyes	Filipino	1	100.00	100.00
Aaron A. Domingo	Filipino	1	100.00	100.00
Jesus P. Francisco	Filipino	1	100.00	100.00
Betty C. Siy-Yap	Filipino	1	100.00	100.00
Ricardo V. Buencamino	Filipino	1	100.00	100.00

TOTAL 1,000,000 100,000,000.00 25,000,000.00

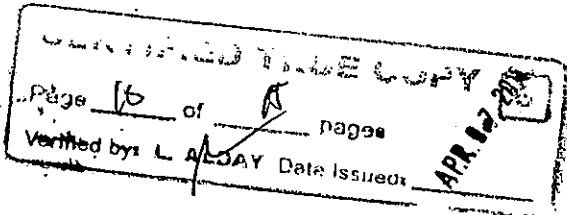
NINTH: That no transfer of stock or interest which would reduce the stock ownership of Filipino citizens to less than the required percentage of capital stock as provided by existing laws shall be allowed or permitted to be recorded in the proper books of corporation and this restriction shall be indicated in the stocks certificates issued by the corporation.

Date: 6-4-2016 Time: 2:3:30 PM

TENTH: That MR. RAFAEL L. ANDRADA 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

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such Treasurer, he has been authorized to receive for and in the name and for the benefit of the corporation, all subscriptions paid by subscribers.

ELEVENTH: That the incorporators undertake to change the name of the Corporation as herein provided or as amended thereafter immediately upon receipt of notice or directive from the Securities and Exchange Commission that another corporation, partnership, or person has acquired a prior right to the use of that name or that the name has been declared misleading, deceptive, confusingly similar to a registered name, or contrary to public morals, good customs or public policy.

IN WITNESS WHEREOF, we have set our hands this 12th day of October 2012 at Pasig City, Metro Manila, Philippines

(SGD)
OSCAR S. REYES
TIN: 136-623-569

(SGD)
AARON A. DOMINGO
TIN: 170-803-692

(SGD)
JESUS P. FRANCISCO
TIN: 100-748-716

(SGD)
BETTY C. SIY- YAP
TIN: 102-100-627

(SGD)
RICARDO V. BUENCAMINO
TIN: 100-748-283

Signed In The Presence Of:

(SGD)
WILLIAM S. PAMINTUAN

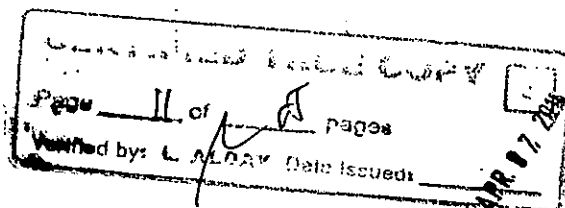
(SGD)
RAFAEL L. ANDRADA

Date: 6-4-2016 Time: 2:3:31 PM

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and for
appeared: 1936

BEFORE ME, a Notary Public in and for
Philippines, this Nov 14 2012, personally appeared: 1936

NAME	I.D. TYPE & NO.	DATE OF EXPIRY	PLACE OF ISSUE
OSCAR S. REYES	Passport No. XX2143931	09-28-13	Manila
AARON A. DOMINGO	Passport No. EB1677351	01-07-16	Manila
JESUS P. FRANCISCO	Passport No. EB6431764	09-26-17	Manila
BETTY C. SIY-YAP	Passport No. EA0009230	12-07-14	Manila
RICARDO V. BUENCAMINO	Passport No. XX2825523	01-19-14	Manila

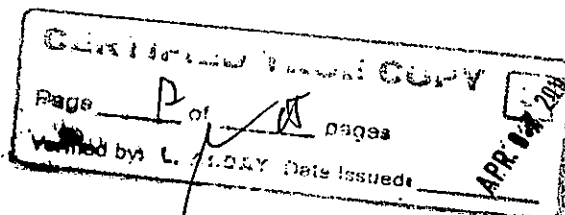
IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date and at the place first above written.

Doc. No. 402;
Page No. 83;
Book No.111;
Series of 2012.

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DIRECTORS' CERTIFICATE OF AMENDMENT
of
THE ARTICLES OF INCORPORATION OF
LUZON NATURAL GAS ENERGY CORPORATION

We, the undersigned, being the Chairman, the Corporate Secretary, and the majority of the members of the Board of Directors of LUZON NATURAL GAS ENERGY CORPORATION (the "Corporation"), a corporation duly organized and existing under the laws of the Republic of the Philippines, do hereby certify that

1. At the regular meeting of the Board of Directors of the Corporation held on 21 March 2014 at the 13th Floor, Executive Board Room 2, Lopez Building, Ortigas Avenue, Pasig City, wherein a quorum was present, a majority of the Board of Directors approved and adopted by resolution the change in the corporate name of the Corporation from "Luzon Natural Gas Energy Corporation" to "Atimonan One Energy, Inc." and for said purpose, unanimously approved the amendment of the First Article of the Corporation's Articles of Incorporation as follows:

"FIRST: The name of the Corporation shall be:

ATIMONAN ONE ENERGY, INC.

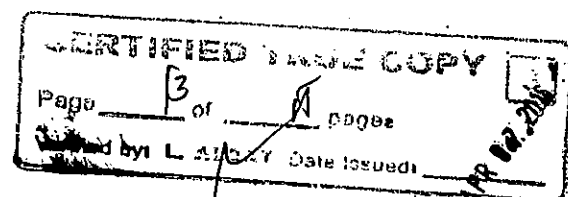
2. The foregoing amendment as likewise approved by the stockholders representing at least two-thirds (2/3) of the outstanding capital stock of the Corporation at their meeting held on 21 March 2014 at the 13th Floor Executive Board Room 2, Lopez Building, Ortigas Avenue, Pasig City.

[SIGNATURE PAGE FOLLOWS]

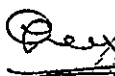
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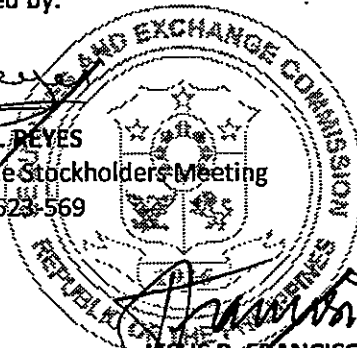


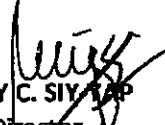
Attested by:


OSCAR S. REYES

Chairman/Chairman of the Stockholders Meeting

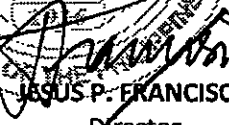
TIN: 136-623-569




BETTY C. SIY TAP

Director

TIN: 107-100-627


JESUS P. FRANCISCO

Director

TIN: 100-748-716

5/5


AARON A. DOMINGO

Director

TIN: 170-803-692


ANGELITO B. LANTINI

Director

TIN: 106-447-777


WILLIAM S. PAMINTUAN

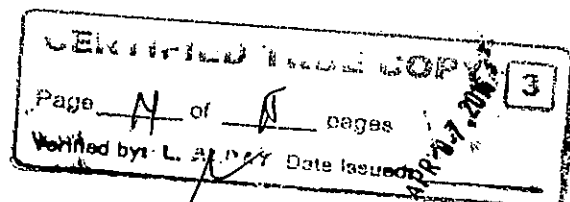
Corporate Secretary/Secretary of the Stockholders Meeting

TIN: 146-473-562

Date: 6-4-2016 Time: 2:3:33 PM

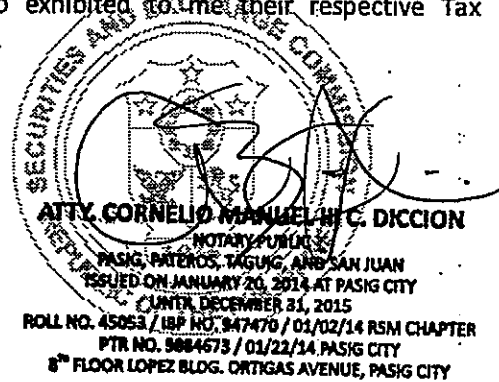
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User Name: 6secexpressc



SUBSCRIBED AND SWORN to before me this 11 APR 2014 in Pasig City, by the above-named persons who exhibited to me their respective Tax Identification Numbers as indicated above.

Doc. No. 22;
Page No. 06;
Book No. XII;
Series of 2014.



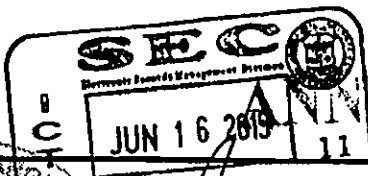
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Page	<u>15</u>	of <u>15</u> pages
Verified by	L. ANDAY	
File Issued	<u>11 11 2014</u>	

GENERAL INFORMATION SHEET
FOR THE YEAR 2015
STOCK CORPORATION



ANNEX "E"

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 SHOULD BE ACCOMPLISHED IN ENGLISH AND CERTIFIED AND SWORN TO BY THE CORPORATE SECRETARY OF THE CORPORATION.
4. THE SEC SHOULD BE TIMELY ARISED 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 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.

PRINT LEGIBLY

CORPORATE NAME: ATIMONAN ONE ENERGY, INC. (formerly LUZON NATURAL GAS ENERGY CORPORATION)		DATE REGISTERED: 11 JANUARY 2013
BUSINESS/TRADE NAME: ATIMONAN ONE ENERGY, INC.		FISCAL YEAR END: DECEMBER 31
SEC REGISTRATION NUMBER: CS201300427		CORPORATE TAX IDENTIFICATION
DATE OF ANNUAL MEETING PER BY-LAWS: 3 rd MONDAY OF MAY OF EACH YEAR AND EVERY YEAR		NO. (TIN): 008-444-777
ACTUAL DATE OF ANNUAL MEETING: MAY 18, 2015		WEBSITE/URL ADDRESS: N.A.
COMPLETE PRINCIPAL OFFICE ADDRESS: ROCKWELL BUSINESS CENTER TOWER 1, ORTIGAS AVENUE, BARANGAY UGONG, PASIG CITY		E-MAIL ADDRESS: N.A.
COMPLETE BUSINESS ADDRESS: ROCKWELL BUSINESS CENTER TOWER 1, ORTIGAS AVENUE, BARANGAY UGONG, PASIG CITY		FAX NO. 681-4978
EXTERNAL AUDITOR: REYES TACANDONG & CO.	SEC ACCREDITATION (If Applicable): 0207-FR-1 (Group A)	TEL. NO. 422-1900
PRIMARY PURPOSE/ACTIVITY/INDUSTRY PRESENTLY ENGAGED IN: REFER TO ANNEX "A"	INDUSTRY CLASSIFICATION: POWER	GEGRAPHICAL CODE: N.A.
INTERCOMPANY AFFILIATIONS		
PARENT COMPANY	SEC REGISTRATION NO.	ADDRESS
MERALCO POWERGEN CORPORATION	A200117570	8 th FLOOR, ROCKWELL BUSINESS CENTER TOWER 1, ORTIGAS AVENUE, BARANGAY UGONG, PASIG CITY
SUBSIDIARY/AFFILIATE	SEC REGISTRATION NO.	ADDRESS
N.A.	N.A.	N.A.
NOTE: USE ADDITIONAL SHEET IF NECESSARY		

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Page 1 of 8 pages

Verified by: ALDAY Date Issued: APR 12 2016

GENERAL INFORMATION SHEET

STOCK CORPORATION

PLEASE PRINT LEGIBLY

Corporate Name: ATIMONAH ONE ENERGY, INC.

A. Is the Corporation a covered person under the Anti Money Laundering Act (AMLA), as amended? (Rep. Acts. 9160/9164/10157/10365)

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.

4. ☐ Jewelry dealers in precious metals, who, as a business, trade in precious metals

5. ☐ 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

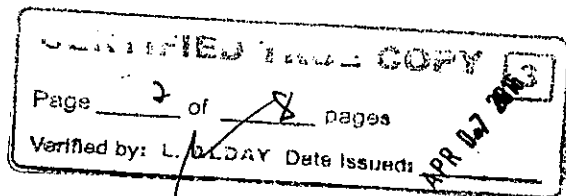
8. ☐ None of the above

Describe nature of business:

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REFER TO ANNEX "A"

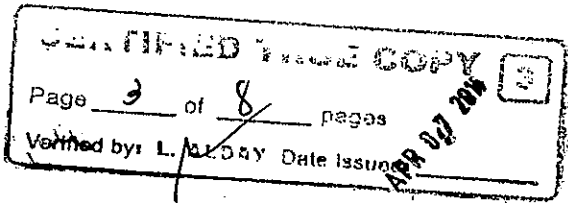
B. Has the Corporation complied with the requirements on Customer Due Diligence (CDD) or Know Your Customer (KYC), record-keeping, and submission of reports under the AMLA, as amended, since the last filing of its

Yes ☐ No ☒



GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: ATIMONAN ONE ENERGY, INC.							
CAPITAL STRUCTURE							
AUTHORIZED CAPITAL STOCK:							
	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (PhP) (No. of Shares x Par/Stated Value)			
	COMMON	4,000,000	P100.00	P400,000,000.00			
TOTAL				P400,000,000.00			
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	AMOUNT (PhP)	% OF OWNER-SHIP
	6	COMMON	1,250,000	N.A.	100.00	P 125,000,000.00	100%
TOTAL			1,250,000		100.00	P 125,000,000.00	100%
FOREIGN (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	AMOUNT (PhP)	% OF OWNER-SHIP
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Percentage of Equity: 0%			TOTAL				
TOTAL SUBSCRIBED						P 125,000,000.00	100%
PAID-UP CAPITAL							
FILIPINO	NO. OF STOCK-HOLDERS	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (PhP)	% OF OWNER-SHIP	
	6	COMMON	1,250,000	100.00	P 125,000,000.00	100%	
TOTAL					P 125,000,000.00	100%	
FOREIGN (INDICATE BY NATIONALITY)	NO. OF STOCK-HOLDERS	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (PhP)	% OF OWNER-SHIP	
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
TOTAL					6-4-2016	Time: 1:57:22 PM	
TOTAL PAID-UP					P 125,000,000.00	100%	
NOTE: USE ADDITIONAL SHEET IF NECESSARY							
* Common, Preferred or other classification							
** Other than Directors, Officers, Shareholders owning 10% of outstanding shares.							



GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: ATIMONAN ONE ENERGY, INC.							
DIRECTORS/OFFICERS							
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 Filipino Unit 8 Kasiyahan Village, No. 58 McKinley Road, Forbes Park Makati City	Y	C	M	Y	CHAIRMAN	N.A.	136-623-569
2. BETTY C. SIY-YAP Filipino No. 7 Caroline Street, Parkway Village, Quezon City	Y	M	F		N.A.	N.A.	102-100-627
3. AARON A. DOMINGO Filipino No. 501 Regent Parkway Condominium, Bonifacio Global City, Taguig City	Y	M	M	Y	PRESIDENT	N.A.	170-803-692
4. JESUS P. FRANCISCO Filipino 25 Rizal Street, Ayala Heights Quezon City	Y	M	M	Y	N.A.	N.A.	100-748-716
5. ANGELITO U. LANTIN Filipino #1 Venezuela St., Loyola Grand Villas, Marikina City	N	M	M	Y	N.A.	N	108-447-777
6. WILLIAM S. PAMINTUAN Filipino 9 Argentina Street, Loyola Grand Villas, Quezon City	N	N	M	N	CORPORATE SECRETARY	N.A.	146-473-562
7. RAFAEL L. ANDRADA Filipino 7 Doña Ines corner Legaspi Streets, Alabang Hills Muntinlupa City	N	N	M	N	TREASURER	N.A.	127-415-866
-NOTHING FOLLOWS-							
INSTRUCTIONS: FOR SEX COLUMN, PUT "F" FOR FEMALE, "M" FOR MALE. FOR BOARD COLUMN, PUT "C" FOR CHAIRMAN, "M" FOR MEMBER, "I" FOR INDEPENDENT DIRECTOR. FOR INC'R COLUMN, PUT "Y" AN INCORPORATOR, "N" IF NOT. FOR STOCKHOLDER COLUMN, PUT "Y" IF A STOCKHOLDER, "N" IF NOT. 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. 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.							

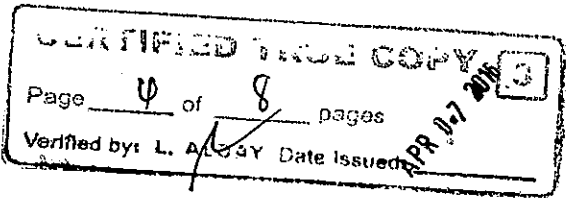
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GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: ATIMONAN ONE ENERGY, INC.						
TOTAL NUMBER OF STOCKHOLDERS:		6		NO. OF STOCKHOLDERS WITH 10% OR MORE SHARES EACH:		1
TOTAL ASSETS BASED ON LATEST AUDITED FINANCIAL STATEMENTS:						PhP90,065,368
STOCKHOLDER'S INFORMATION						
NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS	SHARES SUBSCRIBED			AMOUNT PAID (PhP)	TAX IDENTIFICATION NO. (TIN) FOR FILIPINOS AND FOREIGNERS	
	TYPE	NUMBER	AMOUNT (PhP)			
1. MERALCO POWERGEN CORPORATION Filipino (Domestic Corporation) 8 th Floor, Rockwell Business Center 1, Ortigas Avenue Pasig City	COMMON	1,249,995	P124,999,500.00	100%	P124,999,500.00	214-684-682
2. OSCAR S. REYES Filipino Unit 6 Kasiyahan Village No. 58 McKinley Road Forbes Park, Makati City	COMMON	1	100.00	NIL	100.00	136-623-569
3. BETTY C. SIY-YAP Filipino No. 7 Caroline Street Parkway Village Quezon City	COMMON	1	100.00	NIL	100.00	102-100-627
4. AARON A. DOMINGO Filipino No. 501 Regent Parkway Condominium Bonifacio Global City Taguig City	COMMON	1	100.00	NIL	100.00	170-803-692
5. JESUS P. FRANCISCO Filipino 25 Rizal Street, Ayala Heights Quezon City	COMMON	1	100.00	NIL	100.00	100-748-716
6. ANGELITO U. LANTIN Filipino #1 Venezuela St., Loyola Grand Villas, Marikina City	COMMON	1	100.00	NIL	100.00	106-447-777
-NOTHING FOLLOWS-						
TOTAL			1,250,000	100%		
TOTAL AMOUNT OF SUBSCRIBED CAPITAL			P125,000,000.00			
TOTAL AMOUNT OF PAID-UP CAPITAL					P125,000,000.00	
INSTRUCTIONS: 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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Page 5 of 8 pages
Verified by: L. A. DAY Date Issued: APR 07 2016

GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

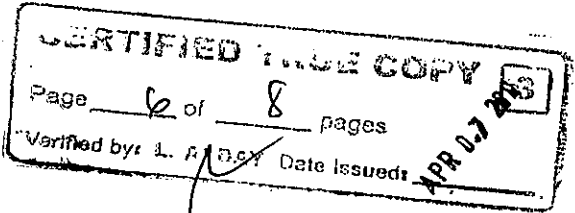
CORPORATE NAME: ATIMONAN ONE ENERGY, INC.			
1. INVESTMENT OF CORPORATE FUNDS IN ANOTHER CORPORATION		AMOUNT (PhP)	DATE OF BOARD RESOLUTION
1.1 STOCKS		N.A.	N.A.
1.2 BONDS/COMMERCIAL PAPER (Issued by Private Corporations)		N.A.	N.A.
1.3 LOANS/ CREDITS/ADVANCES		N.A.	N.A.
1.4 GOVERNMENT TREASURY BILLS		N.A.	N.A.
1.5 OTHERS		N.A.	N.A.
2. INVESTMENT OF CORPORATE FUNDS IN ACTIVITIES UNDER ITS SECONDARY PURPOSES (PLEASE SPECIFY)		DATE OF BOARD RESOLUTION	DATE OF STOCKHOLDERS' RATIFICATION
N.A.		N.A.	N.A.
3. TREASURY SHARES		NO. OF SHARES	% AS TO THE TOTAL NO. OF SHARES ISSUED
		N.A.	N.A.
4. DEFICIT AS OF END OF THE LAST FISCAL YEAR:		(PhP11,973,433)	
5. DIVIDENDS DECLARED DURING THE IMMEDIATELY PRECEDING YEAR		NONE	
TYPE OF DIVIDEND		AMOUNT (PhP)	DATE DECLARED
5.1 CASH		N.A.	N.A.
5.2 STOCK		N.A.	N.A.
5.3 PROPERTY		N.A.	N.A.
TOTAL			
6. ADDITIONAL SHARES ISSUED DURING THE PERIOD:			
DATE		NO. OF SHARES	AMOUNT
29 October 2014		500,000	P50,000,000.00
14 May 2015		500,000	P50,000,000.00
SECONDARY LICENSE/REGISTRATION WITH SEC AND OTHER GOV'T AGENCY:			
NAME OF AGENCY:		SEC	BSP
TYPE OF LICENSE/REGN.		N.A.	N.A.
DATE ISSUED		N.A.	N.A.
DATE STARTED OPERATIONS:		N.A.	N.A.
TOTAL ANNUAL COMPENSATION OF DIRECTORS DURING THE PRECEDING FISCAL YEAR (In PhP) N.A.		TOTAL NO. OF OFFICERS:	TOTAL NO. OF RANK & FILE EMPLOYEES:
		4	3
			TOTAL MANPOWER COMPLEMENT:
			7
NOTE: USE ADDITIONAL SHEET IF NECESSARY			

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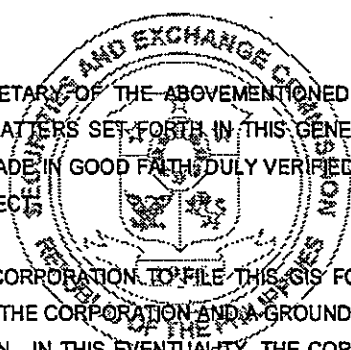
www.sec.gov.ph

User Name: 6secexpressc



21120 0152 0000

I, WILLIAM S. PAMINTUAN, CORPORATE SECRETARY OF THE ABOVEMENTIONED CORPORATION DECLARE UNDER THE PENALTY OF PERJURY, THAT ALL THE MATTERS SET FORTH IN THIS GENERAL INFORMATION SHEET WHICH CONSISTS OF EIGHT (8) 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 CORPORATIO HEREBY WAIVES ITS RIGHT TO A HEARING FOR THE SAID REVOCATION.

JUN 16 2015

DONE THIS _____ DAY _____ IN PASIG CITY.

WILLIAM S. PAMINTUAN
CORPORATE SECRETARY

JUN 16 2015

SUBSCRIBED AND SWORN TO BEFORE ME IN PASIG CITY, ON _____ 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. 136
PAGE NO. 36
BOOK NO. 1
SERIES OF 2015

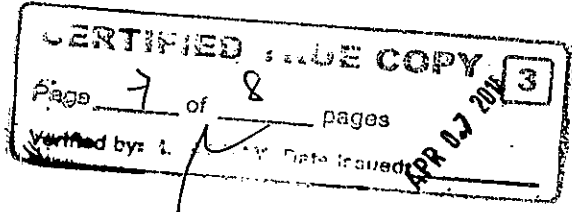
ATTY. LEOPOLDO N. NOLASCO, GITAII
NOTARY PUBLIC
FOR AND IN PASIG, PATEROS, TAGUIG AND SAN JUAN
APPOINTMENT NO. 201 (2014-2015) ON APRIL 21, 2014
AT PASIG CITY / UNTIL DECEMBER 21, 2015
8TH FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY
ATTORNEY'S ROLL NO. 61386
IBP NO. 980965 / 01-07-2015 CAGAYAN
PTR NO. 489193 / 2-5-2015 PASIG CITY

Date: 6-4-2016 Time: 1:57:26 PM

GIS_STOCK (v.2013)

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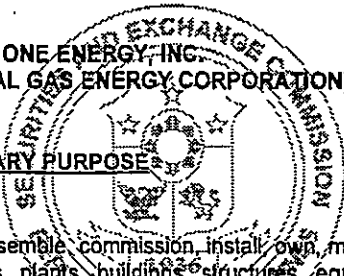
User Name: 6secexpressc



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ANNEX "A"

ATIMONAN ONE ENERGY, INC.
(formerly LUZON NATURAL GAS ENERGY CORPORATION)



PRIMARY PURPOSE

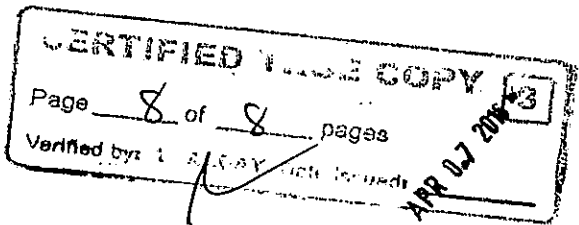
To develop, design, acquire, build, construct, erect, assemble, commission, install, own, maintain, operate, rehabilitate and manage all necessary and convenient facilities, plants, buildings, structures, equipment, machineries, sub-stations, transmission lines, poles, wires and other properties used in the generation, delivery, and/or transmission of electricity, including but not limited to natural gas-fired power generating plants, gas receiving terminal, regasification facility, gas-turbine and other plants and facilities used in connection therewith; to carry on the general business of generation, delivery and/or transmission of electric energy and other sources for lightning and power purposes and wholesale of electricity to power companies, distribution utility companies, electric cooperatives, retail electricity suppliers, aggregators, and other customers to such extent, and in such manner as may be permitted by applicable laws and regulations; and to enter into contracts either alone or jointly with other companies or persons for the purpose of carrying out the business under which this Corporation is created.

Date: 6-4-2016 Time: 1:57:28 PM

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User Name: 6secexpressc

7





INDEPENDENT AUDITOR'S REPORT

ANNEX " F "

The Stockholders and the Board of Directors
Atimonan One Energy, Inc.
Rockwell Business Center Tower 1
Ortigas Avenue, Barangay Ugong, Pasig City

Report on the Financial Statements

We have audited the accompanying financial statements of Atimonan One Energy, Inc. (formerly Luzon Natural Gas Energy Corporation and a wholly owned subsidiary of MERALCO PowerGen Corporation), 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

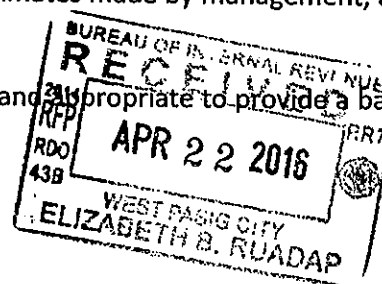
Management is responsible for the preparation and fair presentation of these financial statements in accordance with Philippine Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's 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 the risks assessment, 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.





Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Atimonan One 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 of the Bureau of Internal Revenue

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information on taxes and licenses in Note 16 to financial statements is presented for purposes of filing with Bureau of Internal Revenue and is not a required part of the basic financial statements. Such information is the responsibility of the management of Atimonan One Energy, Inc. The information has been subjected to the auditing procedures applied in our audit of the basic financial statements and in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

REYES TACANDONG & Co.

HAYDEE M. REYES

Partner

CPA Certificate No. 83522

Tax Identification No. 102-095-265-000

BOA Accreditation No. 4782; Valid until December 31, 2018

SEC Accreditation No. 0663-AR-2 Group A

Valid until April 14, 2017

BIR Accreditation No. 08-005144-6-2013

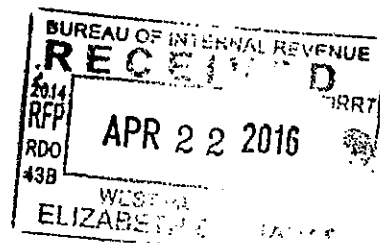
Valid until November 26, 2016

PTR No. 5321843

Issued January 5, 2016, Makati City

April 13, 2016

Makati City, Metro Manila

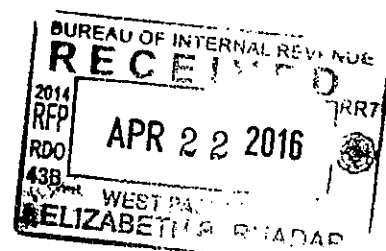


ATIMONAN ONE ENERGY, INC.
(Formerly Luzon Natural Gas Energy Corporation)
(A Wholly Owned Subsidiary of MERALCO PowerGen Corporation)

STATEMENTS OF FINANCIAL POSITION

		December 31	
	Note	2015	2014
ASSETS			
Current Assets			
Cash and cash equivalents	6	P74,670,799	P47,675,216
Accounts receivable	7	167,432	257,663
Other current assets		122,201	21,257
Total Current Assets		74,960,432	47,954,136
Noncurrent Assets			
Property and equipment	8	105,248,074	37,845,923
Input value-added tax		9,633,084	4,265,309
Software	9	1,589,179	—
Total Noncurrent Assets		116,470,337	42,111,232
TOTAL ASSETS		P191,430,769	P90,065,368
LIABILITIES AND EQUITY			
Liabilities			
Accrued expenses and other payables	10	P9,709,346	P27,038,801
Equity			
Capital stock	13	225,000,000	75,000,000
Deficit		(43,278,577)	(11,973,433)
Total Equity		181,721,423	63,026,567
TOTAL LIABILITIES AND EQUITY		P191,430,769	P90,065,368

See accompanying Notes to Financial Statements.

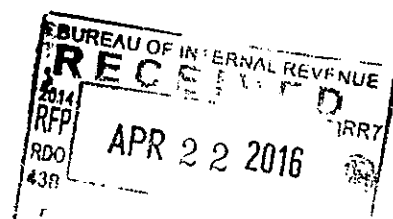


ATIMONAN ONE ENERGY, INC.
(Formerly Luzon Natural Gas Energy Corporation)
(A Wholly Owned Subsidiary of MERALCO PowerGen Corporation)

STATEMENTS OF COMPREHENSIVE INCOME

		Years Ended December 31	
	Note	2015	2014
EXPENSES			
Professional fees		₱12,935,807	₱2,815,042
Community affairs		8,243,510	2,193,253
Salaries, wages and employee benefits		4,978,894	1,427,107
Transportation and travel		3,269,784	884,183
Entertainment, amusement and recreation		434,975	288,722
Depreciation and amortization	8	320,260	43,137
Contracted services		237,157	208,556
Rent and utilities	11	188,288	80,956
Office supplies		81,106	10,212
Communication		74,903	22,108
Taxes and licenses		16,383	12,268
Others		113,500	30,047
		30,894,567	8,015,591
OTHER INCOME (CHARGES)			
Interest income	6	408,559	74,242
Foreign exchange loss		(69,136)	(6,400)
		339,423	67,842
NET LOSS		(30,555,144)	(7,947,749)
OTHER COMPREHENSIVE INCOME		-	-
TOTAL COMPREHENSIVE LOSS		(₱30,555,144)	(₱7,947,749)

See accompanying Notes to Financial Statements.

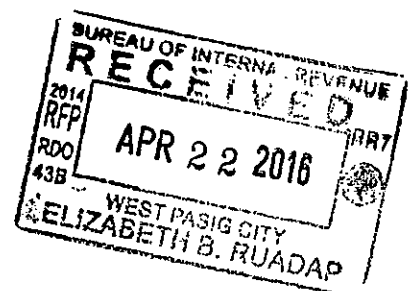


ATIMONAN ONE ENERGY, INC.
(Formerly Luzon Natural Gas Energy Corporation)
(A Wholly Owned Subsidiary of MERALCO PowerGen Corporation)

STATEMENTS OF CHANGES IN EQUITY

	Note	Capital Stock	Deficit	Total
BALANCES AS AT DECEMBER 31, 2013		P25,000,000	(P3,775,684)	P21,224,316
Issuance of capital stock		50,000,000	—	50,000,000
Stock transaction costs	13	—	(250,000)	(250,000)
Total comprehensive loss	13	—	(7,947,749)	(7,947,749)
BALANCES AS AT DECEMBER 31, 2014		75,000,000	(11,973,433)	63,026,567
Issuance of capital stock	13	150,000,000	—	150,000,000
Stock transaction costs	13	—	(750,000)	(750,000)
Total comprehensive loss		—	(30,555,144)	(30,555,144)
BALANCES AS AT DECEMBER 31, 2015		P225,000,000	(P43,278,577)	P181,721,423

See accompanying Notes to Financial Statements.

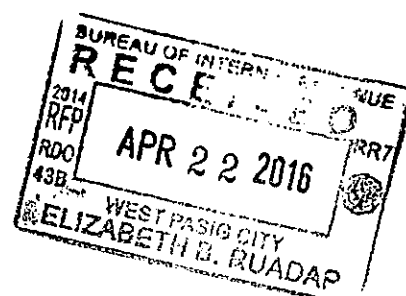


ATIMONAN ONE ENERGY, INC.
(Formerly Luzon Natural Gas Energy Corporation)
(A Wholly Owned Subsidiary of MERALCO PowerGen Corporation)

STATEMENTS OF CASH FLOWS

		Years Ended December 31	
	Note	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES			
Net loss		(P30,555,144)	(P7,947,749)
Adjustments for:			
Interest income	6	(408,559)	(74,242)
Depreciation and amortization	8	320,260	43,137
Unrealized foreign exchange loss		31,858	6,400
Operating loss before working capital changes		(30,611,585)	(7,972,454)
Decrease (increase) in:			
Accounts receivable		90,231	(257,663)
Other current assets		(100,944)	(24,423)
Input value-added tax		(5,367,775)	(4,248,231)
Increase (decrease) in accrued expenses and other payables		(8,291,967)	12,280,202
Net cash used for operations		(44,282,040)	(222,569)
Interest received		408,559	74,242
Net cash used in operating activities		(43,873,481)	(148,327)
CASH FLOWS USED IN AN INVESTING ACTIVITY			
Additions to property and equipment	8	(78,349,078)	(24,451,495)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issuance and subscription of capital stock	13	150,000,000	50,000,000
Payments of stock transaction costs	13	(750,000)	(250,000)
Net cash provided by financing activities		149,250,000	49,750,000
NET INCREASE IN CASH AND CASH EQUIVALENTS		27,027,441	25,150,178
EFFECT OF EXCHANGE RATE CHANGES ON CASH IN BANK			
		(31,858)	(6,400)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR		47,675,216	22,531,438
CASH AND CASH EQUIVALENTS AT END OF YEAR	6	P74,670,799	P47,675,216

See accompanying Notes to Financial Statements.



ATIMONAN ONE ENERGY, INC.
(Formerly Luzon Natural Gas Energy Corporation)
(A Wholly Owned Subsidiary of MERALCO PowerGen Corporation)

NOTES TO FINANCIAL STATEMENTS

1. Corporate Information

Atimonan One Energy, Inc. (the Company) was incorporated and registered with the Philippine Securities and Exchange Commission (SEC) on January 11, 2013 primarily to build, own and operate power plants and engage in businesses related to the power industry.

The Company is a wholly owned subsidiary of MERALCO PowerGen Corporation (MERALCO PowerGen or the Parent Company), a domestic corporation engaged in the development of power generation plants. The Company's ultimate parent is Manila Electric Company (MERALCO), a public company whose common shares are listed in the Philippine Stock Exchange (PSE).

On March 21, 2014, the Company's Board of Directors (BOD) approved the amended articles of incorporation and by-laws changing the corporate name from Luzon Natural Gas Energy Corporation to Atimonan One Energy, Inc. The SEC approved the amendment on June 9, 2014.

The Company is developing a 2x600 megawatt (MW) supercritical coal-fired power plant to be constructed in Atimonan, Quezon Province. As at December 31, 2015, the Company is consolidating the land to be its project site and finalizing the project plan.

The Company's registered office address is Rockwell Business Center Tower 1, Ortigas Avenue, Barangay Ugong, Pasig City.

The financial statements of the Company as at and for the years ended December 31, 2015 and 2014 were approved and authorized for issuance by the BOD on April 13, 2016.

2. Basis of Preparation and Statement of Compliance

The financial statements of the Company have been prepared on a historical cost basis and are presented in Philippine Peso, the Company's functional currency. All values are stated in absolute amounts, unless otherwise stated.

The financial statements have been prepared in compliance with Philippine Financial Reporting Standards (PFRS). PFRS includes PFRS, Philippine Accounting Standards (PAS) and Philippine Interpretations from International Financial Reporting Interpretations Committee (IFRIC) issued by the Philippine Financial Reporting Standards Council (FRSC) and adopted by the SEC, including the SEC pronouncements.

The Company availed of the exemption from the mandatory adoption of Philippine Financial Reporting Standard for Small and Medium-sized Entities (PFRS for SMEs) on the basis that the Company is a subsidiary of MERALCO PowerGen, which adopts full PFRS.

3. Summary of Significant Changes in PFRS

Adoption of New and Revised PFRS

The accounting policies adopted are consistent with those of the previous financial year, except for the following amended and improved PFRSs and Philippine Interpretations based on IFRIC interpretations and amendments to existing PAS that became effective beginning January 1, 2015 and which did not have any significant effect on the Company's financial statements.

- PAS 19, *Employee Benefits - Defined Benefit Plans: Employee Contributions* (Amendments)
- *Annual Improvements to PFRS (2010 to 2012 cycle)*

The Annual Improvements to PFRS (2010 to 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 PFRS (2011 to 2013 cycle)*

The Annual Improvements to PFRS (2011 to 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 PFRS

The following are the new and revised PFRS 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 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 to the

Company's financial statements given that the Company has not used revenue-based method to depreciate any of its non-current assets.

- 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 will apply. After initial recognition, bearer plants will 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 shall 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*, will apply. The amendments are retrospectively effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact to the Company's financial statements since the Company does not have any bearer plants.
- PAS 27, *Separate Financial Statements - Equity Method in Separate Financial Statements* (Amendments), allows 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 will not have any impact on the Company's financial statements.
- PFRS 10 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) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require that a 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 Company expects that these amendments will not have any impact on its financial position or performance.
- PFRS 11, *Joint Arrangements - Accounting for Acquisitions of Interests in Joint Operations* (Amendments), requires 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 to 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 on the statement of financial position and present movements in these account balances as separate line items in the statement of 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.

Annual Improvements to PFRS (2012 to 2014 cycle)

The following Annual Improvements to PFRS (2012 to 2014 cycle) are effective for annual periods beginning on or after January 1, 2016 and are not expected to have 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 to be 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 amendments.
- 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 in 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.

The adoption of PFRS 9 will potentially have no impact on the classification and measurement of the Company's financial assets and liabilities.

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.

The following new standards and amendments issued by the IASB has not yet been adopted by the Philippine FRSC:

- International Financial Reporting Standard (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.

The Company continues to assess the impact of the above new and amended accounting standards and interpretations which are effective subsequent to December 31, 2015 and any additional disclosures required will be included in the financial statements when these are adopted.

4. Summary of Significant Accounting and Reporting Policies

The significant accounting policies that have been used in the preparation of these financial statements are summarized below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Financial Assets and Liabilities

Financial assets and liabilities are accounted for as follows:

a. Recognition

Financial instruments are recognized in the statement of financial position when the Company becomes a party to the contractual provision of the instruments. Financial instruments are initially measured at fair value, including transaction costs directly attributable to the acquisition. Transaction costs directly attributable to its acquisition or issuance are included as part of its fair value except for those classified at fair value through profit or loss (FVPL). The Company uses trade date accounting to account for financial instruments.

b. Fair Value

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 best evidence of fair value is quoted prices (bid price for assets and an offer price for liabilities) in an active market. If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique that makes use of market observable inputs or reference to a recent arm's-length transaction. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price.

c. Classification

The Company classifies its financial assets at initial recognition under the following categories: (a) financial assets at FVPL, (b) held-to-maturity (HTM) investments, (c) loans and receivables and (d) available-for-sale (AFS) financial assets. Financial liabilities, on the other hand, are classified as either financial liabilities at FVPL or other financial liabilities at amortized cost. The classification of a financial instrument largely depends on the Company's intention at acquisition or issuance date.

As at December 31, 2015 and 2014, the Company does not have financial assets and liabilities classified as "at FVPL," AFS financial assets and HTM investments.

Loans and Receivables. Loans and receivables are non-derivative financial assets with fixed or determinable payments and fixed maturities that are not quoted in an active market, other than those held for trading or classified as AFS financial assets. After initial recognition, loans and receivables are subsequently measured at amortized cost using the effective interest method, less any allowance for impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and transaction costs which are directly attributable in the acquisition of the financial instrument. The amortization is included in profit or loss.

As at December 31, 2015 and 2014, the Company classified its cash and cash equivalents and accounts receivable as loans and receivables.

Cash includes cash on hand and in banks. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash with original maturities of three (3) months or less from dates of acquisition and that are subject to an insignificant risk of change in value.

Other Financial Liabilities at Amortized Cost. Financial liabilities, which are not held for trading or are not designated as "at FVPL" are classified as financial liabilities carried at amortized cost where the substance of the contractual arrangement results in the Company having an obligation either to deliver cash or another financial asset to the holder, or to settle the obligation other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of its own equity instruments.

Other financial liabilities are initially recognized at fair value less any directly attributable transaction costs. 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 issue and related issue costs that are an integral part of the effective interest rate. Gains and losses are recognized in profit or loss when the liabilities are derecognized or impaired, or through the amortization process.

The Company's accrued expenses and due to Parent Company presented under "Accrued expenses and other payables" account are classified under this category.

d. Impairment of Financial Assets

The Company assesses at each reporting date whether there is objective evidence that a financial asset or 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 have occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) 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 borrower or a group of borrowers 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 measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

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 individually assessed financial assets, whether significant or not, it includes the financial assets in a portfolio with similar credit risk characteristics and collectively assesses them for impairment. Financial 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 for impairment.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the excess of financial asset's carrying amount over its net realizable value, normally based on the present value of the estimated future cash flows from the financial asset. The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate. Time value is generally not considered when the effect of discounting is not material. If a financial asset has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate, adjusted for the original credit risk premium. The calculation of the present value of the estimated future cash flows of a collateralized financial asset reflects the cash flows that may result from foreclosure less costs for obtaining and selling the collateral, whether or not foreclosure is probable. Any impairment loss determined is recognized in profit or loss.

The carrying amount of an impaired financial asset is reduced to its net realizable value through the use of an allowance account. For an impaired financial asset, interest income continues to be recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

e. Derecognition

A financial asset (or where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognized by the Company when:

- the contractual right to the cash flows from the financial asset has expired; or
- the Company retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a pass-through arrangement; or
- the Company has transferred its right to receive cash flows from the asset and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risk and rewards of the asset, but has transferred control over the asset.

When the Company has transferred its right 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 over the asset, the asset is recognized to the extent of the Company's continuing involvement in the asset.

A financial liability is 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 financial liability are substantially modified, such an exchange or modification is accounted for as an extinguishment of the original financial liability and the recognition of the new financial liability, and the difference in the respective carrying amounts is recognized in profit or loss.

f. Offsetting

Financial assets and liabilities are offset and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the asset and settle the liability simultaneously. This is not generally the case with master netting agreements where the related assets and liabilities are presented gross in the statement of financial position.

Fair Value Measurement

The Company uses market observable data as far as possible when measuring the fair value of an asset or a liability. Fair values are categorized into different levels in a fair value hierarchy based on inputs used in the valuation techniques as follows:

- Level 1 - Quoted (unadjusted) market prices in active market 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.
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

If the inputs used to measure the fair value of an asset or a liability might be categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting year during which the change has occurred.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and any impairment in value.

The initial cost of property and equipment consists of its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use. Expenditures incurred after the property and equipment have been put into operation, such as repairs and maintenance are normally recognized in profit or loss in the period these costs are incurred. In situations where it can be clearly demonstrated that the expenditures have resulted in an increase in the future economic benefits expected to be obtained from the use of property and equipment beyond its originally assessed standard of performance, the expenditures are capitalized as additional costs of property and equipment.

Depreciation of property and equipment is computed using the straight-line method over the estimated useful life of three (3) years, except for leasehold improvements. Leasehold improvements are amortized over the estimated useful life of five years (5) or the term of the lease, whichever is shorter.

The assets' useful life and depreciation and amortization method are reviewed periodically to ensure that these are consistent with the expected pattern of economic benefits from the property and equipment.

When assets are sold or retired, the cost and the related accumulated depreciation and amortization and any impairment in value are eliminated from the accounts and any resulting gain or loss is included in profit or loss.

Construction in progress represents structures under construction and is stated at cost. Cost includes costs of construction, labor and other direct costs. Borrowing costs that are directly attributable to the construction of property and equipment are capitalized during the construction period. Construction in progress is not depreciated until such time that the relevant assets are ready for 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 Non-financial Assets (Property and Equipment and Software)

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 and when annual impairment testing for an asset is required, the Company makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's cash-generating unit's fair value less costs to sell or its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples and other available fair value indicators. In assessing value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessment of the time value of money and the risks specific to the asset.

An assessment is 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 Company makes an estimate of recoverable amount. 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 that is the case, the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior periods. Such reversal is recognized in profit or loss.

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 from sale of goods and services. Input VAT is classified as current asset if expected to be used within 12 months from the reporting date. Otherwise, these are classified as noncurrent assets.

Capital Stock

Capital stock is measured at par value for all shares issued. Proceeds and/or fair value of considerations received in excess of par value, if any, are recognized as additional paid-in capital. Stock transactions costs, which are incremental costs directly attributable to the issuance of shares are treated as a contra shareholders' equity account as deduction from additional paid-in capital from previous stock issuance, if any, then to retained earnings, with appropriate disclosure.

Retained Earnings

The balance of retained earnings includes the cumulative balance of periodic net income or loss and is reduced by dividend distributions and adjusted for prior period adjustments, effect of changes in accounting policy and other capital adjustments. A debit balance in the retained earnings account refers to a deficit position.

Revenue Recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company and the amount of the revenue can be measured reliably. Revenue is measured at the fair value of the consideration received or receivable, excluding VAT.

Interest Income. Interest income is recognized as the interest accrues, using the effective interest method.

Expense Recognition

Expenses are recognized in profit or loss when a decrease in future economic benefits related to a decrease in an asset or an increase in a liability has arisen that can be measured reliably.

Expenses are recognized in profit or loss when incurred.

Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangements and requires an assessment of whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

The Company as a Lessee. Leases where the lessor retains substantially all the risks and benefits over the ownership of the leased properties are classified as operating leases. Operating lease payments are recognized as an expense in profit or loss on a straight-line basis over the lease term.

Foreign Currency-Denominated Transactions

Transactions denominated in foreign currencies are recorded using the exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are restated using the closing rate of exchange at reporting date. All differences are taken to profit or loss. Nonmonetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Nonmonetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Foreign exchange gains and losses are recognized on a net basis.

Income Taxes

Current Tax. Current tax assets and liabilities for the current and prior year are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rate and tax laws used to compute the amount are those that have been enacted or substantively enacted as at the reporting date.

Deferred Tax. Deferred 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 tax liabilities are recognized for all taxable temporary differences. Deferred tax assets are recognized for all deductible temporary differences, carryforward benefits of unused net operating loss carryover (NOLCO), to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and carryforward benefits of unused tax losses can be utilized. Deferred tax, however, is not recognized when it 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.

The carrying amount of deferred 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 tax asset to be utilized. Unrecognized deferred 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 tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rate that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rate and tax laws that have been enacted or substantively enacted as at the reporting date.

Deferred tax assets and liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Related Parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control. Related parties may be individuals or corporate entities.

Provisions

Provisions are recognized when the Company has a present legal or constructive obligation 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. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessment of the time value of money and, 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 interest expense.

Contingencies

Contingent liabilities are not recognized in the financial statements but 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 on the Company's financial position at the reporting date (adjusting events), are reflected in the financial statements. Any event after the reporting date that is not an adjusting event is disclosed in the notes to financial statements when material.

5. Significant Accounting Judgments, Estimates and Assumptions

The preparation of the financial statements requires management to make judgment and estimates that affect the amounts reported in the financial statements and accompanying notes. The judgments, estimates and assumptions are based on management's evaluation of relevant facts and circumstances as at the reporting date. While the Company believes that the assumptions are reasonable and appropriate, significant differences in the actual experience or significant changes in the assumptions may materially affect the estimated amounts.

Judgments

In the process of applying the Company's accounting policies, management has made the following judgments, apart from those involving estimations, which have the most significant effect on the amounts recognized in the financial statements.

Determination of 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 revenue and expenses.

Determination of Classification of Lease Arrangements. The Company has a lease arrangement with a third party in relation to the Company's satellite office in Atimonan, Quezon. The Company has determined, based on the evaluation of the terms and conditions of the arrangement, that it has not acquired any significant risks and benefits over the ownership of such property because the lease arrangement over the assets does not transfer the ownership to the Company at the end of the lease term and does not provide the Company with a bargain purchase option over the lease assets. Consequently, the lease arrangement is accounted for as an operating lease.

Rent expense amounted to ₱152,637 and ₱79,753 in 2015 and 2014, respectively (see Note 11).

Estimates and Assumptions

The key estimates and assumptions and sources of estimation uncertainty at the reporting date that has a significant risk of causing a material adjustment to the carrying amount of assets and liabilities within the next financial year are discussed below.

Estimating Impairment Losses of Receivables. The Company reviews its receivables at each financial reporting date to assess whether impairment losses should be recognized in profit or loss. In particular, judgment by management is required in the estimation of the amount and timing of future cash flows when determining the level of allowance required. Such estimates are based on assumptions on a number of factors and actual results may differ, resulting in future changes to the allowance.

No impairment losses on receivables were recognized for the years ended December 31, 2015 and 2014. The carrying amount of accounts receivable amounted to ₱167,432 and ₱257,663 as at December 31, 2015 and 2014, respectively (see Note 7).

Estimation of Useful Lives of Property and Equipment and Software. The Company estimates the useful lives of property and equipment and software based on the period within which the assets are expected to be available for use. The estimated useful lives of property and equipment and software are reviewed periodically and are updated if expectations differ from previous estimates due to physical wear and tear, technical and commercial obsolescence and legal or other limits on the use of the assets. The estimation of the useful lives 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 the estimates brought about by changes in factors mentioned above. The amounts and timing of recorded expenses for any period would be affected by changes in these factors and circumstances. A reduction in the estimated useful lives of property and equipment and software would increase the recorded depreciation and amortization expense and decrease noncurrent assets.

There are no changes in the estimated useful life of property and equipment in 2015 and 2014. The depreciable property and equipment amounted to ₱854,773 and ₱163,445 as at December 31, 2015 and 2014, respectively (see Note 8), while the net book value of software which was acquired in 2015 was ₱1,589,179 as at December 31, 2015 (see Note 9).

Estimating Impairment on Non-financial Assets. The Company assesses impairment on its assets whenever events or changes in circumstances indicate that the carrying amount of the assets or group of assets may not be recoverable. The relevant factors that the Company considers in deciding whether to perform an asset impairment review include, among others, the following:

- significant underperformance of a business in relation to expectations;
- significant negative industry or economic trends; and
- significant changes or planned changes in the use of the assets.

There were no indicators that the Company's property and equipment and software are impaired. Accordingly, no impairment loss was recognized on property and equipment and software in 2015 and 2014. Property and equipment amounted to ₱105,248,074 and ₱37,845,923 as at December 31, 2015 and 2014, respectively (see Note 8), while software amounted to ₱1,589,179 and nil as at December 31, 2015 and 2014 (see Note 9).

Assessing Realizability of Deferred Tax Assets. The Company reviews the carrying amounts of deferred tax asset at each reporting date and reduces these to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the deferred income tax asset to be utilized. Significant management judgment is required to determine the amount of deferred income tax assets that can be recognized, based upon the likely timing and level of future taxable income together with future tax planning strategies.

The Company has carryforward benefit of unused NOLCO and deductible temporary difference amounting to ₱43,083,529 and ₱11,804,801 as at December 31, 2015 and 2014, respectively (see Note 14). Management believes that sufficient taxable profits will not be available in the near future against which the related tax benefits can be applied.

6. Cash and Cash Equivalents

This account consists of:

	2015	2014
Cash on hand and in banks	₱14,638,132	₱47,675,216
Cash equivalents	60,032,667	—
	₱74,670,799	₱47,675,216

Cash in banks earns interest at prevailing bank deposit rates. Cash equivalents are temporary cash investments which are made for varying periods up to three (3) months depending on the Company's immediate cash requirements, and earn interest at the prevailing short-term investment rates.

Interest income from cash and cash equivalents amounted to ₱408,559 and ₱74,242 in 2015 and 2014, respectively.

7. Accounts Receivable

This account consists of:

	Note	2015	2014
Advances to officers and employees		₱135,432	₱13,999
Due from MERALCO	12	—	243,664
Others		32,000	—
		₱167,432	₱257,663

The Company's accounts receivable are non-interest bearing, due and demandable.

8. Property and Equipment

Movements of property and equipment are shown below:

	December 31, 2015				
	Construction in Progress	Computer Equipment	Office Furniture, Fixtures and Other Equipment	Leasehold Improvements	Total
Cost					
Balance at beginning of year	₱37,682,478	₱126,139	₱90,536	₱—	₱37,899,153
Additions during the year	66,710,823	375,000	191,645	268,368	67,545,836
Balance at end of year	104,393,301	501,139	282,181	268,368	105,444,989
Accumulated Depreciation					
Balance at beginning of year	—	40,257	12,973	—	53,230
Depreciation and amortization	—	81,629	44,767	17,289	143,685
Balance at end of year	—	121,886	57,740	17,289	196,915
Carrying Amount	₱104,393,301	₱379,253	₱224,441	₱251,079	₱105,248,074

	December 31, 2014			
	Construction in Progress	Computer Equipment	Office Furniture, Fixtures and Other Equipment	Total
Cost				
Balance at beginning of year	P-	P72,668	P-	P72,668
Additions during the year	37,682,478	53,471	90,536	37,826,485
Balance at end of year	37,682,478	126,139	90,536	37,899,153
Accumulated Depreciation				
Balance at beginning of year	-	10,093	-	10,093
Depreciation and amortization	-	30,164	12,973	43,137
Balance at end of year	-	40,257	12,973	53,230
Carrying Amount	P37,682,478	P85,882	P77,563	P37,845,923

Construction in progress mainly pertains to directly attributable costs for the cost of site development and professional fees, related to the development of the proposed power plant in Atimonan, Quezon Province. As at December 31, 2015 and 2014, the Company has related liabilities for the capitalized development expenses amounting to P2,571,748 and P13,374,990, respectively, which are included under the "Accrued expenses and other payables" account.

Depreciation and amortization are allocated as follows:

	Note	2015	2014
Property and equipment		P143,685	P43,137
Software	9	176,575	-
		P320,260	P43,137

9. Software

Movements of software in 2015 are shown below:

	Note	
Cost		
Balance at beginning of year		P-
Additions	12	1,765,754
Balance at end of year		1,765,754
Accumulated Amortization		
Balance at beginning of year		-
Amortization	8	176,575
Balance at end of year		176,575
Carrying Amount		P1,589,179

As at December 31, 2015, the Company's reimbursement of software cost amounting to P1,765,754 is a non-cash investing activity.

10. Accrued Expenses and Other Payables

This account consists of:

	Note	2015	2014
Accounts payable and accrued expenses		₱7,128,642	₱25,720,229
Due to Parent Company	12	1,770,585	157,619
Withholding taxes payable		791,534	1,155,398
Others		18,585	5,555
		₱9,709,346	₱27,038,801

Accrued expenses primarily pertain to accrual of various expenses as at December 31, 2015 and 2014.

11. Lease Agreements

On May 26, 2014, the Company entered into a lease agreement with a third party for the lease of office space in Atimonan, Quezon Province, which expired on August 31, 2015.

On July 16, 2015, the Company entered into a lease agreement with another third party for a term of five (5) years to establish the Company's new satellite office in Atimonan, Quezon Province.

Total rent expense recognized in 2015 and 2014 in connection with the foregoing amounted to ₱152,637 and ₱79,753, respectively.

Future rental commitments as at December 31, 2015 and 2014 are as follows:

	2015	2014
Within one year	₱180,000	₱89,840
After one year but not more than five years	661,200	—
	₱841,200	₱89,840

12. Related Party Transactions

In the normal course of business, the Company has transactions with related parties as presented below:

Related Parties	Nature of Transactions	Transactions during the Period		Outstanding Balances		Terms and Conditions
		2015	2014	2015	2014	
Parent Company	Reimbursement of software cost	(₱1,765,754)	₱—	(₱1,765,754)	₱—	One-time transaction, due and demandable
	Advances for working capital	(386,703)	(164,348)	(4,831)	(157,619)	Noninterest-bearing cash advances, due and demandable
				(₱1,770,585)	(₱157,619)	
MERALCO	Advances for expenses	₱—	₱243,664	₱—	₱243,664	One-time cash advance, due and demandable

The outstanding balances are unsecured, noninterest-bearing and are to be settled in cash. No guarantees are provided.

Compensation of Key Management

The administrative and financial functions of the Company are being handled by the Parent Company at no cost.

13. Capital Stock

Movements of capital stock are shown below:

	2015		2014	
	Number of Shares	Amount	Number of Shares	Amount
Authorized - ₱100 par value	4,000,000	₱400,000,000	4,000,000	₱400,000,000
Issued and Outstanding				
Balance at beginning of year	750,000	₱75,000,000	250,000	₱25,000,000
Issued during the year	1,500,000	150,000,000	500,000	50,000,000
Balance at end of year	2,250,000	₱225,000,000	750,000	₱75,000,000
Subscribed				
Balance at beginning of year	1,000,000	₱100,000,000	1,000,000	₱100,000,000
Paid and issued during the year	1,250,000	125,000,000	—	—
Balance at end of year	2,250,000	225,000,000	1,000,000	100,000,000
Subscriptions Receivable				
Balance at beginning of year		25,000,000		75,000,000
Collection		(25,000,000)		(50,000,000)
Balance at end of year		—		25,000,000
		₱225,000,000		₱75,000,000

Subscriptions receivable of ₱25,000,000 and ₱50,000,000 were paid in 2015 and 2014, respectively.

In 2015, an additional 1,250,000 shares were subscribed and paid by the Parent Company.

Stock issuance costs consisting of documentary stamp taxes amounting to ₱750,000 and ₱250,000 related to the foregoing were deducted from retained earnings in 2015 and 2014, respectively.

14. Income Tax

The Company has no current income tax expense in 2015 and 2014 because it is in a tax loss position.

The Company is not subject to minimum corporate income tax (MCIT) until taxable year 2017, which is the fourth taxable year immediately following the year of the Company's registration with the Bureau of Internal Revenue (BIR) as provided under the Tax Code. The Company was registered with the BIR on February 5, 2013.

As at December 31, 2015 and 2014, the Company has the following carryforward benefit of unused NOLCO and deductible temporary difference for which no deferred tax assets were recognized:

	2015	2014
NOLCO	P43,051,671	P11,798,401
Unrealized foreign exchange loss	31,858	6,400
	P43,083,529	P11,804,801

Management assessed that there will not be enough taxable income in the future from which the deferred tax assets can be applied.

As at December 31, 2015, details and expiry of NOLCO are as follows:

Year Incurred	Year of Expiration	Amount
2013	2016	P3,821,532
2014	2017	7,976,869
2015	2018	31,253,270
		P43,051,671

A reconciliation between the statutory income tax rate and effective income tax rate follows:

	2015	2014
Statutory income tax rate	30.00%	30.00%
Income tax effects of:		
Movements in unrecognized deferred tax assets	(30.71)	(30.13)
Stock transaction costs	0.74	0.94
Nondeductible expense	(0.43)	(1.09)
Interest income subjected to final tax	0.40	0.28
Effective income tax rate	—	—

15. Financial Risk Management Objectives and Policies

The Company's financial instruments consist of cash in banks and cash equivalents, accounts receivable, due to Parent Company and accrued expenses. The main purpose of these financial instruments is to support the Company's operations.

The main risks arising from the Company's financial instruments are credit risk and liquidity risk. The Company's BOD reviews and approves policies for managing each of these risks as summarized below.

Credit Risk. Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company's exposure to credit risk is currently limited to the carrying amount of cash and cash equivalents amounting to P74,580,799 and P47,625,216, as at December 31, 2015 and 2014, respectively. Such exposure arises from a possible default of banks. As at December 31, 2015 and 2014, cash and cash equivalents are viewed by management as "high grade" since the depository banks are not expected to default.

Liquidity Risk. The Company closely monitors its cash flows and ensures that it will meet its obligations as and when they fall due. To manage this exposure, the Company maintains a sufficient level of cash to fund its obligations. The Company's accrued expenses and due to Parent Company totaling to ₱8,899,227 and ₱25,877,848 as at December 31, 2015 and 2014, respectively, are payable within one year, while cash and cash equivalents and accounts receivable used for liquidity purposes amounted to ₱74,748,231 and ₱47,882,879, as at December 31, 2015 and 2014, respectively.

Fair Value of Financial Instruments

The carrying amounts of cash in banks and cash equivalents, accounts receivable, due to Parent Company and accrued expenses approximate their fair values since maturities of these financial instruments are within the short-term period.

The Company uses the following hierarchy for determining 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

As the Company has not started operations, it ensures that the capital infused by the shareholders is properly managed. The Company's total equity as at December 31, 2015 and 2014 amounted to ₱181,721,423 and ₱63,026,567, respectively. Capital calls shall be made when the Company's business plan is completed. To date, the Company is not subject to any externally imposed capital requirements.

No changes were made in the objectives, policies or processes for the years ended December 31, 2015 and 2014. The Company was able to meet its capital management objectives as at December 31, 2015 and 2014.

16. Supplementary Information Required under Revenue Regulations No. 15-2010

The Company reported the following types of taxes for the year ended December 31, 2015:

I. Output VAT

The Company has no output VAT paid for the year ended December 31, 2015.

II. Input VAT

The movements in the input VAT paid for by the Company for the year ended December 31, 2015 are shown below:

Balance at beginning of year	₱4,262,143
Current year's domestic purchases/payments for:	
Goods other than for resale or manufacture	61,058
Capital goods not subject to amortization	77,533
Services included under various accounts	4,879,743
Balance at end of year	<u>₱9,280,477</u>

For the year ended December 31, 2015, deferred input VAT on services amounted to ₱352,607.

III. Documentary stamp tax

The Company paid the following DST in 2015:

Issuance of shares of stock	₱750,000
Lease contract	901
	<u>₱750,901</u>

IV. All other local and national taxes

Details of taxes and license fees included under the "Taxes and licenses" account in the statement of comprehensive income follows:

Local business taxes	₱8,807
Community tax certificate	580
BIR annual registration	500
Others	5,595
	<u>₱15,482</u>

V. Withholding taxes

Expanded withholding taxes	₱5,599,813
Withholding taxes on compensation and benefits	1,202,059
	<u>₱6,801,872</u>

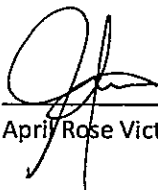
VI. Tax assessments and tax cases

The Company has no outstanding tax assessments from the BIR and tax cases in courts or other regulatory bodies outside of the BIR as at December 31, 2015.

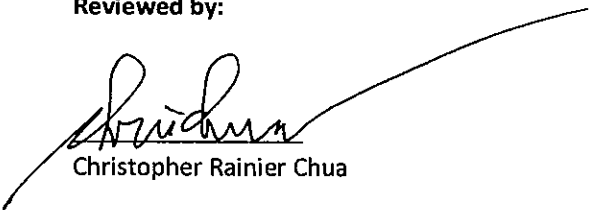
Board of Investment (BOI) Certificate of Registration

Atimonan One Energy, Inc. (A1E) is not yet qualified to register with the BOI, as the current Investment Priorities Plan (IPP) covers only 2014-2016, while the planned commissioning and Commercial Operations Date of A1E is in 2021. A1E plans to avail of the ITH pending the release of the 2017-2019 IPP, and will submit a BOI Certificate of Registration as soon as available.

Prepared by:


April Rose Victoria

Reviewed by:


Christopher Rainier Chua



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 " H "

OCT 13 2015

ECC-CO-1412-0029

Mr. Angelito U. Lantin
President
Atimonan One Energy, Inc. (A1E)
8F Rockwell Business Center I
Ortigas Ave., Pasig City

SUBJECT: ENVIRONMENTAL COMPLIANCE CERTIFICATE

Dear Sir:

This refers to the Environmental Compliance Certificate (ECC) application for the proposed Coal - Fired Power Plant Project to be located at Barangay Villa Ibaba, Municipality of Atimonan, Quezon Province.

After satisfying the requirements of PD No. 1586 and its implementing rules and regulations, the Environmental Management Bureau (EMB) of this Department, has decided to grant an ECC for the above-mentioned project.

With the issuance of this ECC, you are expected to fully 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. However, you may proceed with the project implementation only after securing all the necessary permits from other pertinent Government agencies. This Office shall be strictly monitoring the project periodically to ensure your compliance with stipulations cited in the attached ECC.

Please be guided accordingly.

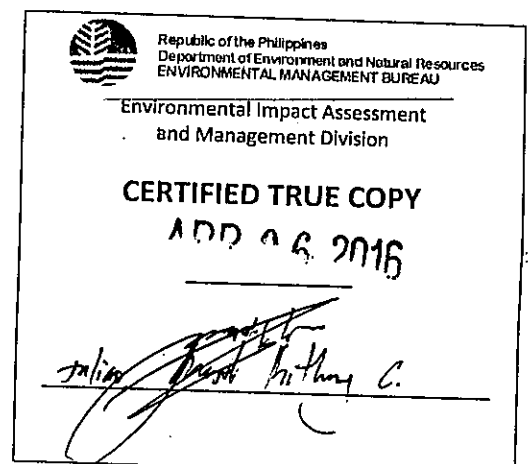
Very truly yours,

By the Authority of the Secretary:


ATTY. JUAN MIGUEL T. CUNA
DENR Assistant Secretary and
Concurrent Director

cc: EMB - Region IV-A
LGU - Province of Quezon
LGU - Municipality of Atimonan
LGU - Brgy. Villa Ibaba, Atimonan
DOE
DOLE
DOH
DENR - FMB
DAR

Environmental Compliance Certificate
Coal - Fired Power Plant Project
Atimonan One Energy, Inc. *Protect the environment... Protect life...*





Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
DENR Compound, Visayas Avenue, Diliman, Quezon City 1118
Telephone Nos.: 927-15-17, 928-20-96
Email : emb@emb.gov.ph
Visit us at <http://www.emb.gov.ph>

ENVIRONMENTAL COMPLIANCE CERTIFICATE
(Issued under Presidential Decree No. 1586)
ECC-CO-1412-0029

THIS IS TO CERTIFY THAT THE PROPONENT, **Atimonan One Energy, Inc.**, as represented by its President, Mr. Angelito U. Lantin, is granted this Environmental Compliance Certificate (ECC) for the proposed **Coal - Fired Power Plant Project** to be located at **Barangay Villa Ibaba, Municipality of Atimonan, Quezon Province** 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 documents labeled as Annexes A and B with the following details:

PROJECT DESCRIPTION

The Certificate shall cover **Coal - Fired Power Plant Project** with a capacity of one thousand two hundred megawatts (1200 MW) to be constructed and operated within the one hundred thirty (130) hectares land area in Barangay Villa Ibaba, Atimonan, Quezon using Pulverized Coal Technology with the following facilities:

Major Components

- 2 units x 600 MW pulverized coal (PC) boiler
- 2 units x 600 MW steam turbine
- 2 units x 600 MW generator
- Electrical systems (lighting, distributed control system, transformer and substation, emergency diesel generator)
- Fuel oil tank
- Coal handling system with enclosed conveyors
- Coal stockyard with wind fences
- Coal stacker/reclaimer
- Ash handling and disposal system
- Cooling water system
- Water supply system
- Fire protection system
- Auxiliary Steam System (Auxiliary Boiler)

Support Facilities

- Pollution control system: Electrostatic precipitator, seawater flue gas desulfurizer, stack, continuous emission monitoring system, wastewater treatment plant
- Access road
- Buildings
 - Bachelor's offices and quarters (BOQ)
 - Workshop, warehouse and motorpool
 - Administration building, car parking area and gatehouse/guardhouse
 - Temporary housing facility
 - Sampling laboratory
- Coal unloading jetty approximately 600 meter long, single berth for 80,000 DWT Panamax Vessel
- Marine offloading facility approximately 300 meter long, with a 35 meter x 25 meter pad at the end of the facility for vessels with up to 4 meters draft requirement

Environmental Compliance Certificate
Coal Fired Power Plant Project
Atimonan One Energy, Inc.

Protect the environment... Protect life...



Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU

Environmental Impact Assessment
and Management Division

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APR 06 2016

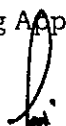
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Atimonan One Energy, Inc.

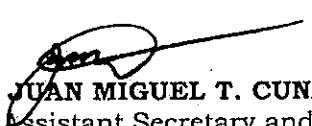
This Certificate is issued in compliance with the requirements of Presidential Decree No. 1586 and in accordance with DENR Administrative Order No. 2003-30. Non-compliance with any of the provisions of this Certificate shall be a sufficient cause for its cancellation and/or imposition of a fine in an amount not to exceed Fifty Thousand Pesos (P50,000.00) for every violation thereof and shall be without prejudice to imposition of fines and penalties under other environmental laws, rules and regulations. The EMB, however, is not precluded from reevaluating, and correcting any deficiencies or errors that may be found after issuance of this Certificate.

Issued at DENR, Quezon City, Philippines, this OCT 13 2015.

Recommending Approval:

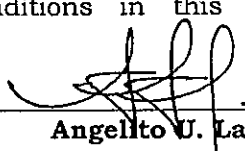
Approved by the Authority of the Secretary:


ATTY. MICHAEL DRAKE P. MATIAS
OIC Chief, EIA Management Division


ATTY. JUAN MIGUEL T. CUNA
DENR Assistant Secretary and
Concurrent Director

STATEMENT OF ACCOUNTABILITY

Atimonan One Energy, Inc., proponent of this 2 x 600 MW Coal Fired Power Plant Project, located at Barangay Villa Ibaba, Atimonan, Quezon, hereby represented by Mr. Angelito U. Lantin, President, takes full responsibility in complying with all conditions in this Environmental Compliance Certificate (ECC).

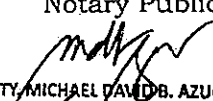

Angelito U. Lantin

TIN 106 447 777 000

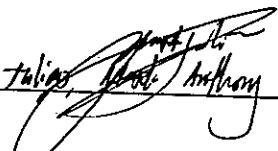
Subscribed and sworn to before me this OCT 15 2015, the
above-named affiant taking oath presenting _____
issued on _____ at _____.

Notary Public

Doc. No. 398
Page No. 81
Book No. I
Series of 2015


ATTY. MICHAEL DAVID B. AZUCENA
NOTARY PUBLIC
PASIG, PATEROS, TAGUIG, AND SAN JUAN
ISSUED ON MAY 12, 2014 AT PASIG CITY
APPOINTMENT NO. 217 (2014-2015)
ROLL NO. 58433 / IBP NO. 0980976 / 01-07-15 MAKATI CHAPTER
PTR NO. 0509670 / 02-13-15 PASIG CITY
8TH FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY

Environmental Compliance Certificate
Coal Fired Power Plant Project
Atimonan One Energy, Inc.

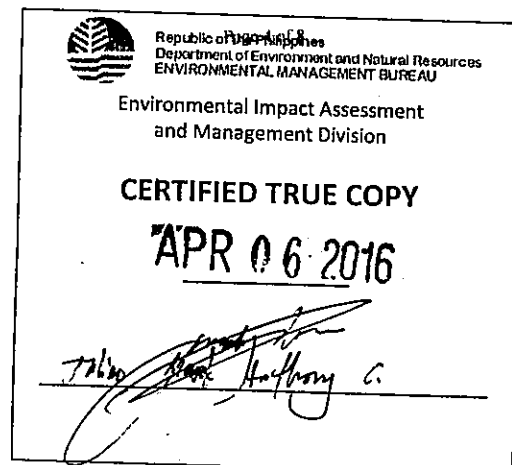
	Page 3 of 8 Republic of the Philippines Department of Environment and Natural Resources ENVIRONMENTAL MANAGEMENT BUREAU
Environmental Impact Assessment and Management Division	
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I. CONDITIONS**ENVIRONMENTAL MANAGEMENT**

All commitments, mitigating measures and monitoring requirements, contained in the Final Environmental Impact Statement (EIS) for the proposed Coal - Fired 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 and understanding of the project. The IEC program shall be submitted to EMB Central Office within thirty (30) days from receipt hereof and every January of every year;
2. Implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB Central Office and copy furnished EMB Region IV-A on a semi-annual basis;
3. Establish appropriate measures and 7 meters buffer zone 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 automated weather station within six months from issuance of this Certificate;
5. Conduct air dispersion model validation one (1) month after commercial operation and every two years thereafter until the model and observed value difference are consistent. Validation report shall be submitted to EMB Central Office two (2) months from the conduct of said validation. The following are the required activities for the model validation:
 - a. Use onsite meteorological data in the validation of dispersion modeling.
 - b. Install a CEMS for SO₂, NO₂, PM₁₀, CO and CO₂ as required by the CAA. For pollutants included in the validation but are not covered by the CAA, a robust source sampling design for model validation shall be formulated and implemented. Real time reporting thereof shall be automatically transmitted to EMB.
 - c. Formulate an ambient air quality sampling design solely for model validation.
 - d. Use the Air Dispersion Modelling Guidelines of EMB as the main reference.
6. Conduct a thermal plume model validation one (1) month after commercial operation and every two years thereafter until the model and observed value difference are consistent. Validation report shall be

Environmental Compliance Certificate
Coal Fired Power Plant Project
Atimonan One Energy, Inc.



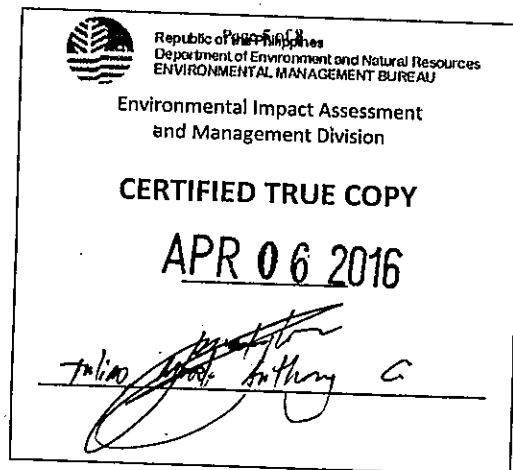
submitted to EMB Central Office two (2) months from the conduct of said validation. The following are the required activities, but not limited to, for the model validation:

- a. Installation of an automatic temperature sensor to measure temperature of discharged water;
 - b. Formulation of an ambient temperature measurement design solely for the model validation. The measurements should be able to capture both seasons.
 - c. Monitor flow rate of the cooling water discharge
7. Conduct a quantitative risk assessment (QRA) or hazard operability (HAZOP) prior to commissioning to ensure that hazards and risks are kept at the minimum. A report shall be submitted to EMB Central Office and EMB Region IV-A prior to commissioning. At the minimum, the QRA or HAZOP shall be updated every five (5) years thereafter, to ensure that hazards and risks are kept at a minimum;
 8. Formulate and submit for approval a reforestation and carbon sink program using endemic/indigenous species to offset greenhouse gas (GHG) emissions of the project in line with the DENR's thrust for GHG emissions reduction program and the National Greening Program in coordination with PENRO and the CENRO and submit the program to EMB (Central and Region IV-A) six (6) months prior to its operation. Implementation of the said program shall be reported to EMB (Central Office and Region IV-A) on a semi-annual basis;
 9. Submit a coastal resource management program (CRMP) covering the project impact area to EMB Central Office copy furnished the EMB Region IV-A within sixty (60) days from start of its construction;
 10. Conduct a detailed site investigation which include detailed geotechnical study and seismic risk analysis of power plant and jetty areas and submit copy of the studies to EMB Central Office and EMB Region IV-A within sixty (60) days prior to construction;

GENERAL CONDITIONS

11. 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 (Ecological Solid Waste Management Act of 2000), and RA 9275 (Philippine Clean Water Act of 2004) and other relevant policies, rules and regulations;
12. Install a closed circuit television (CCTV) with the receiver located in the boiler room or control room to monitor the plant emission. The CCTV camera system shall be web-based and accessible to the DENR;
13. The proponent shall set-up the following:
 - 13.1 A readily available and replenishable Environmental Guarantee Fund (EGF) to cover the following expenses:
 1. Environmental assessments, compensations/indemnification for whatever damages to life and property that may be caused by the project;
 2. Rehabilitation and /or restoration of areas affected by the

Environmental Compliance Certificate
Coal Fired Power Plant Project
Atimonan One Energy, Inc.



project's implementation; and

3. 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;

13.2 A Multipartite Monitoring Team (MMT) composed of among others representative(s) from the proponent, EMB Region IV-A, a local environmental Non-Government Organization (NGO), Department of Energy (DOE) Regional Office and the Local Government Units shall be organized. The MMT shall primarily oversee the compliance of the proponent with the Environmental Management and Monitoring Plan (EMMoP) and the ECC conditions;

13.3 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, fieldwork and transportation.

The amount and mechanics of the EGF, EMF and the establishment of the MMT shall be determined by the EMB Central Office and the proponent in consultation with EMB Region IV-A through a Memorandum of Agreement (MOA) which shall be submitted within sixty (60) days upon receipt of this Certificate;

14. Creation of an Environmental Unit (EU) within sixty (60) days from receipt of this Certificate that shall 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), the EU shall have the following responsibilities:

- a. Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the EIS;
- b. Recommend revisions to the EMMoP, whenever necessary subject to the approval of EMB Central Office. Revisions shall also consider the result of the validation of air dispersion and thermal plume modeling;
- c. Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated and reported in accordance with the standard formats; and
- d. Ensure that monitoring and submissions of reports to EMB (Central Office and Region IV-A) are carried out as required;

15. The proponent shall ensure that its contractors and sub-contractors properly comply with the relevant conditions of this Certificate;

II. RESTRICTIONS

16. No coral reefs shall be affected during construction and operation of intake pipe and discharge canal and jetty;

17. The project implementation shall only proceed after securing the final resolution of the pending issues with Department of Agrarian Reform;

18. There shall be no development/operation within the proposed project area until such time that the same or portion thereof has been reclassified as industrial zone by the Local Government Unit;

Environmental Compliance Certificate
Coal Fired Power Plant Project
Atimonan One Energy, Inc.

Page 6 of 8
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Department of Environment and Natural Resources
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Environmental Impact Assessment
and Management Division

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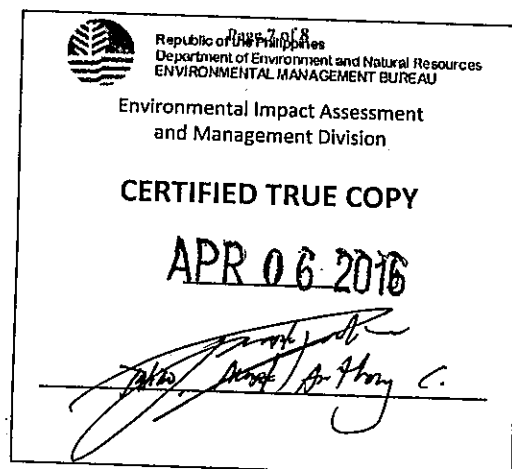
APR 06 2016

[Signature]

19. No activities shall be undertaken other than what were stipulated in the final EIS. 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
20. 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 Central Office within fifteen (15) days from the transfer of ownership.

O.R. No : 6692870
Date : Nov. 21, 2014
Processing Fee: PhP 6,010.00

Environmental Compliance Certificate
Coal Fired Power Plant Project
Aumonan One Energy, Inc.



PROJECT ASSESSMENT PLANNING TOOL

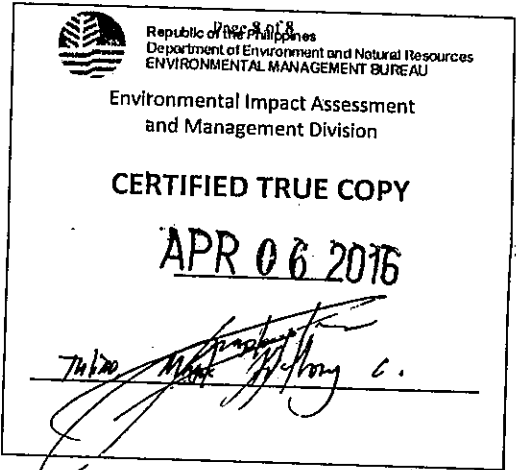
For the assistance of the Proponent and the Government Agencies concerned in the management of the Project and for better coordination in mitigation of the impacts of the Project on the surrounding areas, the following are recommended to the parties and authorities concerned for appropriate action.

OTHER REGULATORY REQUIREMENTS/CONDITIONS	CONCERNED GOVERNMENT AGENCIES/ENTITIES
1. Compliance with the Sanitation Code of the Philippines;	DOH and LGU concerned
2. Compliance with the Labor Code of the Philippines;	DOLE
3. Compliance with the Building Code of the Philippines	LGU concerned
4. Ensure compliance with the Ecological Solid Waste Management Act;	LGU concerned
5. Secure a Foreshore Lease Agreement (FLA);	DENR
6. Secure a tree cutting permit;	DENR-FMB
7. Secure Municipal Zoning Clearance	LGU concerned
8. Secure land use conversion order for CLOA lots	DAR
ENVIRONMENTAL PLANNING RECOMMENDATIONS FOR THE PROPONENT	
9. Priority of employment shall be given to qualified local residents. Adequate public information for jobs available to local residents in the affected areas shall be provided; and	
10. An independent third party shall be commissioned to undertake an environmental audit, including a continuing study of the effects of the Project on the health of the workers and affected residents, including vulnerable groups. The result of the third party environmental audit, including the auditing of risks and hazards of the Project, shall be submitted to EMB Central Office, while the result of the continuing health study shall be submitted to the Department of Health (DOH), for evaluation every two (2) years commencing from receipt hereof.	

ATTY. MICHAEL DRAKE P. MATIAS
OIC, Chief EIAM Division

ATTY. JUAN MIGUEL T. CUNA
DENR Assistant Secretary and
Concurrent Director

Environmental Compliance Certificate
Coal Fired Power Plant Project
Aumonan One Energy, Inc.



ANNEX " I "

MANILA ELECTRIC COMPANY – ATIMONAN ONE ENERGY, INC. POWER SUPPLY AGREEMENT

EXECUTIVE SUMMARY

Brief Background

Atimonan One Energy, Inc. (A1E) intends to construct, own, operate, manage and maintain a 2 x 600 MW (net) supercritical coal-fired power generating facility in the Municipality of Atimonan, Quezon (the "Plant").

On 26 April 2016, the Power Supply Agreement (PSA) between the Manila Electric Company (Meralco) and A1E for purchase of Contract Capacity and Associated Energy from the Plant was signed.

Technical and Economic Characteristics of the Plant

The Plant is a 2 x 600 MW (net) supercritical coal-fired power plant to be constructed within the greenfield site of Sitio Carinay, Barangay Villa Ibaba in the municipality Atimonan in the province of Quezon. A1E will oversee the financing, design, procurement, construction, testing, commissioning, operation, and maintenance of the Plant. The Plant intends to run as a base-load power generation unit.

It shall adopt a super-critical pressure, Pulverized Coal ("PC") boiler, steam turbine generator ("STG") complete with electric generator and associated accessories with a total Net electrical output of 1,200 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.

The Project will include a number of other auxiliary systems necessary for operation. These include a coal handling system, coal crushers and pulverizing mills, a low-NOx boiler burner system, ash handling system, an air preheater, a seawater flue gas desulfurization (FGD) system, electrostatic precipitators for dust capture and removal, continuous emission monitoring (CEMS) system, condensate and feed water systems that include preheating, condensate polishing, chemical dosing and sampling, an auxiliary steam supply system, a once-through seawater cooling water system that includes a condenser with on-line tube cleaning system, chlorine dosing, intake and outfall structures, pumps and piping, primary air, forced draft and induced draft fans, a compressed air system, water and effluent treatment system, service and potable water supply system, a demineralized water supply system, fire-fighting, HVAC, and service gas supply systems, lifting/cranes, lubricating oil system, electrical system, transformers, switchgear, and a distributed control and instrumentation systems.

The Plant will be designed to operate as a base load, and will use proven supercritical technology and contract with highly respected construction contractors and equipment manufacturers. Given the size of the Project, the Plant will be designed to utilize a relatively broad range of coal specifications to allow for greater flexibility in coal sourcing, benefitting from the extensive coal reserves of Indonesia, Australia, and the US Powder River Basin with well-established coal delivery route(s) to the site of the Plant.

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The Project has agreed on a connection methodology with the NGCP, with the final route of transmission line consisting wholly of private lands, i.e. no indigenous, public, or protected areas. The approved transmission interconnection of Power Supplier shall be through a new 23-km 500 kV Double Circuit 4-795 MCM ACSR transmission line. The Power Supplier TL will start from the 500 kV switchyard located within the Power Supplier Plant site and shall pass through the municipalities of Atimonan, Padre Burgos, and Pagbilao, Quezon to connect radially to the New Pagbilao 230/500 kV substation to be built by the NGCP in Pagbilao, Quezon.

In case of delay in the implementation of the New Pagbilao Substation by NGCP, Power Supplier also has an approved interim connection from NGCP. The interim connection of Power Supplier is to bus-in the existing Naga-Tayabas 230 kV transmission line of NGCP. Such a bus-in connection will require construction of a 500 kV Double Circuit 4-795 MCM ACSR transmission line and a 230 kV Double Circuit 4-795 MCM ACSR transmission line with both lines having an approximate length of nine kilometers. Such an interim connection scheme will convert the Atimonan-Tayabas portion of the Naga-Tayabas line into 500 kV operation while the Atimonan-Naga portion remains at 230 kV.

Salient Features of the PSA

❖ **Term**

The obligation of A1E to deliver, and the obligation of Meralco to purchase the Contract Capacity and Associated Energy shall commence on the Commercial Operations Date (Unit 1), and shall expire on the date falling twenty (20) years and six (6) months thereafter.

❖ **Contract Capacity**

The Contract Capacity shall, upon Commercial Operations Date (Unit 1), be initially set at 600 MW, and, commencing on the Commercial Operations Date (Unit 2), be increased to 1,200 MW, subject to Assignment or Transfer of Contract Capacity.

❖ **Outage Allowances**

A1E 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, A1E 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 (4th) year after Commercial Operations Date and Major Maintenance Outage of Unit 1 and Unit 2 shall not occur at the same time.

❖ **Replacement Power**

For force majeure or outages within allowance, Meralco will source replacement power from WESM. If beyond outage allowance, A1E will purchase replacement power from WESM or third parties; these shall be declared as Bilateral Contract Quantities and will be paid by Meralco at five percent (5%) lower than the contract price.

❖ **Billing and Payment**

Meralco 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.

❖ **Reduction in Contract Capacity and Associated Energy**

Meralco shall, from time to time, be entitled to a reduction in the Contract Capacity and Associated Energy equivalent to the reduction in the demand of its captive customers by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

❖ **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.

ANNEX “J-N”

See Confidential Documents

REPUBLIC OF THE PHILIPPINES)
PASIG CITY)SS

ANNEX " 0 "

SWORN STATEMENT

I, Christopher Rainier Chua, of legal age, with office address at 8/F Rockwell Business Center Tower 1, Ortigas Avenue, Pasig City, after having been sworn in accordance with law, hereby depose and state that:

1. I am the duly authorized representative of Atimonan One Energy, Inc. ("A1E") for purposes of executing a sworn statement regarding the fuel procurement process relative to the Power Supply Agreement between A1E and the Manila Electric Company;
2. As the Assistant Vice President for Development, I have taken part in the internal management discussions and planning regarding the practicability and feasibility of entering into fuel supply agreements;
3. A1E has not yet entered into fuel supply agreements as of this date;
4. A1E intends to enter into a mix of short and long-term coal supply agreements and start discussions with potential suppliers during construction to manage likely minimum take-or-pay volume requirement of coal suppliers, especially those providing long-term supply.
5. A1E has engaged a third-party consultant to conduct studies on potential coal sources taking into account the required range of coal specifications and has identified Indonesia and Australia as the primary and secondary markets, respectively. Based on the said studies, A1E is confident that adequate supplies of coal can be procured economically and efficiently.
6. 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 26th day of April 2016 in Pasig City, Metro Manila.


Christopher Rainier Chua
Affiant

SUBSCRIBED AND SWORN to before me this APR 28, 2016 the day of April 2016 at Pasig City, Metro Manila by affiant who exhibited to me his Passport No. EC0644682 as proof of identity.
Issued: 23 March 2014

Doc. No. 110 ;
Page No. 23 ;
Book No. II ;
Series of 2016.


ATTY. GRETCHELL L. TOLOSA
Notary Public
Pasig, San Juan, Taguig and Pateros
Issued on April 20, 2015 at Pasig City
Appointment No. 155 (2015-2016)
Roll No. 57464/ IBP No. 1026896/ 01-06-16 RCM Chapter
PTR No. 1465701/01-21-16 Pasig City
MCLE V-0002607-06/09/14
8th Floor Lopez Bldg., Ortigas Avenue Pasig City

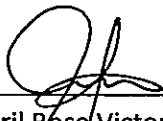
Status of Agreements

Transmission Services Agreement (TSA), Metering Service Agreement (MSA), and Connection Agreement (CA) –The Connection Agreement (CA) between A1E and NGCP is currently in process while the Metering Service Agreement (MSA) and the Transmission Services Agreement (TSA) can only be processed with NGCP after start of construction of the A1E power plant.

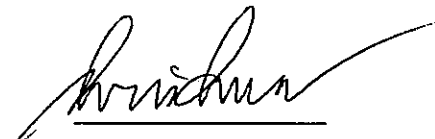
A1E has completed the System Impact Study (SIS) and Facility Study (FS), and both have been approved by the NGCP.

Fuel Supply Agreement – A1E has not yet entered into fuel supply agreements. A1E intends to enter into a mix of short and long-term coal supply agreements and start discussions with potential suppliers during construction to manage likely minimum take-or-pay volume requirement of coal suppliers, especially those providing long-term supply

Prepared by:


 April Rose Victoria

Reviewed by:


 Christopher Rainier Chua

National Power Corporation (NPC) Certification

This is not applicable to Atimonan One Energy, Inc. (A1E). The proposed power plant of A1E is a greenfield project and was not a state-owned asset hence does not have a Transition Supply Contract (TSC).

Prepared by:



April Rose Victoria

Reviewed by:

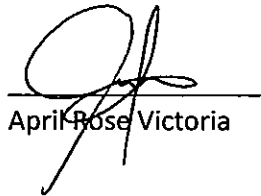
Christopher Rainier Chua

Write up regarding Department of Energy Certification

Atimonan One Energy, Inc. (A1E) obtained the Certificate of Endorsement from the Department of Energy (DOE) stating that A1E's 2x600 MW (net) supercritical coal-fired power project is included as "Indicative Power Project" in the DOE's List of Private Sector Initiated Power Projects.

We are also attaching the presentation given by the DOE in September 2015 on the Power Outlook 2015-2020.

Prepared by:


April Rose Victoria

Reviewed by:

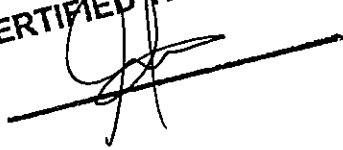

Christopher Rainier Chua

ANNEX " R "

Technical and Economic Characteristics

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

Technical Parameter	Technical Limit	Remarks
Design capacity (in MW)	Approximately 1320 (gross/installed capacity)	2 x ~660 MW gross unit generation at TMCR
	1200 (net/dependable capacity)	2 x 600 MW net unit generation at TMCR
Mode of Operation	Baseload	
Frequency Limits (Hertz)	60 ± 4%	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)	500 ± 5%	Per unit 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	85ms	
Start-up times (in minutes)* (Times from light off) a. Cold Start b. Warm Start c. Hot Start	 a. to Pmin (621min); to TMCR (691min) b. to Pmin (305min); to TMCR (359min) c. to Pmin (180min); to TMCR (215min)	Definition of start condition (hrs from unit shut down): a. ≥36h b. >8h to <36h c. ≤8h
Dispatch Ramp Rates (MW/min)* a. Hot condition	 a. Pmin to 50% (3.0MW/min); 50% to 100% (4.5MW/min)	

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b. Warm condition	b. Pmin to 50% (3.0MW/min); 50% to 100% (4.5MW/min)	
c. Cold condition	c. Pmin to 50% (2.5MW/min); 50% to 100% (2.5MW/min)	
Pmin (in MWnet) (as registered with the WESM)	240	Minimum Net Unit generation for continuous stable operation – no oil firing

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

Interconnection

The Atimonan One Energy, Inc. (A1E) power plant will be located in Brgy. Villa Ibaba, Atimonan, Quezon.

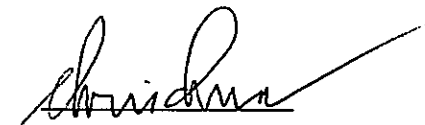
The approved transmission interconnection of A1E shall be through a new 23-km 500 kV Double Circuit 4-795 MCM ACSR transmission line (A1E TL). The A1E TL will start from the 500 kV switchyard located within the A1E power plant and shall pass through the municipalities of Atimonan, Padre Burgos, and Pagbilao, Quezon to connect radially to the New Pagbilao 230/500 kV Substation to be built by the National Grid Corporation of the Philippines (NGCP) in Pagbilao, Quezon.

In case of delay in the implementation of the New Pagbilao Substation by NGCP, A1E also has an approved interim connection from NGCP. The interim connection of A1E is to bus-in the existing Naga-Tayabas 230 kV transmission line of NGCP. Such a bus-in connection will require construction of a 500 kV Double Circuit 4-795 MCM ACSR transmission line and a 230 kV Double Circuit 4-795 MCM ACSR transmission line with both lines having an approximate length of nine kilometers. Such an interim connection scheme will convert the Atimonan-Tayabas portion of the Naga-Tayabas line into 500 kV operation while the Atimonan-Naga portion remains at 230 kV.

Prepared by:


April Rose Victoria

Reviewed by:


Christopher Rainier Chua



NGCP

Stronger transmission
for a stronger nation.

NetAccess/KAP-BRA-2016-03-149
MAR 11 2016

MR. DAN NEIL
Head of Development
Atimonan One Energy, Inc. (A1E)
8/F Rockwell Business Center Tower 1
Ortigas Avenue, Pasig City 1604

**Subject: INTERCONNECTION FACILITIES STUDY FOR THE 2x600 MW COAL-FIRED
POWER PLANT**

Dear Mr. Neil:

This refers to the submitted interconnection Facilities Study (FS) Report for the proposed connection of the A1E's 2x600 MW Coal-Fired Power Plant (the "Project") located in Brgy. Villa Ibaba, Atimonan, Quezon to the transmission system thru the Luzon Grid via direct termination to the proposed NGCP Pagbilao EHV Substation.

Based on our review, we are pleased to inform you that the FS is generally acceptable and in accordance with the result of the System Impact Study conducted for the said Project. However, the following technical concerns have been observed in the study and should be addressed prior to the implementation of the Project:

1. Detailed Technical description, specification and engineering design of the equipment and other material particularly foreseen to be Transmission Assets (TAs) shall be submitted to NGCP for review and approval prior to its purchase and the said assets shall be in accordance with the NGCP's List of Approved Equipment Manufacturer. NGCP shall also validate the cost of the equipment which is to be reimbursed to A1E.
2. Submission of the complete SCADA-Telecom System Architecture to NGCP for proper evaluation.
3. The new line differential protection relays shall be equipped with two (2) communication channels operating simultaneously at the same time. Each communication channel shall utilized separate and different fiber optic link (i.e. Line 1 Main 1: Channel A via OPGW Line 1 and Channel B via OPGW Line 2).
4. To ensure telecom system compatibility, the new FOTE/MUX to be installed at A1E power plant shall be propriety to ABB FOX515.
5. A1E shall closely coordinate with NGCP on the installation, testing and commissioning of primary and secondary equipment for NGCP Pagbilao EHV Substation. Proper coordination with NGCP is essential to avoid any unwanted outages during the project implementation.

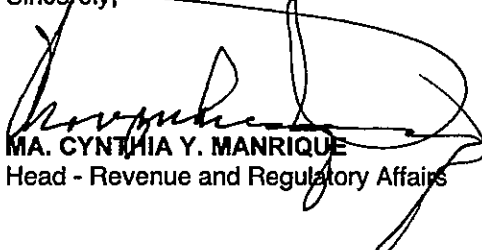
6. A1E shall provide a separate room with dedicated access for NGCP personnel at their power plant to house all the equipment identified as TAs.
7. Integrity and functional testing of Fault Clearance System (FCS) at the power plant shall be conducted by the generator proponent, and the activity shall be witnessed by NGCP.
8. The location, specifications, rating and special requirements of the Revenue Metering shall be confirmed by NGCP.

In addition, construction drawings shall be reviewed and approved by NGCP prior to the actual construction of the facilities to ensure that the power Grid will not be adversely affected by the operation of the interconnection.

Likewise, we wish to highlight that A1E shall arrange for NGCP to conduct an initial assessment of the User's Development prior to the issuance of Statement of Readiness to Connect pursuant to Rule B18 of the Open Access Transmission Service (OATS) Rules.

As a final note, we are now set to facilitate the Connection Agreement (CA) between NGCP and A1E pursuant to Section B16 of the OATS Rules. The CA shall be executed within thirty (30) days from the approval of the FS or within the time period for which the FS is valid.

Sincerely,



MA. CYNTHIA Y. MANRIQUE
Head - Revenue and Regulatory Affairs

Review of Third Party System Impact Study

2x600 MW Atimonan One Energy Coal-Fired Power Plant

(TPGIS-15L-16)

Atimonan One Energy, Inc. (A1E)



Prepared by:

Luzon System Planning Division
Transmission Planning Department

NATIONAL GRID CORPORATION OF THE PHILIPPINES
Quezon Avenue corner BIR Road, Dilliman, Quezon City

MAY 2015

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1 Background Information

Atimonan One Energy, Inc. is proposing the connection of the 2x600 MW Atimonan Coal-Fired Power Plant (A1ECFPP) to the Luzon grid. The target commercial operation of the power plant is in year 2019.

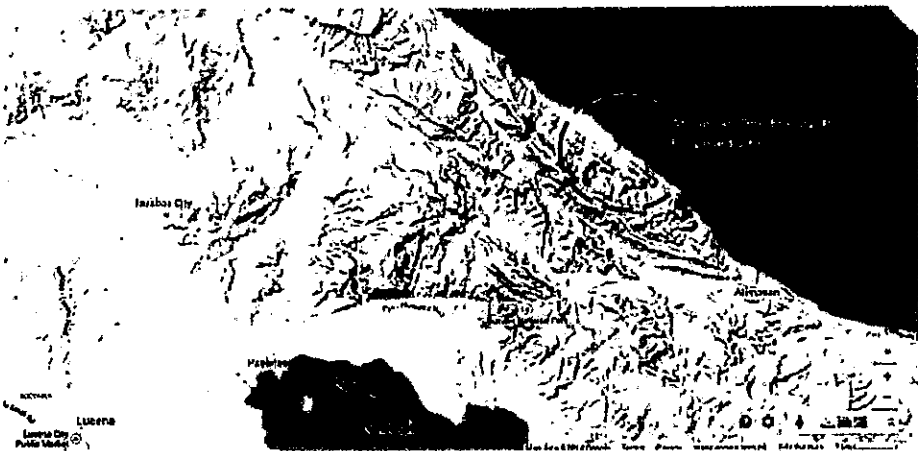


Figure 1. Geographic Location of A1ECFPP (Excerpt from SIS Report)

Such new grid connection shall require the conduct of a System Impact Study (SIS) as prescribed in the Grid Code. Consistent with *Section B14.8 – Proposal to Undertake SIS* of the 2006 Open Access Transmission Service (OATS) Rules, Atimonan One Energy, Inc. engaged the services of a Consultant (a Third Party) to undertake the preparation of the SIS.

Through a Confidentiality Agreement among NGCP, Atimonan One Energy, Inc. and the Consultant, NGCP provided the necessary data/information to carry out the conduct of the SIS. These include the raw data of the Year 2019 and 2024 Luzon grid model, single-line diagram, generator dynamic model, and the load forecast.

As part of the requirements provided under the OATS Rules for SIS undertaken by a Third Party, NGCP conducted the review of the submitted SIS for acceptability of the evaluation method, simulation results and study conclusions.

1.1 Connection Scheme

The Third Party System Impact Study (SIS) evaluated the following connection schemes for the proposed interconnection of 2 x 600 MW A1ECFPP to the Luzon Grid:

- Option A. 500 kV Radial connection to NGCP's New Pagbilao Substation;
- Option B. Bus-In connection between New Pagbilao – Naga transmission line, with lines going to New Pagbilao Substation at 500 kV and lines going to Naga Substation at 230 kV; and
- Option C. Bus-In connection between Tayabas – Naga transmission line, with lines going to Tayabas Substation at 500 kV and lines going to Naga Substation at 230 kV.

These connection options were considered to provide flexibility of connecting the proposed power plant depending on the design of the New Pagbilao Substation. The connection options along with their descriptions are as follows:

Option A: 500 kV radial connection to NGCP's New Pagbilao substation

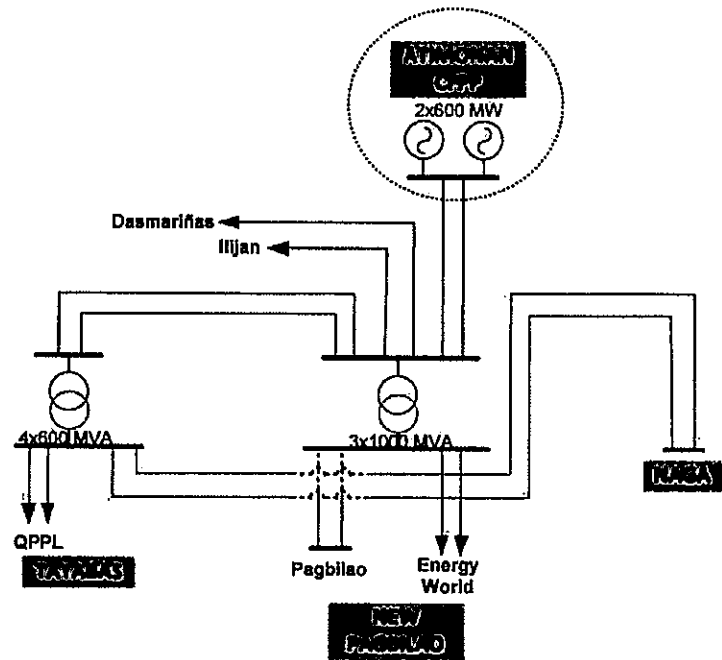


Figure 2. Option A: 500 kV radial connection to NGCP's New Pagbilao substation

Option A consists of constructing a 23-km double-circuit 500 kV line composed of 795 MCM ACSR conductors (bundle of four) on steel towers that will radially connect the A1ECFPP to the 500 kV switchyard of the New Pagbilao substation.

Option B: Bus-In connection between New Pagbilao – Naga transmission line, with lines going to New Pagbilao substation at 500 kV and lines going to Naga substation at 230 kV (1-600 MVA, 500/230 kV transformer installed in Atimonan substation)

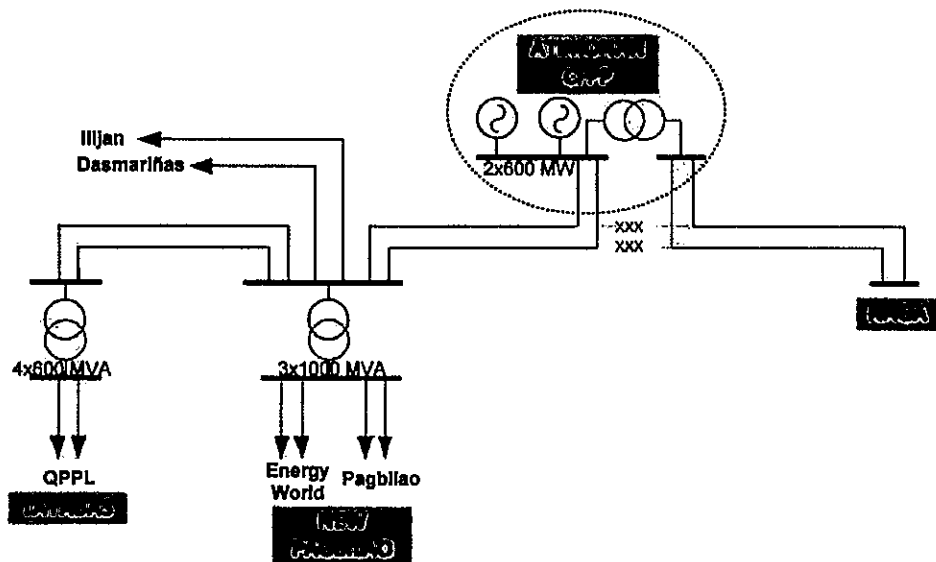


Figure 3. Option B: Bus-In connection between New Pagbilao – Naga transmission line

In this option a 600 MVA, 500/230 kV transformer will be installed at the Atimonan substation (power plant substation) to link the 500 kV and 230 kV voltage levels. The New Pagbilao – Naga transmission line will be split at the tapping point of A1ECFPP such that the line from Atimonan substation to New Pagbilao substation is energized at 500 kV while the rest of the line from Atimonan substation to Naga substation will remain at the 230 kV voltage level.

The connection facility that will bus-in to the New Pagbilao-Naga line will consist of an 8-km double-circuit 500 kV line composed of 795 MCM ACSR conductors (bundle of four) and another 8-km double-circuit 230 kV line composed of 795 MCM ACSR conductors (bundle of four) on steel towers.

Option C: Bus-In connection between Tayabas – Naga transmission line, with lines going to Tayabas substation at 500 kV and lines going to Naga substation at 230 kV (1-600 MVA, 500/230 kV transformer located in Atimonan substation)

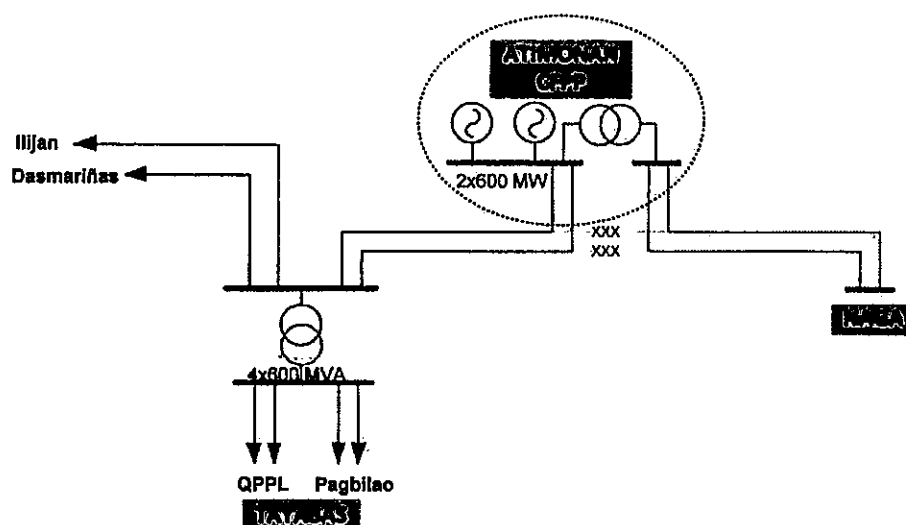


Figure 4. Option C: Bus-In connection between Tayabas – Naga transmission line

An interim connection, Option C, is also included in the SIS in the scenario where the power plant project is completed before the New Pagbilao substation. As with Option B, a 600 MVA, 500/230 kV transformer will be installed at the Atimonan substation to link the 500 kV and 230 kV voltage levels. The Tayabas – Naga transmission line will be split at the tapping point of A1ECFPP such that the line from Atimonan substation to Tayabas substation is energized at 500 kV while the rest of the line from Atimonan substation to Naga substation will remain at the 230 kV voltage level.

The connection facility that will bus-in to the Tayabas-Naga line will consist of an 8-km double-circuit 500 kV line composed of 795 MCM ACSR conductors (bundle of four) and another 8-km double-circuit 230 kV line composed of 795 MCM ACSR conductors (bundle of four) on steel towers.

2 Review of the System Impact Study

2.1 Methodology

The assessment criteria used in the study are found consistent with the Philippine Grid Code. The system simulation conducted include load flow, short-circuit and transient stability analyses.

The SIS was also able to capture the necessary system simulation scenarios to evaluate the proposed connection:

- a. Year 2019 peak and off-peak load conditions prior to the connection of the 2x600 MW Atimonan One Coal-Fired Power Plant
- b. Year 2019 peak and off-peak load conditions upon the connection of the 2x600 MW Atimonan One Coal-Fired Power Plant with connection options
- c. Year 2024 peak and off-peak load conditions prior to the connection of the 2x600 MW Atimonan One Coal-Fired Power Plant
- d. Year 2024 peak and off-peak load conditions upon the connection of the 2x600 MW Atimonan One Coal-Fired Power Plant with connection options

2.2 Simulation Results

Analysis Conducted	Remarks
Load Flow (Thermal and Voltage)	<p>Using the same models/configurations, the documented SIS results are found consistent with NGCP's own simulations.</p> <p>The SIS considered three (3) connection options to provide flexibility of connecting the proposed power plant depending on the design of the New Pagbilao substation.</p> <p>Option A and B Connection:</p> <p>In order to maintain the N-1 contingency provision on the New Pagbilao-Tayabas 500 kV line upon the entry of the 2x600 MW A1ECFPP, additional outgoing lines from New Pagbilao substation are needed. Without any new line, the generation capacity that may be curtailed is about 35 MW and the affected plant will be determined in the electricity Market.</p> <p>Overloading of the Taguig-Paco 230 kV line as well as the overloading of the 500/230 kV transformers in Dasmariñas and</p>

Analysis Conducted	Remarks
	<p>Taguig substations are also expected during N-1 contingency event. The overloading of the above-mentioned facilities is due to the simultaneous maximum dispatch of power plants in southern Luzon. Under this situation, the allowable dispatch from each associated plant will be determined in the electricity Market.</p> <p>Option C Connection:</p> <p>In the event that the A1ECFPP is completed before the New Pagbilao substation, an interim connection, Option C, is evaluated in the study.</p> <p>The interim option is the bus-in connection of A1ECFPP along the Tayabas – Naga line, with lines going to Tayabas substation at 500 kV and lines going to Naga substation at 230 kV. The limitation of this option is that only one power plant project along with A1ECFPP can be accommodated. In the study, the 500 MW QPPL expansion project was considered.</p> <p>As regards the voltage analysis, no voltage problems were identified as a result of connecting the 2x600 MW A1ECFPP. Also, the generator units to be installed are noted to be capable of providing and absorbing reactive power at a power factor range of 0.85 power factor lagging to 0.90 power factor leading as prescribed in the Philippine Grid Code.</p>
Short Circuit	<p>The resulting fault level in NGCP's New Pagbilao substation and nearby substations due to the contribution of the 2x600 MW A1ECFPP would not exceed the symmetrical fault rating of the existing PCBs. The network model considered the entry of the other power plant projects in Quezon province such as the expansion projects of QPPL and Pagbilao Plants and entry of Energy World Plant.</p> <p>For the interim connection scheme, Option C, if the A1ECFPP is completed ahead of the New Pagbilao Substation only one power plant project together with A1ECFPP can be accommodated by the existing facilities. In the study, the 500 MW QPPL expansion project is considered.</p>

Analysis Conducted	Remarks
Transient Stability	<p>The simulation results show that with the New Pagbilao substation, the system will remain stable for short circuit events that were cleared under normal and delayed fault clearing even upon the connection of the 2x600 MW A1ECFPP.</p> <p>Among those considered in the study is a fault applied near the A1ECFPP switchyard for 85 ms duration with corresponding tripping of one circuit of the connection facility.</p>
Frequency Assessment	<p><i>Peak Load Scenario</i> Based on the system peak demand for years 2019 and 2024, the outage of one 600 MW unit of A1ECFPP will cause frequency drop but will not result in instantaneous shedding of a group of loads as triggered by an ALD (Automatic Load Dropping) relay. However, outage of both 600 MW units during peak load scenario will cause the frequency to fall to 59.4 Hz that may cause instantaneous load dropping in the actual system.</p> <p><i>Off-peak Load Scenario</i> During off-peak period, for years 2019 and 2024, the outage of one 600 MW unit of A1ECFPP will cause the frequency drop to 59.4 Hz. Furthermore, outage of both units will cause the frequency to drop to below 59.0 Hz where activation of an ALD relay is expected.</p>

2.3 Recommended Connection Scheme – Option A

The conducted System Impact Study captures the NGCP’s recommended connection scheme and grid reinforcement as indicated in “Option A. Radial connection to NGCP’s New Pagbilao substation” for the interconnection of the 2x600 MW Atimonan Coal-Fired Power Plant together with the committed and other proposed power plants in Quezon province. As mentioned in the discussions of Option A page 18 of the SIS report, “This option is intended if NGCP decides to construct the New Pagbilao Substation at 500 kV and 230 kV”.

The diagram below shows the resulting network configuration in Quezon area upon connection of the 2x600 MW Atimonan Coal-Fired Power Plant. The proposed grid reinforcement scheme addresses the overloading and increased fault level at Tayabas

substation due to the connection of Pagbilao and QPPL expansion projects. Also, in this configuration, the connection of the 2x600 MW A1ECFPP and the 600 MW Energy World LNG project have been taken into consideration.

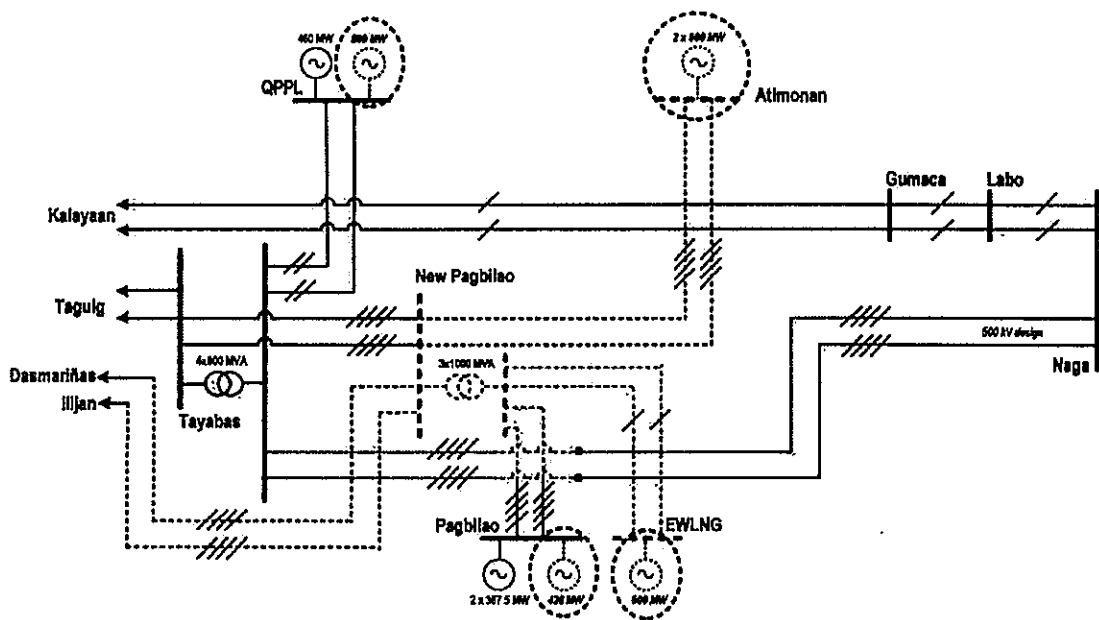


Figure 5. NGCP Proposed Grid Reinforcement at Quezon Province

The over-all development in Quezon area will involve the construction of a new Pagbilao 500/230 kV substation with the A1ECFPP to be connected radially to the new Pagbilao 500 kV switchyard. QPPL and its expansion project will remain connected to the Tayabas 230 kV substation and the Pagbilao Coal Plant will be terminated at the 230 kV switchyard of the New Pagbilao substation together with the Energy World LNG Plant. To reduce the power merging at Tayabas 500 kV Substation, the 500 kV lines going to Ilijan and Dasmariñas will be terminated at the new Pagbilao 500 kV Substation by constructing a 17-km double-circuit 500 kV (4-795 MCM ACSR) line extension.

The potential overloading of the Taguig-Paco 230 kV line and the 500/230 kV transformers in Dasmariñas and Taguig substations during N-1 contingency event will be addressed by the proposed Metro Manila backbone development project of NGCP.

3 Summary and Conclusion

Overall, the conclusions in the SIS provide an acceptable assessment of the impact of the connection of the 2x600 MW Atimonan Coal-Fired Power Plant (A1ECFPP) to the Luzon grid. Using the same models/configurations, the documented SIS results are found consistent with NGCP's own simulations.

Recommended Connection Scheme – Option A

The conducted System Impact Study captures the NGCP's recommended connection scheme and grid reinforcement as indicated in "Option A. Radial connection to NGCP's New Pagbilao substation" for the interconnection of the 2x600 MW Atimonan Coal-Fired Power Plant together with the committed and other proposed power plants in Quezon province. As mentioned in the discussions of Option A page 18 of the SIS report, "This option is intended if NGCP decides to construct the New Pagbilao Substation at 500 kV and 230 kV".

The entry of the 2x600 MW A1ECFPP will involve construction of a 23-km double circuit 500 kV line composed of 795 MCM ACSR conductors (bundle of four) on steel towers that will radially connect the A1ECFPP to the 500 kV switchyard of the New Pagbilao substation.

To reduce the power merging at the Tayabas 500 kV Substation, the 500 kV lines going to Ilijan and Dasmariñas will be terminated at the New Pagbilao 500 kV substation by constructing a 17-km double-circuit 500 kV (4-795 MCM ACSR) line extension. This scheme will reduce the criticality of the Tayabas 500 kV substation and will improve grid security and at the same time will provide room to accommodate other future generation capacity additions in the area.

The potential constraint during N-1 contingency at the Taguig-Paco 230 kV corridor within Metro Manila was also identified. The constraint is imminent when the existing and all the incoming power plants, including the A1ECFPP in south Luzon, are at simultaneous maximum dispatch. This problem will be addressed by the proposed Metro Manila backbone development project of NGCP.

As regards the voltage assessment, no issues have been identified as a result of the connection of A1ECFPP.

Using the network model provided by NGCP, the proposed power plant will contribute to the increase in the levels of fault current in nearby buses but is not significant to initiate upgrading of the existing power circuit breakers.

Transient stability simulation results show that with the New Pagbilao 500/230 kV substation constructed to cater the connection of A1ECFPP together with the other

power plants in Quezon area, the system will remain stable and were able to regain synchronism for short circuit events that were cleared under normal and delayed fault clearing. During peak load scenario, only the outage of both two (2) 600 MW units of A1ECFPP will cause the frequency to drop causing activation of an ALD (Automatic Load Dropping) relay. Furthermore, during off-peak load scenario, outage of one 600 MW unit will already cause a frequency drop where ALD activation is expected.

3.1 Future Update in the Study Assumptions

The results in this System Impact Study (SIS) are valid based on the information discussed in Section 3 –Assumptions of the Third Party SIS Report. Any later changes or updates in the stated assumptions particularly on the part of the transmission network require further study and assessment by NGCP in the succeeding preparation and update of the Transmission Development Plan (TDP). On the part of the power plant project evaluated in the SIS, it should be noted that any change in the generator parameters, assumptions, and connection schemes used in the study could necessitate a re-run of the SIS. In this regard, the proponent should duly inform NGCP of the changes during the planning and design stage of the power plant project.



Republic of the Philippines
DEPARTMENT OF ENERGY

ANNEX " T "

19 April 2016

MR. CHRYSOGONUS F. HERRERA
SVP - Commercial and Planning
MERALCO Power Generation (MGEN)
8/F, Rockwell Business Center Tower I
Ortigas Avenue, Pasig City

Dear Mr. Herrera:

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 1,200 (2 x 600) MW AOEL Coal-Fired Power Plant Project located in Atimonan, Quezon.

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 also issued System Impact Study endorsement to the National Grid Corporation of the Philippines and endorsement to the Department of Agrarian Reform for the above cited project of Atimonan One Energy, Inc.

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,

 4/20/16
MYLENE C. CAPONGCOL
OIC-Undersecretary

POWER OUTLOOK 2015-2020

As of August 2015

PRESENTATION TO:

HOUSE COMMITTEE ON ENERGY

02 September 2015



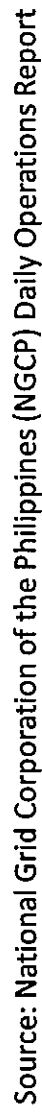
Outline:

Luzon/ Visayas/ Mindanao

- Power Situation (January-August 2015)
- Power Outlook 2015-2020



01 January – 31 August 2015



Note:
FO – Forced Outage / PO – Planned Outage

Luzon Additional Capacities (01 Jan 2014 to 15 Aug 2015)

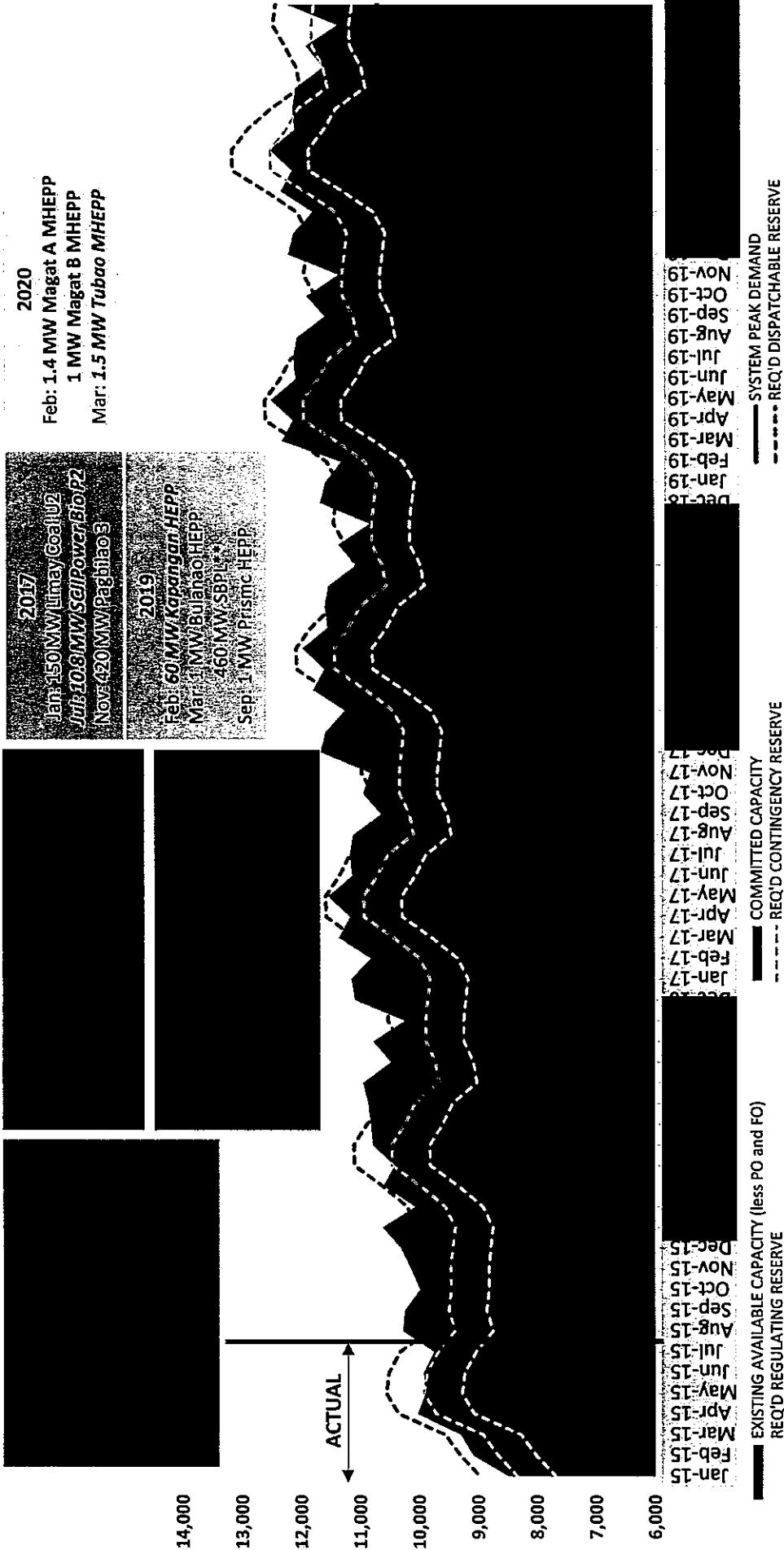
Power Plant	Location	Installed Capacity (MW)	Dependable Capacity (MW)	Commercial Operation
Maibarara Geothermal Power	Sto. Tomas, Batangas	20	18.6	8-Feb-14
Lafarge DPP	Taysan, Batangas	12.7	12	14-Jul
Banguil Bay Wind Power Project Phase 3	Banguil, Ilocos Norte	18.9	12.6	10-Oct-14
Burgos Wind Power Project	Burgos, Ilocos Norte	150	45	11-Nov-14
SJCI Power Rice Husk-Fired Biomass Power Plant Project Phase 1	San Jose, Nueva Ecija	12	10	25-Oct-14
Caparispisan Wind Energy Project	Pagudpud, Ilocos Norte	81	28	11-Nov-14
Raslag Pampanga Solar*	Pampanga	10	8.5	5-Feb-15
Majestic Cavite Economic Zone (CEZ) Solar Rooftop Power	Cavite Economic Zones I and II, Rosario and Gen. Trias, Cavite	41.3	20	15-Mar-15
Burgos Solar*	Burgos, Ilocos Norte	4.1	4	5-Mar-15
SLTEC Puting Bato Coal Fired Power Plant Unit 1	Calaca, Batangas	135	123	17-Apr-15
Sinoma Waste Heat Recovery Facility**	San Jose, Antipolo	6	5.7	2-Apr-15
SPCRPI SM North**	Quezon City	1.5	1.5	7-Apr-15
Millennium Gas Turbine Power Plant***	Navotas, Metro Manila	100	80	27-May-15
Sabangan HIEPP	Sabangan, Mt. Province	14	4	2-Jun-15
Pillilia Wind*	Pillilia, Rizal	54	48.6	Jul 2015
Total		660.5	421.5	

Note: Dependable Capacity based on submitted report of GenCos. Those that are italicized are computed with consideration of station use per plant type technology



* - Embedded
** - Own Used
*** - Recommissioned

LUZON DEMAND-SUPPLY OUTLOOK 2015-2020



Notes

- a. Required Reserve Margin (RM) i.e. 4% regulating reserve and contingency and dispatchable reserve requirement
- b. 4.2 % peak demand growth rate resulted from observed 0.6 elasticity ratio of demand for electric power with national economic growth applied to 7 percent GDP growth rate (GR) target for 2015.
- c. 4.8 % peak demand growth rate resulted from observed 0.6 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2016-2020.
- d. Assumed average forced outage of the total dependable capacity

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
(%)	1.5	2.0	2.0	6.3	5.6	7.5	7.5	2.8	5.2	6.9	7.2	3.1
MW	167	230	631	712	642	858	856	316	595	779	808	348

* On-going testing and commissioning
** awaiting certificate of financial closure
Bold & Italicized – with changes on schedule; new entry

Luzon Summary of Power Projects (as of 15 August 2015)

Type of Power Plant	Committed		Indicative	
	No. of Proponents	Capacity (MW)	No. of Proponents	Capacity (MW)
Coal	6	1,697.0	9	6,400.0
Oil-Based	0	0.0	1	150.0
Natural Gas	2	550.0	3	1,750.0
Renewable Energy	15	175.1	26	982.5
Geothermal	0	0.0	1	111.0
Hydro	6	65.9	17	517.3
Biomass	7	59.2	3	39.6
Solar	2	50.0	1	65.6
Wind	0	0.0	4	249.0
TOTAL	23	2,422.1	39	9,282.5



COMMITTED POWER PROJECTS

Luzon Grid Committed Power Projects, 2,422.1 MW*

Name of the Project	Project Proponent	Mother/JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
SLPGC Coal-Fired Power Plant Phase I Unit 1***	Southwest Luzon Power Generation Corporation (SLPGC)	DMCI Power Corporation	Brgy. San Rafael, Calaca, Batangas	150.0	June 2015	Aug 2015
SLPGC Coal-Fired Power Plant Phase I Unit 2	Southwest Luzon Power Generation Corporation (SLPGC)	DMCI Power Corporation	Brgy. San Rafael, Calaca, Batangas	150.0	Aug 2015	Sept 2015
Anda Power Corporation Circulating Fluidized Bed Coal Fired Power Plant***	Anda Power Corporation	Anda Power Corporation	Brgy. Bundaguli, Mabalacat, Pampanga	82.0	June 2015 ^b	Sept 2015 ^b
Puting Bato Coal Fired Power Plant Phase II	South Luzon Thermal Energy Corp. (SLTEC)	Trans Asia Oil and Energy Development Corporation (TAOil)	Brgy. Puting Bato West, Calaca, Batangas	135.0	Aug 2015	Nov 2015
Limay Power Plant Project Phase I Unit 1	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Limao, Limay, Bataan	150.0	May 2016	Aug 2016
Limay Power Plant Project Phase I Unit 2	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Limao, Limay, Bataan	150.0	Oct 2016	Jan 2017
Pagbilao 3 Coal-Fired Thermal Power Plant	Pagbilao Energy Corporation	Team Energy / Aboitiz Power	Pagbilao Power Station, Nrgy. Ibabang Polo, Pagbilao, Quezon	420.0	May-2017	Nov-2017
San Buenaventura Power Ltd. Co. (SBPL) Project****	San Buenaventura Power Ltd. Co. (SBPL)	QPPL/EGCO	Mauban, Quezon	460.0	Dec 2018 ^b	Mar 2019
TOTAL COAL				1,697.0		
Limay Power Plant Project Phase I Unit 1	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Limao, Limay, Bataan	150.0	May 2016	Aug 2016
Limay Power Plant Project Phase I Unit 2	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Limao, Limay, Bataan	150.0	Oct 2016	Jan 2017
Pagbilao 3 Coal-Fired Thermal Power Plant	Pagbilao Energy Corporation	Team Energy / Aboitiz Power	Pagbilao Power Station, Nrgy. Ibabang Polo, Pagbilao, Quezon	420.0	May-2017	Nov-2017
San Buenaventura Power Ltd. Co. (SBPL) Project****	San Buenaventura Power Ltd. Co. (SBPL)	QPPL/EGCO	Mauban, Quezon	460.0	Dec 2018 ^b	Mar 2019



* Excluding Off-grid power projects
a Revised based on REMB's report

*** on-going testing and commissioning
**** awaiting certificate of financial closure

^b Updated from proponent's submission
As of 15 August 2015

COMMITTED POWER PROJECTS

Luzon Grid Committed Power Projects, 2,422.1 MW*

Name of the Project	Project Proponent	Mother/JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
TOTAL BIOMASS						
San Gabriel/Avon Project	Prime Meridian Power Gen Corporation	First Gen Power Corporation	Barangay Bolbok, Batangas	100.0	Aug 2015	Sep-2015
San Gabriel Project	First Gas Power Corp.	First Gen Power Corporation	San Gabriel, Batangas	450.0	Mar-2016	Jun-2016
TOTAL NATURAL GAS				550.0		
TOTAL HYDRO						
Currimao Solar Power Project	Mirae Asia Energy Corporation	SOLEQ	Currimao, Ilocos Norte	20.0	Nov-2015	Nov-2015
Macabud Solar Power Project	ATN Philippines Solar Energy Group, Inc.		Brgy. Macabud, Rodriguez, Rizal	30.0	Feb-2016	Feb-2016
TOTAL SOLAR				50.0		
TOTAL				2,422.1		



* Excluding Off-grid power projects ^a Revised based on REMB's report

** New Entry from Indicative list ¹ New Entry to Committed Project based from REMB's report

^b Updated from proponent's submission

As of 15 August 2015

INDICATIVE POWER PROJECTS

Luzon Grid Indicative Power Projects, 9,282.95 MW*

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
SMC Limay Power Plant Project Phase II (2x150MW)	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Lamao, Limay, Bataan	300.0	U1 (150 MW) - Dec 2016 ^b
					U2 (150 MW) - May 2017 ^b
SMC Limay Power Plant Project Phase III Unit 1	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Lamao, Limay, Bataan	300.0	U1 (150 MW) - Dec 2016 ^b
					U2 (150 MW) - May 2017 ^b
Lucidum Energy Coal Power Plant	Lucidum Energy, Inc. (LEI)	Lucidum Energy, Inc. (LEI)	Silanguin Bay, Zambales	300.0	Jun 2017
SLPGC Coal-Fired Power Plant Phase II	Southwest Luzon Power Generation Corporation (Project Company)	DMCI Power Corporation	Brgy. San Rafael, Calaca, Batangas	300.0	Unit 1 - Dec 2017 Unit 2 - Dec 2017
SMC Limay Power Plant Project Phase III Unit 2	SMC Consolidated Power Corporation	SMC Consolidated Power Corporation	Brgy. Lamao, Limay, Bataan	300.0	Dec-2017
JGS Coal Fired Thermal Power Plant Unit 1	JG Summit Holdings, Inc.	JG Summit Holdings, Inc.	Brgy. Pinamukan Ibaba, Batangas City	150.0	Unit 1 - June 2018
JGS Coal Fired Thermal Power Plant Unit 2	JG Summit Holdings, Inc.	JG Summit Holdings, Inc.	Brgy. Pinamukan Ibaba, Batangas City	150.0	Unit 2 - Dec 2018
Redondo Peninsula Coal-Fired Power Plant	Redondo Peninsula Energy, Inc.	MERALCO MGEN Power Corporation/ Abotiz Power Corporation/ Taiwan Cogeneration Corporation	Siteo Naglatore, Cawag, Subic Bay Freeport Zone	600.0	Dec 2018 ^b
GNPower Mariveles Expansion Project	GNPower Mariveles Coal Plant Ltd. Co.	GNPower Ltd. Co.	Mariveles, Bataan	1,200.0	January 2019 ^b
JGS Coal Fired Thermal Power Plant Unit 3	JG Summit Holdings, Inc.	JG Summit Holdings, Inc.	Brgy. Pinamukan Ibaba, Batangas City	150.0	Unit 3 - June 2019
Masinloc Expansion	AES Masinloc Power Partners Co., Inc.	AES Philippines Power Partners Co., LTD.	Zambales	600.0	U3 (300 MW) - Sept2019
					U4 (300 MW) - Sept 2019
JGS Coal Fired Thermal Power Plant Unit 4	JG Summit Holdings, Inc.	JG Summit Holdings, Inc.	Brgy. Pinamukan Ibaba, Batangas City	150.0	Unit 4 - Dec 2019
AOE Coal-Fired Power Plant	Atimonan One Energy	Meralco PowerGen Corporation	Atimonan, Quezon	1,200.0	Dec 2020
PTE Sub-Critical Coal-Fired Power Plant	H & WB Asia Pacific (PTE)	H & WB Asia Pacific (PTE)	Camarinnes Norte	700	U1 - Dec 2020 U2 - Dec 2025
TOTAL COAL				6,400.0	

*Excluding Off-grid power projects

^b Updated from proponent's submission



INDICATIVE POWER PROJECTS

Luzon Grid Indicative Power Projects, 9,282.95 MW*

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Aero Derivative Combined Cycle Power Plant	Calamba Aero Power Corporation	MERALCO MGEN Power Corporation	Calamba, Laguna	150.0	TBD
TOTAL OIL-BASED				150.0	
Pagbilao Combined Cycle Gas Fired Power Plant***	Energy World Corporation (EWC)	Energy World Corporation (EWC)	Isla Grande, Pagbilao, Quezon Province	600.0	U1 (200 MW)- Dec 2015 U2 (200 MW)- Mar 2016 U3 (200 MW)- Dec 2016
Mobile Gas Turbine Power Plant Project	Team (Philippines) Energy Corporation	Team (Philippines) Energy Corporation	Ilijan, Batangas	250.0	Jun 2016
Sta Maria Project (formerly San Gabriel Phase 2 Project)	First Gen Corporation	First Gen Corporation	Sta Maria, Batangas	900.0	U1 – 2017 U2 – 2019
TOTAL NATGAS				1,750.0	
Bacman 3 (Tanawon) Geothermal Project	Energy Development Corporation (EDC)	Energy Development Corporation (EDC)	Guinlajon, Sorsogon	31.0 ^a	Dec 2017 ^a
Rangas Geothermal Project	Energy Development Corporation (EDC)	Energy Development Corporation (EDC)	Bacon District, Sorsogon	40.0	Jun 2018 ^a
Kayabon Geothermal Project	Energy Development Corporation (EDC)	Energy Development Corporation (EDC)	Manito, Albay	40.0	Dec 2019
TOTAL GEOTHERMAL				111.0	
Clark Freeport Zone Solar Power Project	Enfinity Philippines Renewable Resources, Inc	Enfinity Philippines Renewable Resources, Inc	Clark Freeport Zone, Pampanga	12.0	Dec 2015
Concepcion Solar Power Project**	Enfinity Philippines Renewable Resources, Inc		Brgy. Sta. Rosa, Concepcion, Tarlac	50.55	Dec 2015
Cavite Solar Power Project	Enfinity Philippines Renewable Resources, Inc	Enfinity Philippines Renewable Resources, Inc	Cavite Economic Zone, Rosario Cavite	3.0	March 2016 ^a
TOTAL SOLAR				65.55	

TBD – to be determined

^a Revised based on REMB's report

* Excluding Off-grid power projects

** New Entry from REMB's report

*** not considered due to uncertainty of commissioning



As of 15 August 2015

INDICATIVE POWER PROJECTS

Luzon Grid Indicative Power Projects, 9,282.95 MW *

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Ibulao Hydroelectric Power Project	Hydrocore, Inc.	Hydrocore, Inc.	Lagawe, Ifugao	4.5	Jun 2018 ^a
Duponga Hydroelectric Power Project	Constellation Energy Corporation	Exelon Corporation	Gabaldon, Nueva Ecija	3	Jun-2018
Pinacanauan	Sunwest Water & Electric Co., Inc.	Sunwest Water & Electric Co., Inc. (SUWECO)	Peñablanca, Cagayan	6	Sep-2018 ^a
Tinoc 2	Philnew Hydro Power Corporation	Philnew Hydro Power Corporation	Tinoc, Ifugao	11	Jan 2019 ^a
Tinoc 3	Philnew Hydro Power Corporation	Philnew Hydro Power Corporation	Tinoc, Ifugao	5.0	Jan 2019 ^a
Colasi	Colasi Mini Hydro Electric Power Plant Corporation	Colasi Mini Hydro Electric Power Plant Corporation	Mercedes, Camarines Norte	0.96	Feb-2019
Majayjay	Majayjay Hydro Power Company, Inc.	Majayjay Hydro Power Company, Inc.	Majayjay, Laguna	2.2	Apr-2019
Ranggas	Clean and Green Energy Solutions, Inc.	Clean and Green Energy Solutions, Inc.	Goa & Tigaon, Camarines Sur	1.5	Jun 2019
Biyao	AV Garcia Power Systems Corp	AV Garcia Power Systems Corp	Balbalan, Kalinga	0.8	Aug-2019
Tinoc 1	Quadraver Energy Corp.	Quadraver Energy Corp.	Tinoc, Ifugao	4.1	Aug-2019 ^a
Tinoc 4	Philnew Hydro Power Corporation	Philnew Hydro Power Corporation	Tinoc, Ifugao	5	Aug-2019 ^a
Abdao HEP	AV Garcia Power Systems Corp.		Tabaan Sur, Tuba, Benguet	2	Sep-2019
Barit (Irrigation Discharge) Hydroelectric Power Project	NASCENT Technologies Corporation		Buhi, Camarines Sur	0.4	Sep-2019 ^a
Tumauni (Lower Cascade)	Quadraver Energy Corp	Quadraver Energy Corp	Tumauni, Isabela	7.8	Oct-2019
Tumauni (Upper Cascade)	Quadraver Energy Corp	Quadraver Energy Corp	Tumauni, Isabela	14	Oct-2019

*Excluding Off-grid power projects
** New Entry from REMB's report
TBD – to be determined

^a Revised based on REMB's report



INDICATIVE POWER PROJECTS

Luzon Grid Indicative Power Projects, 9,282.95 MW*

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Tinoc 5	Philnew Hydro Power Corporation		Tinoc, Ifugao	6.9	Dec 2019 ^a
Tinoc 6	Philnew Hydro Power Corporation		Tinoc, Ifugao	8	Dec 2019 ^a
Alilem	Philnew Hydro Power Corporation		Alilem, Ilocos Sur	16.2	Dec 2019
Kapipian	Sunwest Water & Electric Co., Inc.		San Miguel, Catanduanes	2.4	Jan-2020
Ilaguen	Isabela Power Corporation		San Mariano & San Guillermo, Isabela	19	Feb-2020
Cawayan 2**	Sunwest Water & Electric Co., Inc.		Sorsogon, Sorsogon	0.99	Apr 2020
Ilaguen 2	Isabela Power Corporation	Isabela Power Corporation	Dinapigue, Isabela	14.0	May 2020
Danac	Philnewriver Power Corp.	Philnewriver Power Corp.	Sugpon, Ilocos Sur	13.2	Jun 2020
Matuno	Epower Technologies Corporation		Bambang, Nueva Vizcaya	8	Jun 2020
Dibuluan**	Greenpower Resources Corp		San Agustin, Isabela	5	Jun 2020
100 MW Alimit	SN Aboitiz Power-Ifugao	Aboitiz Power Corporation	Lagawe, Ifugao	100	Jan-2021
240 MW Alimit	SN Aboitiz Power-Ifugao	Aboitiz Power Corporation	Ifugao	240	Jan-2021 ^b
Ollicon HEPP	SN Aboitiz Power-Ifugao	Aboitiz Power Corporation	Ifugao	10	Jan-2021 ^b
Maris Main Canal 1 HEP	SN Aboitiz Power Generation	Aboitiz Power Corporation	Ramon, Isabela	6	Jan-2021 ^b
Maapon River Mini-Hydro Power Project (MHP)	Renesons Energy Corporation		Brgy. Pliis, Lucban, Quezon	2.6	TBD
Maris Main Canal2 HEP	SN Aboitiz Power Generation	Aboitiz Power Corporation	Alfonso Lista, Ifugao	1.75	TBD
TOTAL HYDRO				517.8	

* Excluding Off-grid power projects

** New entry from REMB's report

TBD – to be determined

^a Revised based on REMB's report

^b Updated from proponent's submission



INDICATIVE POWER PROJECTS

Luzon Grid Indicative Power Projects, 9,282.95 MW*

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Pasquin East Wind Power Project (Phase 1)	Energy Logics Philippines, Inc.	Delgado Group of Companies	Pasquin, Ilocos Norte	48.0	Jun 2016
Sembrano Wind Power Project (Formerly Mabitac Wind Power Project Phase 2)	Alternergy Sembrano Wind Corporation	Alternergy	Mt. Sembrano, Mabitac, Laguna	72.0	Apr 2017
Balaoi Wind Power Project	Northern Luzon UPC Asia Corporation	UPC Asia Corporation	Brgy. Balaoi, Pagudpud, Ilocos Norte	45.0	Aug 2017
Pagudpud Wind Power Project	EDC Pagudpud Wind Power Corporation	Energy Development Corporation	Brgy. Balaoi and Caunayan, Pagudpud, Ilocos Norte	84.0	Dec 2018
TOTAL WIND				249.0	
CJGGEPC Waste-to-Energy Project using Thermal Gasifier Conversion	CJ Global Green Energy Philippine Corp.	CJ Global Green Energy Philippine Corp.	Camarines Sur	18.0	Aug 2015
GGREC Rice Husk-Fired Biomass Power Plant Project	Grass Gold Renewable Energy Corp	Grass Gold Renewable Energy Corp	Nueva Ecija	10.8	Jan 2018
Napier Grass-Fired Biomass Power Plant Project	Cleangreen Energy Corporation	CleangreenEnergy Corporation	Bataan	10.8	Dec 2018
TOTAL BIOMASS				39.6	
TOTAL				9,282.95	

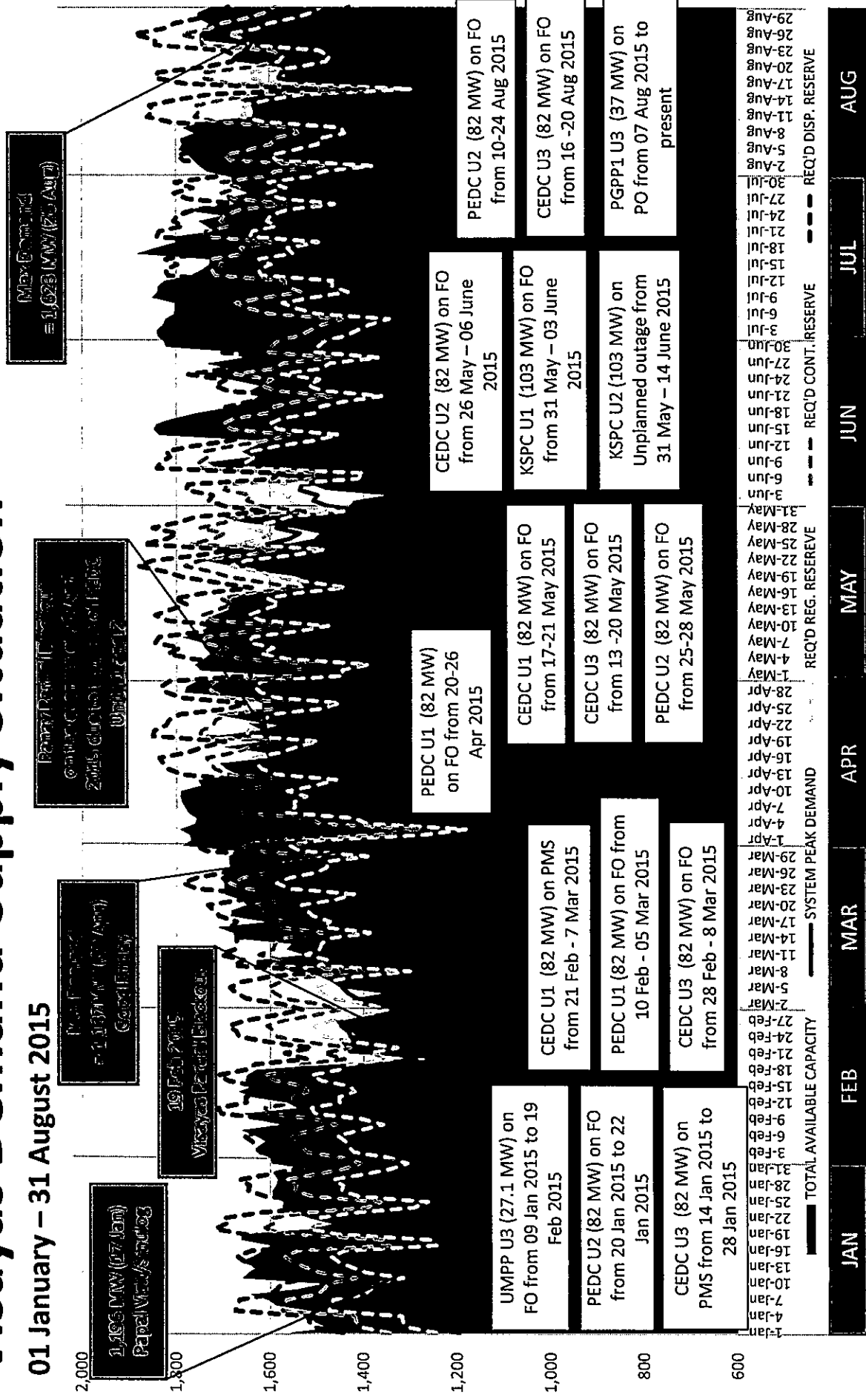
* Excluding Off-grid power projects
TBD -- to be determined

^a Revised based on REMB's report



Visayas Demand-Supply Situation

01 January – 31 August 2015



Source: National Grid Corporation of the Philippines (NGCP) Daily Operations Report



Note:
FO – Forced Outage / PO – Planned Outage

Visayas Additional Capacities (01 Jan 2014 to 15 Aug 2015)

Power Plant	Location	Installed Capacity (MW)	Dependable Capacity (MW)	Commercial Operation
San Carlos Solar Photovoltaic Power Project Phase 1	San Carlos City, Negros Occidental	13	9	15-May-14
San Carlos Solar Photovoltaic Power Project Phase 2	San Carlos City, Negros Occidental	9	7.5	16-Aug-14
Nasulo Geothermal Project	Valencia, Negros Oriental	49.37	40	26-Sep-14
San Lorenzo Wind Farm Project (TAREC)	San Lorenzo, Guimaras	54	50	27-Dec-14
Universal Robina Corporation Bagasse Cogeneration Facility Phase 1	Kabankalan, Negros Occidental	40	36	20-Jan-15
HPCo Bagasse Cogeneration Power Plant	Silay City, Negros Occidental	12	3	4-Feb-15
PSFLI (SOLEQ) Solar Power Project	Ormoc, Leyte	30	24	4-Apr-15
PetroWind Nabas Wind Farm Phase 1	Nabas, Aklan	36	32.4	10-Jun-15
TPC - 1A Coal	Toledo City, Cebu	82	75.9	Ready for commercial Operation
Total		325.37	277.8	

Note: Dependable Capacity based on submitted report of GenCos. Those that are italicized are computed with consideration of station use per plant type technology



VISAYAS DEMAND-SUPPLY OUTLOOK 2015-2020



Notes

- a. Reserve Margin (RM) i.e. 4% regulating reserve and largest online unit for contingency and dispatchable reserve requirement (100 MW to increase by 135 MW in 2016)
- b. 7 % peak demand growth rate resulted from observed 1 elasticity ratio of demand for electric power with national economic growth applied to 7 percent GDP growth rate (GR) target for 2014-2015.
- c. 8 % peak demand growth rate resulted from observed 1 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2016-2020.

* On-going testing and commissioning
Bold & italicized – with changes on schedule

Visayas Summary of Power Projects (as of 15 August 2015)

Type of Power Plant	Committed		Indicative	
	No. of Proponents	Capacity (MW)	No. of Proponents	Capacity (MW)
Coal	1	270.00	2	450.00
Oil-Based	1	18.9	-	-
Natural Gas	-	-	-	-
Renewable Energy	10	239.40	15	230.47
Geothermal	1	10.00	1	40.00
Hydro	4	21.9	7	73.00
Biomass	2	20.00	4	61.80
Solar	2	173.50	1	5.67
Wind	1	14.00	2	50.00
Battery Storage	-	-	1	40.00
TOTAL	12	528.30	18	720.47



COMMITTED POWER PROJECTS

Visayas Grid Committed Power Projects, 528.30 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
Concepcion Coal-Fired Power Plant Unit 1	Palm Thermal Consolidated Holdings Corp.	AC Energy Holdings, Inc./ Palm Thermal Consolidated Holdings Corporation/ Jln Navitas Resource, Inc.	Brgy. Nipa, Concepcion, Iloilo	135.0	Apr-2016	Jun-2016
Concepcion Coal-Fired Power Plant Unit 2	Palm Thermal Consolidated Holdings Corp.	AC Energy Holdings, Inc./ Palm Thermal Consolidated Holdings Corporation/ Jln Navitas Resource, Inc.	Brgy. Nipa, Concepcion, Iloilo	135.0	Sep-2016	Nov-2016
TOTAL COAL				270.0		
Cabunod Oil-Based Power Plant	Energy Efficient Development & Management, Inc.		Brgy. Concepcion, Brgy. Concepcion, Concepcion	18.9	Unit 1 = Sep-2016 Unit 2 = Sep-2016 Unit 3 = Sep-2016 Unit 4 = Nov-2016	Unit 1 = Oct-2016 Unit 2 = Oct-2016 Unit 3 = Oct-2016 Unit 4 = Dec-2016
TOTAL OIL-BASED				18.9		
TOTAL HYDRO				21.9		
Nabas Wind Power Project Phase 1	Wangsa Wind Energy Corporation	Wangsa Wind Energy Corporation	Barangay Nabas, Nabas, Aklan	10.5	Apr-2016	Oct-2016
Nabas Wind Power Project Phase 2	Wangsa Wind Energy Corporation	Wangsa Wind Energy Corporation	Barangay Nabas, Nabas, Aklan	11.4	Oct-2016	Nov-2016
TOTAL BIOMASS				20.0		
Nabas Wind Power Project Phase 2	Petrogreen Energy Corporation	Petrogreen Energy Corporation	Brgy. Pawa, Nabas, Aklan	14.0	Sep-2015	Sep-2015
TOTAL WIND				14.0		

* New Entry from Indicative List

^a Revised based on REMB's report

^b Updated from proponent's submission

^c Revised based from DOE-VFO

^d New Entry to Committed Project

As of 15 August 2015

COMMITTED POWER PROJECTS

Visayas Grid Committed Power Projects, 528.30 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
Biliran Geothermal Plant Project Phase 1	Biliran Geothermal Incorporated	Orika Energy Philippine (Iceland)	Biliran, Biliran	10.0	Aug 2016	Sept 2016
TOTAL GEOTHERMAL				10.00		
San Carlos Solar Power Project Phase C-10 Phase D-13	San Carlos Solar Energy Inc.	Bronzeoak Philippines	San Carlos City, Negros Occidental	23.0	Jul 2015	Sept 2015 ^a
La Carlota Solar Power Project Phase A (SACASOL II-A)	San Carlos Solar Energy Inc.	Bronzeoak Philippines	La Carlota City, Negros Occidental	18.0	Nov 2015	Nov 2015
Cadiz Solar Power Project	Philippine Power Solar Energy Corp. (formerly Phil Power Exploration & Development Corporation)	SOLEQ	Bigay, Tinampayan Cadiz City, Negros Occidental	132.5	Mar 2016	Mar 2016
TOTAL SOLAR				173.50		
TOTAL				528.3		

^a Revised based on REMB's report



INDICATIVE POWER PROJECTS

Visayas Grid Indicative Power Projects 720.47 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
PEDC Expansion	Panay Energy Development Corporation	Global Business Power Corporation	Brgy. Ingore, La Paz, Iloilo	150.0	Aug 2016 ^b
Therma Visayas Energy	Therma Visayas Inc.	Aboitiz Power Corporation	Brgy. Bato, Toledo City, Cebu	U1-150.0 U2-150.0	U1 – Dec 2017 ^b U2 – Mar 2018 ^b
TOTAL COAL				450.0	
Dauin Geothermal Project	Energy Development Corporation (EDC)	Energy Development Corporation (EDC)	Dauin, Negros Oriental	40.0	Dec 2021 ^b
TOTAL GEOTHERMAL				40.0	
Milag-ao Solar Power Project	COSMO Solar Energy, Inc.	COSMO Solar Energy, Inc.	Milag-ao, Iloilo	5.67	TBD
TOTAL SOLAR				5.67	
Pulupandan Wind Power Project	First Maxpower International Corporation	First Maxpower International Corporation	Pulupandan, Negros Occidental	50.0	Dec 2016
TOTAL WIND				50.0	

^b Updated from proponent's submission



INDICATIVE POWER PROJECTS

Visayas Grid Indicative Power Projects, 720.47 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Timbaban Hydroelectric Power Project	Oriental Energy and Power Generation Corporation	Oriental Peninsula Resources Group Inc (ORE)	Madalag, Aklan	18.0	May 2018 ^a
Loboc Hydro Power Project	Sta Clara Power Corporation	Sta Clara Int'l Corporation	Loboc, Bohol	1.2	Jun 2018 ^a
Hilabangan (Upper Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	Kabankalan, Negros Occidental	4.8	Aug 2018 ^a
Hilabangan (Lower Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	Kabankalan, Negros Occidental	3.0	Aug 2018 ^a
Main Aklan River Hydroelectric Power Project	Sunwest Water & Electric Co. Inc. (SUWECO)	Sunwest Water & Electric Co. Inc. (SUWECO)	Libacao, Aklan	15.0	Sept 2018 ^a
Maninila (Lower Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	San Remigio, Antique	4.5	Oct 2018 ^a
Maninila (Upper Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	San Remigio, Antique	3.1	Oct 2018 ^a
Sibalom (Upper Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	San Remigio, Antique	4.2	Oct 2018 ^a
Sibalom (Middle Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	San Remigio, Antique	4.0	Oct 2018 ^a
Sibalom (Lower Cascade)	Century Peak Energy Corporation	Century Peak Metals Holdings Corp	San Remigio, Antique	4.0	Oct 2018 ^a
Basak II	Meadowland Developers, Inc.		Badian, Cebu	0.5	Apr 2019 ^a
Amlan (Plant B)	Natural Power Sources Integration, Inc.		Amlan, Negros Oriental	1.5	Jul 2019 ^a
Amlan (Plant A)	Natural Power Sources Integration, Inc.		Amlan, Negros Oriental	3.2	Sept 2019
Malugo	Vivant-Malogo Hydropower, Inc		Silay City, Negros	6	Oct 2019 ^a
TOTAL HYDRO				73.0	

^a Revised based on REMB's report



INDICATIVE POWER PROJECTS

Visayas Grid Indicative Power Projects, 720.47 MW

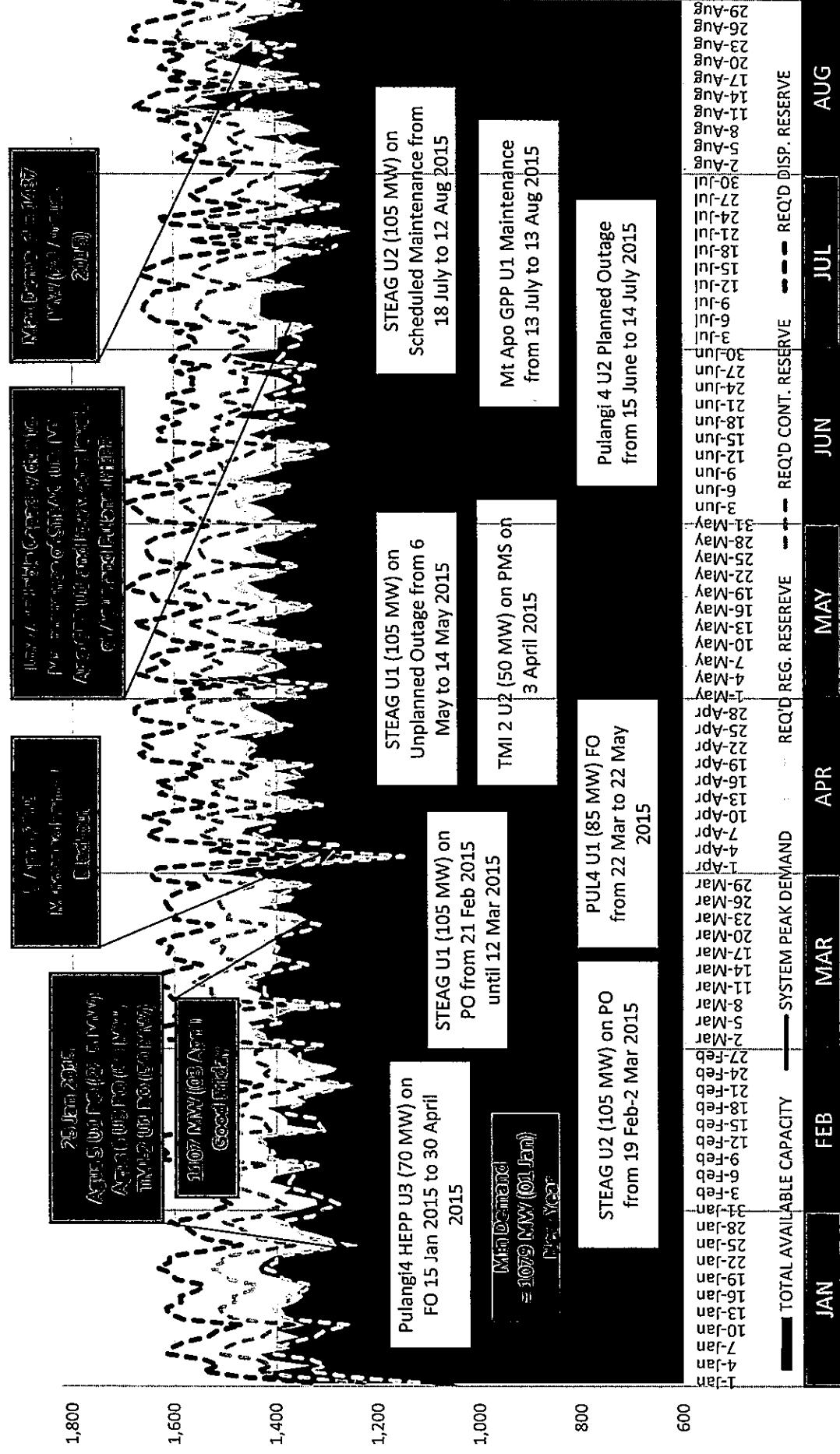
Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Mina Multi-Fuel Biomass Power Generation Facility	Green Power Panay Phils., Inc.		Iloilo	Phase 1 – 16.5 ^a Phase 2 – 16.5 ^a	Phase 1- May 2017 Phase 2 – May 2018
SCBiopower Bagasse-Fired Power Generation Project	San Carlos Biopower Inc.	Bronzeoak Philippines	Negros Occidental	18.0	Nov-2015
MCEI Multi-Feedstock Biomass Power Plant Project	Megawatt Clean Energy, Inc.		Negros Occidental	10.8	May 2018
TOTAL BIOMASS				61.8	
AES Battery Storage Project	AES Philippines Power Partners Co., LTD.	AES Philippines Power Partners Co., LTD.	Kabankalan, Negros Occidental	40.0	Oct 2016
TOTAL BATTERY				40.0	
TOTAL				720.47	

^a Revised based on REMB's report



Mindanao Supply-Demand Situation

01 January – 31 August 2015



Source: National Grid Corporation of the Philippines (NGCP) Daily Operations Report



PO – Planned Outage

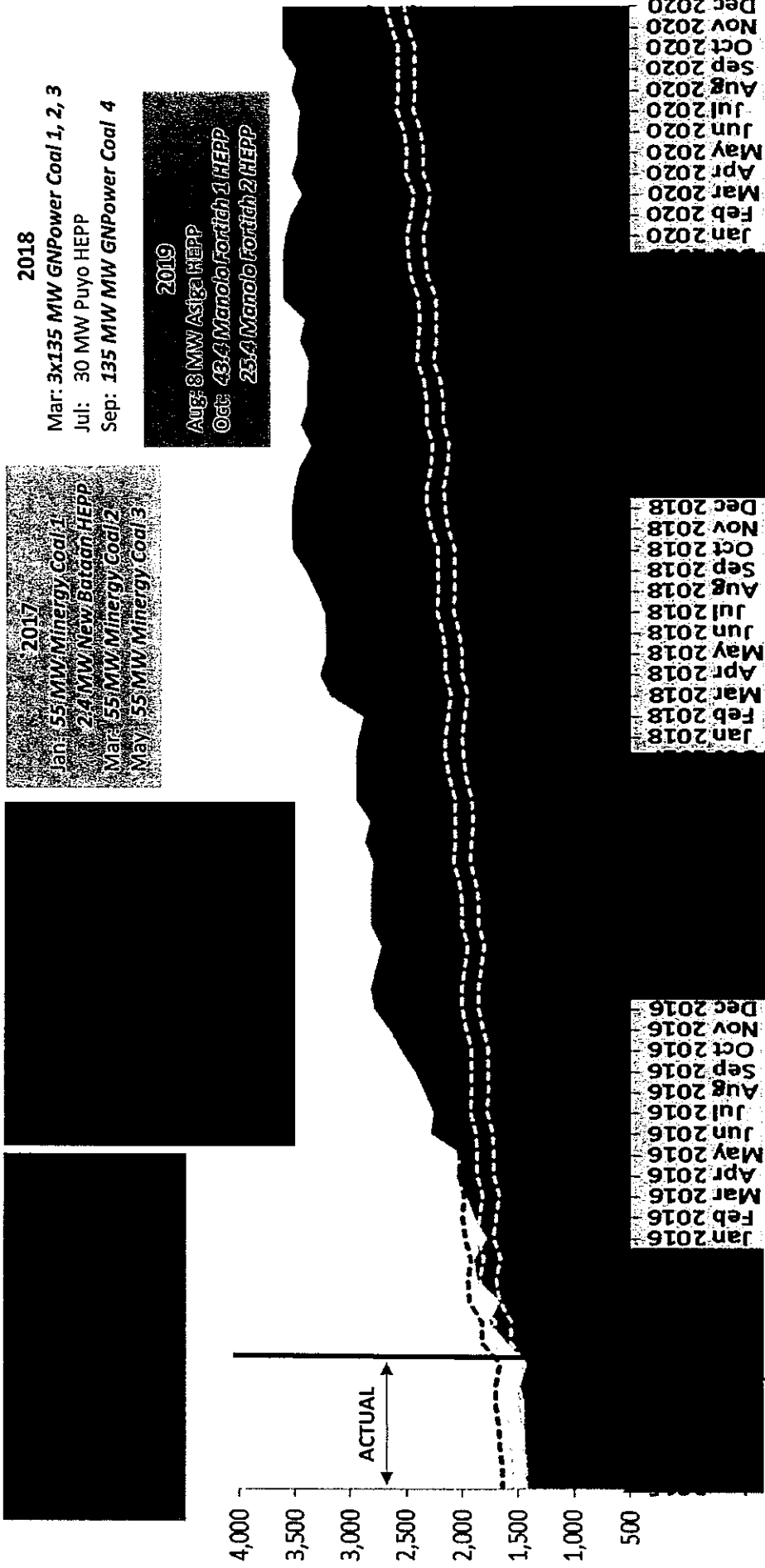
Mindanao Additional Capacities (01 Jan 2014 to 15 August 2015)

Power Plant	Location	Installed Capacity (MW)	Dependable Capacity (MW)	Commercial Operation
SoEnergy DPP*	Brgy. Apopong, Gen. Santos City, South Cotabato	19	18.05	22-Mar-14
MPC-Digos DPP*	Digos, Davao del sur	15	14.25	28-Mar-14
KEGI - Panaon DPP*	Panaon, Ozamis City, Misamis Occ.	15	13.6	May-14
Tudaya 1 Hydroelectric Power Project*	Sta. Cruz, Davao del Sur	6.6	6.53	9-May-14
Tudaya 2 Hydroelectric Power Project*	Sta. Cruz, Davao del Sur	7	6.93	9-May-14
KEGI Tandag*	Tandag, Surigao	7.5	6	Oct-14
Mapalad Energy Generation Corp. DPP*	Iligan City	15	14.25	29-Dec-14
Peak Power Soccsargen, Inc. (PSI) DPP*	Brgy. Apopong, General Santos City	20.9	19.6	26-Jan-15
Peak Power ASELCO (PSFI) DPP*	San Francisco, Agusan del Sur	5.9	5	26-Feb-15
Total		111.9	104.21	

Note: Dependable Capacity based on submitted report of GenCos. Those that are italicized are computed with consideration of station use per plant type technology



MINDANAO DEMAND-SUPPLY OUTLOOK 2015-2020



Notes

- Required Reserve Margin (RM) i.e. 4% regulating reserve and contingency and dispatchable reserve requirement
- 5.6 % peak demand growth rate resulted from observed 0.8 elasticity ratio of demand for electric power with national economic growth applied to 7 percent GDP growth rate (GR) target for 2014-2015.
- 12.8 % peak demand growth rate resulted from observed 1.6 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2016
- 8 % peak demand growth rate resulted from observed 1 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2017-2020

* On-going testing and commissioning
Bold & italicized – with changes on schedule; new entry

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As of 15 August 2015

Summary of Mindanao Power Projects as of 15 August 2015

Type of Power Plant	Committed		Indicative	
	No. of Proponents	Capacity (MW)	No. of Proponents	Capacity (MW)
Coal	7	1,910.00	4	1,400.00
Oil-Based	1	11.9	-	-
Natural Gas	-	-	-	-
Renewable Energy	8	148.40	20	520.81
Geothermal	-	-	1	40.00
Hydro	5	134.20	9	352.39
Biomass	3	14.20	6	69.6
Solar	-	-	4	58.82
Wind	-	-	-	-
TOTAL	16	2,070.30	24	1,920.81



COMMITTED POWER PROJECTS

Mindanao Grid Committed Power Projects, 2,070.3 MW

Name of the Project	Project Proponent	Mother JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
Therma South Inc.Coal-Fired Energy Project Unit 1*	Therma South Inc. (TSI)	Abotiz Power Corporation	Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur	150	Jun-2015	Aug 2015*
Southern Mindanao Coal Fired Power Station Unit 1	Sarangani Energy Corporation (SEC)	Alsons Power Corporation	Brgy. Kamanga, Maasim, Sarangani	100	Sept-2015 ^b	Nov 2015 ^b
Therma South Inc.Coal-Fired Energy Project Unit 2	Therma South Inc. (TSI)	Abotiz Power Corporation	Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur	150	Jan-2016	Feb-2016
SMC Davao Power Plant Project Phase 1 Unit 1	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	150	Dec-2015 ^b	March-2016 ^b
SMC Davao Power Plant Project Phase 1 Unit 2	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	150	May-2016	Jun-2016
FDC-Misamis Circulating Fluidized Bed (CFB) Coal-Fired Power Plant Project	FDC Utilities, Inc.	FDC Utilities, Inc.	Phivdec Industrial Estate, Villanueva, Misamis Oriental	405	U1 – Dec 2015 U2 – Mar 2016 U3 – Jun 2016	U1 – Jun 2016 U2 – Sep 2016 U3 – Dec 2016
Southern Mindanao Coal Fired Power Station Unit 2	Sarangani Energy Corporation (SEC)	Alsons Power Corporation	Brgy. Kamanga, Maasim, Sarangani	100	Feb-2016	Nov-2016
Balingasag Thermal Power Plant (Circulating Fluidized Bed Combustion (CFBC) Coal-Fired Power Plant Plant)	Minergy Coal Corporation	Mindanao Energy Systems, Inc.	Brgy. Mandangao, Balingasag, Misamis Oriental	165	U1 – July 2016 ^b U2 – Sept 2016 ^b U3 – Nov 2016 ^b	U1 – Jan 2017 ^b U2 – Mar 2017 ^b U3 – May 2017 ^b
GNPower Kauswagan Ltd. 540MW Clean Coal-Fired Power Plant	GN Power Kauswagan Ltd. Co.	GNPower Ltd. Co	Kauswagan, Lanao del Norte	540	U1 – Oct 2017 ^b U2 – Oct 2017 ^b U3 – Oct 2017 ^b U4 – Mar 2018 ^b	U1 – Mar 2018 ^b U2 – Mar 2018 ^b U3 – Mar 2018 ^b U4 – Sep 2018 ^b
TOTAL COAL				1,910.00		

* on-going testing and commissioning

^b Updated from proponent's submission



As of 15 August 2015

COMMITTED POWER PROJECTS

Mindanao Grid Committed Power Projects, 2,070.3 MW

Name of the Project	Project Proponent	Mother / JV Company	Location	Rated Capacity (MW)	Target Testing & Commissioning	Target Commercial Operation
SPORKOMAD Diesel Power Plant	Supreme Power Corporation		Puerto Garcia, Davao Province, Mindanao	114.0	Sept 2016	Sept 2016 ^b
TOTAL DIESEL				11.90		
TOTAL HYDRO				134.2		
TOTAL BIOMASS				14.2		
TOTAL				2,070.3		

* New Entry from Indicative list
^a Revised based on REMB's report
^b Updated from proponent's submission



INDICATIVE POWER PROJECTS

Mindanao Grid Indicative Power Projects, 1,920.81 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
SMC Davao Power Plant Project Phase III	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	U1 - 150.0 U2 - 150.0 U3 - 300.0	U1 - Jan 2016 U2 - June 2016 U3 - Dec 2016
Sibuguey Power Plant Project	Philippine National Oil Company (PNOC-EC)	Philippine National Oil Company (PNOC)	Sibugay, Zamboanga	100.0	Sep 2016
Ozamiz Power Coal Fired Power Plant Phase 1 - 2 x 100MW Phase 2 - 1 x 100MW	Ozamiz Power Generation, Inc.	Ozamiz Power Generation, Inc.	Brgy. Pulot, Ozamiz City, Misamis Occidental	300.0	Phase 1 - Sept 2018 Phase 2 - Dec 2018
SMC Davao Power Plant Project Phase II	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	300.0	Dec 2018
SRPI Circulating Fluidized Bed (CFB) Coal-Fired Power Station	San Ramon Power Inc.	Mapalad Power Corporation	Sitio San Ramon, Brgy. Talisayan, Zamboanga City	100.0	TBD
TOTAL COAL				1,400.0	
Mindanao 3 Geothermal	Energy Development Corporation	Energy Development Corporation	Kidapawan, North Cotabato	40.0	Jun 2018
TOTAL GEOTHERMAL				40.0	
Limbatangon Hydroelectric Power Project	Turbines Resource & Development Corp.	Turbines Resources and Development Corp. (TRDC)	Cagayan de Oro City, Misamis Oriental	9.0	Jan-2018
Tagoloan	First Gen Mindanao Hydropower Corp.	First Gen Mindanao Hydropower Corp.	Impasugong & Sumilao, Bukidnon	39.0	Jun-2018
Culaman Hydroelectric Power Project	Oriental Energy and Power Generation Corporation	Oriental Energy and Power Generation Corporation	Manolo Fortich, Bukidnon	10.0	Jun 2018
Cabadbaran Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Cabadbaran, Agusan del Norte	9.75	Jul 2018
Tumalaong Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Baungon, Bukidnon	9.0	Jul 2018



INDICATIVE POWER PROJECTS

Mindanao Grid Indicative Power Projects, 1,920.81 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Pasonanca	Philcarbon, Inc.	Philcarbon, Inc.	Zamboanga City	0.5	Jan 2019 ^a
Clarín	Philnew Hydro Power Corporation		Clarín, Misamis Occidental	5.0	Apr 2019
Mat-i-1	Philnew Hydro Power Corporation		Claveria, Cagayan de Oro	2.0	Apr 2019
Mat-i-2	Philnew Hydro Power Corporation		Cagayan de Oro, Misamis Oriental	1.6	Sept 2019
Mat-i-3	Philnew Hydro Power Corporation		Cagayan de Oro, Misamis Oriental	3.25	Sept 2019
Mangima Hydroelectric Power Project	Philnew Hydro Power Corporation		Manoto Fortich, Bukidnon	10.0	Sept 2019
Maladugao River (Upper Cascade)	UHPC Bukidnon Hydro Power I Corporation	UHPC Bukidnon Hydro Power I Corporation	Wao, Bukidnon	5.50	Jan 2020
Maladugao River (Lower Cascade)	UHPC Bukidnon Hydro Power I Corporation	UHPC Bukidnon Hydro Power I Corporation	Kailangan & Wao, Bukidnon	10.0	Apr 2020
Lanon (Lam-alu)	Euro Hydro Power (Asia) Holdings, Inc.	Euro Hydro Power (Asia) Holdings, Inc.	Lake Sebu, South Cotabato	9.50	May 2020
Silo-o	Philnewriver Power Corp.	Philnewriver Power Corp.	Malitbog, Bukidnon	3.29	Jun 2020
Agus III	Maranao Energy Corporation	Maranao Energy Corporation	Pantar & Balo-I, Lanao del Sur & Lanao del Norte	225	Jul 2020
TOTAL HYDRO				352.39	
Digos Solar Photovoltaic Power Project	Enfinity Philippines Renewable Resources, Inc.	Enfinity	Digos City, Davao del Sur	10.0	Oct 2015
Digos Solar Photovoltaic Power Project II**	Enfinity Philippines Renewable Resources, Inc.	Enfinity	Digos City, Davao del Sur	19.58	Dec 2015
Kibawe Solar Power Project	Asian GreenEnergy Corp.	Asian GreenEnergy Corp	Brgy. Labuagon, Kibawe, Bukidnon	10.49	Jan 2016
Kirahon Solar Power Project Phase 1	Kirahon Solar Energy Corporation		Brgy. Kirahon, Villanueva, Misamis Oriental	12.5	Jul 2016
Centralla Solar Power Project	NV Vogt Philippines Solar Energy One, Inc.		Brgy. Centralla, Surallah, South Cotabato	6.25	TBD
TOTAL SOLAR				58.82	

^a Revised based on REMB's report

** New Entry from REMB's report

² New Entry to Indicative Project based from REMB's report

TBD – to be determined



As of 15 August 2015

INDICATIVE POWER PROJECTS

Mindanao Grid Indicative Power Projects, 1,920.81 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
EPC Woody Biomass Power Plant Project	Eastern Petroleum Corporation		Agusan del Norte	21.0	Oct 2015
Kallangan Bio-Energy Corporation Multi-Feedstock Power Generating Facility	Kallangan Bio-Energy Corporation		Bukidnon	9.0	Aug 2016
Don Carlos Bio-Energy Corporation Multi-Feedstock Power Generating Facility	Don Carlos Bio-Energy Corporations		Bukidnon	9.0	Aug 2016
Malay-balay Bio-Energy Corporation Multi Feedstock	Malaybalay Bio-Energy Corporation	Malaybalay Bio-Energy Corporation	Bukidnon	9.0	Aug 2016
Biomass Power Plant Project	Misamis Oriental Bio-Energy Corporations	Misamis Oriental Bio-Energy Corporations	Misamis Oriental	10.8	Oct 2017
Napier Grass-Fired Biomass Power Plant Project ²	Manolo Fortich Biomass Energy Corporation	Manolo Fortich Biomass Energy Corporation	Bukidnon	10.8	Jan 2018
TOTAL BIOMASS				69.6	
TOTAL				1,920.81	

^a Revised based on REMB's report

² New Entry to Indicative Project based from REMB's report



END OF PRESENTATION

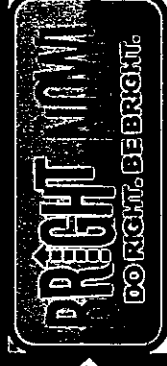
POWER OUTLOOK 2015-2020

As of August 2015

PRESENTATION TO:

HOUSE COMMITTEE ON ENERGY

02 September 2015



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.	
Provinces 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 Batangas: Batangas City, San Pascual, Sto. Tomas Quezon: Candelaria, Dolores, Lucban, Lucena City, Mauban, Pagbilao, Sampaloc, San Antonio, Sariaya, Tayabas, Tiaong 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, Araneta, Balintawak, Batangas, Biñan, Botocan, Calauan, Caliraya, CND, Dasmarinas, Dolores, Duhai, Makban, Malaya, Malolos, Paco, Pagbilao, San Jose, Sta. Rosa, Sucat, Tayabas, Zapote	
5a. Brief description of methodology used in load forecasting and supply expansion plan:	1. Load Forecasting Model using Econometric method. 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 CPI, GDP growth: Economist Intelligence Unit (EIU) Appendix I	

[illegible]

This also includes the following:

- (1) Contestable Customers who have already switched to their respective Retail Electricity Supplier (RES)
- (2) Eligible Contestable Customers with forecasted monthly peak of 3MW average and above
- (3) Eligible Contestable Customers with historical monthly peak demand of at least 1MW for 3 consecutive months
- (4) Eligible Contestable Customers with historical monthly peak demand of at least 1MW for 3 consecutive months

Item 2 and 3 are pursuant to Section 2 (2.3) (b) & (c) of the ERC Resolution No. 02, Series of 2008 (Rules for Contestability).

Forecast/Planning Results											
Units											
Historical											
Forecast											

Forecast/Planning Results											
Units											
(1)											
10c. Total Electricity Purchased or Generated											
Supplied by Utility Owned Generator											
On-grid											
Off-grid											
Electricity Purchased											
On-grid											
Off-grid											
Local Private Supply											
On-grid											
Off-grid											
TOTAL Electricity Purchased or Generated											
Note: (1) plus (2) must equal to (3)											
Total											
10f. Percent System Loss											

11. PEAK DEMAND REQUIREMENT											
11a. Peak Demand (On-grid)											
Customers Demand Requirement											
Residential											
Commercial											
Industrial											
Others											
Public Bldgs											
Street Lights											
Company Use: Company/Office/Housing											
Company Use: Utility's Station use											
Others (Direct sale or Large Load)											
On-Grid: Demand Requirement											

11b. Peak Demand (Off-Grid)											
Customers Demand Requirement											
Residential											
Commercial											
Industrial											
Others											
Public Bldgs											
Street Lights											
Company Use: Company/Office/Housing											
Company Use: Utility's Station use											
Others (Direct sale or Large Load)											
Off-grid: Demand Requirement											

11c. Peak Demand (Franchise)											
Customers Demand Requirement											
Residential											
Commercial											
Industrial											

Forecast/Planning Results											
	Units	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
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	(2)										
Company/Office/Housing	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	(3)										
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											
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											
Utility's Actual Monthly Coincident Peak Demand	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Utility's Monthly Contracted Demand from Power Suppliers:	5,032,400	5,326,900	5,405,400	5,834,400	6,121,300	6,070,500	5,809,300	5,841,100	5,669,300	5,663,500	5,636,600	5,618,000
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	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	250,000	250,000	250,000	250,000
AES Corp. (Masinloc Power Partners Co., Ltd.)	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	244,000	244,000	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.-Iligan Plant	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,065,000	1,065,000
Therma Mobile Inc.	100,000	150,000	150,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Global Business Power Corp. - Panay Plant*				27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
Global Business Power Corp. - Toledo Plant*				37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000
1590 Energy Corp. - Bauang Plant*				140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
Embedded Generation**	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890
Utility's Actual Monthly Withdrawn Capacity from Power Suppliers:	4,274,890	4,324,890	4,324,890	4,438,890	4,578,890	4,578,890	4,578,890	4,552,890	4,532,890	4,532,890	4,503,890	4,439,890
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	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	250,000	250,000	250,000	250,000
AES Corp. (Masinloc Power Partners Co., Ltd.)	270,000	270,000	270,000	270,000	270,000	270,000	270,000	270,000	244,000	244,000	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.-Iligan Plant	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,080,000	1,065,000	1,065,000
Therma Mobile Inc.	100,000	150,000	150,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Global Business Power Corp. - Panay Plant*				27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000
Global Business Power Corp. - Toledo Plant*				37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000
1590 Energy Corp. - Bauang Plant*				140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
Embedded Generation**	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890	14,890
Variance (Excess/Deficit)												

13b. Projected Monthly Load Data												
Year:	2015											
Utility's Projected Monthly Coincident Peak Demand	KW	5,248,800	5,297,400	5,356,747	6,216,293	6,337,442	6,264,733,915	6,172,728	6,077,101	6,120,812	6,068,671	5,917,669
Utility's Monthly Contracted Demand	KW	4,459,800	4,431,562	4,431,562	4,431,562	4,431,562	4,431,562	4,431,562	4,431,562	4,431,562	4,291,562	4,291,562
from Power Suppliers:												
Quezon Power Philippines Ltd.	KW	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	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	1,000,000	1,000,000	1,000,000
First Gas Power, San Lorenzo	KW	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	KW	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.)	KW	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	KW	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	KW	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	KW	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.	KW	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*	KW	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000
Embedded Generation**	KW	14,890	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	MWh	2,715,852	3,001,937	2,849,564	3,271,986	3,391,732	3,432,832	3,328,043	3,364,399	3,339,556	3,284,927	3,202,651
Utility's Monthly Contracted Energy from	MWh	2,105,198	2,062,854	2,170,343	2,537,992	2,665,985	2,665,640,181	2,566,512	2,572,634	2,536,128	2,495,144	2,375,232
Power Suppliers:												
Quezon Power Philippines Ltd.	MWh	161,632	0	231,231	264,307	266,635	289,059,6232	264,654	263,551	259,989	270,352	252,076
First Gas Power, Sta. Rita	MWh	543,235	633,867	518,941	644,162	603,818	628,679,7531	561,270	588,159	617,280	577,418	599,449
First Gas Power, San Lorenzo	MWh	289,295	298,067	262,184	328,709	317,352	311,994,7953	311,721	293,327	319,896	267,240	316,983
SEM-CALACA Power Corporation	MWh	136,477	184,764	154,909	161,495	158,933	165,127,5	160,138	152,901	82,493	133,496	132,949
AES Corp. (Masinloc Power Partners Co., Ltd.)	MWh	129,987	163,188	143,055	157,637	161,631	166,725,5564	160,231	160,849	164,751	160,842	150,866
Therma Luzon Inc.-Pagbilao Plant	MWh	147,472	144,645	152,582	169,166	170,478	231,38,88475	151,142	165,960	170,805	168,613	153,618
Therma Luzon Inc.-Pagbilao Plant	MWh	172,494	203,675	185,321	214,941	215,632	234,731,2942	213,735	210,297	205,391	118,036	89,616
San Miguel Energy Corp.-Sual Plant	MWh	423,862	533,667	417,159	374,669	608,597	663,519,7363	609,144	608,831	611,016	618,198	595,056
South Premiere Power Corp.-Ilijan Plant	MWh	13,704	23,841	21,000	30,124	38,585	41,887,87676	13,528	25,068	29,198	29,520	25,170
Therma Mobile Inc.	MWh	3,772	18,012	19,940	35,613	28,704	35,226,31627	28,014				
1590 Energy Corp.-Bauang Plant*	MWh	1,971										
Embedded Generation**	MWh	81,298	59,128	64,023	157,149	95,619	106,548,8439	92,936	103,691	75,309	151,428	59,449
Wholesale Electricity Spot Market	MWh	69,558	5,617	71,509	70,759	71,939	73,659	72,458	74,418	73,339	77,759	69,359
Utility Load Factor	%											

* Interim Power Supply Agreement

** Embedded Generation consists of supply from Montalban Methane, Bacavalle, Pangea and Philipdeco. (Montalban Methane terminated on Jan 26, 2015)

Note: NST 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	Contracted Supply			
			KW	KW	MWH	2014	2015	2016	2017
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				1,963,038	2,040,000	2,172,771			
Contracted Energy			MWH						
NPC-Ecozone									
Name of Plant			KW	391,919	555,000	648,471			
Contracted Demand			%	72%	71%	65%			
Load Factor				2,455,320	3,461,987	3,719,530			
Contracted Energy			MWH						
NPC-Sunpower									
Name of Plant			KW	31,427	33,621	34,009	26,933	28,224	34,000
Contracted Demand			%	77%	93%	71%	87%	91%	100%
Load Factor				213,121	274,123	230,233	204,953	223,507	297,840
Contracted Energy			MWH						
NPC-CCP (RE-based)									
Name of Plant			KW	11,107					
Contracted Demand			%	73%					
Load Factor				72,705					
Contracted Energy			MWH						
NPC-Ecozone (RE-based)									
Name of Plant			KW	24,081					
Contracted Demand			%	72%					
Load Factor				157,131					
Contracted Energy			MWH						
Total (NPC)									
Contracted Demand			KW	299,893	404,391	404,391	26,933	28,224	34,000
Load Factor			%	75%	83%	61%	87%	91%	100%
Contracted Energy			MWH	1,963,038	2,040,000	2,172,771	204,953	223,507	297,840

Supply Expansion Plan:									
14c. Supply from NPC's Transition Supply Contract									
NPC - TSC									
Name of Plant	KW	2,211,677	2,292,200	1,851,065	357,400				
Contracted Demand	%	37%	41%	63%	84%				
Load Factor	MW	1,818,200	8,139,733	10,304,664	887,059				
Contracted Energy									
NPC - TSC (Re-Based)									
Name of Plant	KW	178,323	247,792	13,915					
Contracted Demand	%	37%	41%	63%					
Load Factor	MW	254,210	897,749	77,573					
Contracted Energy									
Total (NPC + TSC)									
Contracted Demand	KW	2,390,000	8,436,932	10,386,679	1,244,400				
Contracted Demand	%	37%	41%	63%	84%				
Load Factor	MW	1,935,000	8,937,501	10,342,237	887,059				
Contracted Energy									
14d. Utility Firm Contract Supply from others:									
Quezon Power Philippines Ltd									
Name of Supplier	KW	460,000	460,000	460,000	460,000	460,000	460,000	460,000	460,000
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	388,022	3,265,006	2,951,117	3,821,472	3,051,721,600	2,752,896	3,079,695	3,146,821
Contracted Energy									
First Gas Power Corp. (SGR RPL)									
Name of Supplier	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
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	755,518	8,116,538	7,215,523	7,532,387	6,297,634,000	7,074,856	6,683,264	6,926,642
Contracted Energy									
FCP Corp. (San Lorenzo)									
Name of Supplier	KW	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	382,362	4,113,962	3,821,180	2,746,309	2,483,207,000	3,406,742	3,161,614	3,244,275
Contracted Energy									
SEM Chata Power Corp									
Name of Supplier	KW	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	156,081	2,521,718	1,862,972,01	1,724,921	2,174,302	2,137,468	1,310,216	
Contracted Energy									
Maritime Power Partners Co. Ltd									
Name of Supplier	KW	610,000	610,000	610,000	610,000	610,000	610,000	610,000	610,000
Installed Capacity	KW	610,000	610,000	610,000	610,000	610,000	610,000	610,000	610,000
Contracted Demand	KW	610,000	610,000	610,000	610,000	610,000	610,000	610,000	610,000
Contracted Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	2,606,084	2,115,219,000	1,865,609	2,017,479	2,068,303	1,197,639	1,037,547	
Contracted Energy									
Thermal Lison Inc.									
Name of Supplier	KW	735,000	735,000	735,000	735,000	735,000	735,000	735,000	735,000
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	2,092,529	1,753,344,23	1,764,648	1,874,210	1,919,688	1,526,071	1,398,375	
Contracted Energy									
San Miguel Energy Corp									
Name of Supplier	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
Installed 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 Demand	%	100%	100%	100%	100%	100%	100%	100%	100%
Load Factor	MW	2,751,634	2,175,915,19	2,243,421	2,316,580	2,373,818	1,833,441	1,543,431	
Contracted Energy									

Supply Expansion Plan:									
Global Supply									
2016201720182019202020212022202320242025									
Name of Supplier									
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
Contracted Capacity	KW	1,180,000	1,080,000	1,065,000	1,065,000	970,000	970,000	970,000	970,000
Contracted Demand	KW	6,889,749	7,121,701.38	6,604,700	5,761,932	4,199,249	3,602,604		
Contracted Energy	MWH								
Name of Supplier									
Therma Mobile Inc.									
Installed Capacity	KW	214,000	242,000.00	242,000	242,000	242,000			
Contracted Capacity	KW	100,000	200,000.00	200,000	200,000	200,000			
Contracted Demand	KW	54,351	329,911.03	292,137	245,076	176,296			
Contracted Energy	MWH								
Name of Supplier									
Global Business Power Corp. (Panay)									
Installed Capacity	KW		72,000.00						
Contracted Capacity	KW		37,000.00						
Contracted Demand	KW		23,571.00						
Contracted Energy	MWH								
Name of Supplier									
Global Business Power Corp. (Toledo)									
Installed Capacity	KW		40,000.00						
Contracted Capacity	KW		37,000.00						
Contracted Demand	KW		29,904.00						
Contracted Energy	MWH								
Name of Supplier									
1590 Energy Corp.									
Installed Capacity	KW		235,200.00	235,200					
Contracted Capacity	KW		140,000.00	140,000					
Contracted Demand	KW		100,442.49	169,281					
Contracted Energy	MWH								
Name of Supplier									
San Buenaventura Power Ltd.									
Installed Capacity	KW				455,000	455,000	455,000	455,000	455,000
Contracted Capacity	KW				455,000	455,000	455,000	455,000	455,000
Contracted Demand	KW					3,786,742	3,840,321	3,848,969	3,822,182
Contracted Energy	MWH					3,379,261	3,680,094	3,379,261	3,377,093
Total (RE-based generating facility)									
Installed Capacity	KW								
Contracted Capacity	KW								
Contracted Demand	KW								
Contracted Energy	MWH								
Total (Utility Firm Contract Supply)									
Installed Capacity	KW	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000
Contracted Capacity	KW	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000
Contracted Demand	KW	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000	1,960,000
Contracted Energy	MWH	1,474,712	71,749,498	14,155,739	13,001,603	12,839,456	12,839,456	12,839,456	12,839,456
* PSA Capacity starting June 26, 2013 (start of Initial OARC) net of assigned capacity to Merabio Local RES									
14c. Local Private Supply (Embedded Generation)									
Philpodeo									
Installed Capacity	KW	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Contracted Capacity	KW	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150
Contracted Demand	KW	3,159	3,651	3,087	2,367.00	1,908	1,908	1,908	1,908
Contracted Energy	MWH								
Montalban Methane									
Installed Capacity	KW	8,190	8,325	8,325	8,325	8,325	8,325	8,325	8,325
Contracted Capacity	KW	13,119	31,844	20,568	14,642	19,344.00			
Contracted Demand	KW								
Contracted Energy	MWH								
Baterality									
Installed Capacity	KW	4,212	4,212	4,212	4,212	4,212	4,212	4,212	4,212
Contracted Capacity	KW								
Contracted Demand	KW								
Contracted Energy	MWH								
Paagaa									
Installed Capacity	KW								
Contracted Capacity	KW								
Contracted Demand	KW								
Contracted Energy	MWH								

Quarterly Supply											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Supply Expansion Plan:											
Sub Total (Embedded RE-based generating facility)											
Installed Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Firm Contract Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Energy Supply	MWH	55,119	85,433	93,402	98,896	98,896	98,896	98,896	98,896	98,896	98,896
Total (All Embedded)	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Installed Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Firm Contract Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Energy Supply	MWH	55,119	85,433	93,402	98,896	98,896	98,896	98,896	98,896	98,896	98,896
14c. TOTAL SUPPLY											
Total Supply from RE-Based Generation Facilities only	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Energy	MWH	55,119	85,433	93,402	98,896	98,896	98,896	98,896	98,896	98,896	98,896
Total Supply from All Generation Facilities	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Energy	MWH	55,119	85,433	93,402	98,896	98,896	98,896	98,896	98,896	98,896	98,896
14g. Supply-Demand Surplus/(Deficit)											
Capacity	KW	8,190	13,687	14,887	15,362	15,362	15,362	15,362	15,362	15,362	15,362
Capacity Margin	%	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
Energy	MWH	55,119	85,433	93,402	98,896	98,896	98,896	98,896	98,896	98,896	98,896

14h. Owned Production Facilities (See Item 14a.)	Operator	Plant Type	Year Installed	Fuel Type	Contract Effectivity	Contract Expiration
1. _____	_____	_____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____	_____
14i. Supply from other sources (See Item 14d. and 14e.)	Operator	Plant Type	Year Installed	Fuel Type	Contract Effectivity	Contract Expiration
1. Quezon Power Philippines Ltd.	_____	_____	_____	Coal	May 2009	May 2025
2. First Gas Power, S.A. R.L.	_____	_____	_____	Natural Gas	October 2002	October 2025
3. First Gas Power, San Lorenzo	_____	_____	_____	Natural Gas	August 2006	August 2027
4. SEMACALACA Power Corporation	_____	_____	_____	Coal	December 2011	December 2019
5. AES Corp. (Masinloc Power Partners Co., Ltd.)	_____	_____	_____	Coal	December 2012	December 2019
6. Thermo Luzon Inc.-Pagbilao Plant	_____	_____	_____	Coal	December 2012	December 2019
7. San Miguel Energy Corp.-Sual Plant	_____	_____	_____	Natural Gas	December 2012	December 2019
8. South Premier Power Corp.-Liljan Plant	_____	_____	_____	Direct	November 2013	June 25, 2017
9. Thermo Mobile Inc.	_____	_____	_____	Bunker Oil	November 14, 2014	July 23, 2015
10. Global Business Power Corp. - Panay Plant	_____	_____	_____	Bunker Oil	November 14, 2014	July 23, 2015
11. Global Business Power Corp. - Toledo Plant	_____	_____	_____	Direct	May 12, 2014	July 23, 2015
12. 1390 Energy Corp. - Buang Plant	_____	_____	_____	Hydro	May 16, 2014	May 16, 2019
13. Philipenco	_____	_____	_____	Biomass	June 2009	September 2016*
14. Montalban Methane*	_____	_____	_____	Biomass	March 16, 2013	March 16, 2016
15. Bacavalley	_____	_____	_____	Biomass	March 15, 2013	February 29, 2016
16. Pangra	_____	_____	_____	Biomass	March 15, 2013	February 29, 2016

14j. Do you wheel power for other users/producers? (YES/NO)

14k. 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 30, 2015

Supply Expansion Plan

Supply Forecast

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

13a. 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

Net Dependable Capacity

Net Production

KW

KW

MWH

Total (Utility Owned Power Generating Facilities)

Installed Capacity

Net Dependable Capacity

Net Production

KW

KW

MWH

13b. Supply from NPC:

Name of Plant

Contracted Demand

Load Factor

Contracted Energy

KW

%

MWH

Total (NPC):

Contracted Demand

Load Factor

Contracted Energy

KW

%

MWH

13c. Supply from NPC's Transition Supply Contract

Name of Plant

Contracted Demand

Load Factor

Contracted Energy

KW

%

MWH

Total (NPC's TSC):

Contracted Demand

Load Factor

Contracted Energy

KW

%

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										
Contracted Demand	MWH										
Contracted Energy											
Sub Total (RE-based generating facility)											
Installed Capacity	KW										
Contracted Demand	KW										
Contracted Energy	MWH										
Sub Total (RE-based generating facility)											
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	KW	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	MWH										
Sub Total											
Installed Capacity	KW										
Contracted Demand	KW										
Contracted Energy	MWH										
13e. Local Private Supply (Embedded Generation)											
Name of Supplier	KW										
Installed Capacity	KW										
Capacity Used for Own Load	MWH										
Energy Used for Own Load	KW										
Contracted Demand	MWH										
Contracted Energy (Surplus of embedded Generators)											
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)							(ANNUAL)					
Voltage, 230kV	ckt-km	2,700	2,700													
Voltage, 138kV and less than 230kV	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, 115kV and less than 138kV	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
Voltage, 69kV and less than 115kV	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)							(ANNUAL)					
Voltage, 230kV	ckt-km															
Voltage, 138kV and less than 230kV	ckt-km	717,900	723,900	725,300	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, 115kV and less than 138kV	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
Voltage, 69kV and less than 115kV	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)							(ANNUAL)					
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)							(ANNUAL)					
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	3,413	3,585	3,801	4,106	4,434	348	781	978	1,193	1,286	917	1,031	1,081	1,102	1,083

Forecast/Planning Results				Historical				Forecast											
Units				2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
16a. Substation Capacity, MVA (Additional)				(CUMULATIVE TOTAL)															
Transformer Capacity, 100 and up				196.97	200.00	212.12	215.94	215.94	300.00	300.00	300.00	300.00	300.00	250.00	150.00	300.00	300.00	300.00	
No. of Units				22	21	22	23	23	3	3	3	3	2	3	2	4	2	2	
Transformer Capacity, 50 and less than 100				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				33.33	33.26	33.26	33.19	33.26	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	
No. of Units				18	18	18	19	19	1	1	1	1	2	1	1	1	1	1	
Transformer Capacity, 10 and less than 25				15.38	15.35	15.35	15.47	15.56											
No. of Units				61	56	56	50	51											
Transformer Capacity, less than 10				5.29	5.29	4.99	3.99	3.99											
No. of Units				17	17	14	10	10											
Total Capacity				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	
MVA																			
16b. Substation Capacity, MVA (Upgrading)				(ANNUAL)															
Transformer Capacity, 100 and up				66.67	83.33	83.33	83.33	50.00					83.00						
No. of Units				2	1	1	1	1					1				1		
Transformer Capacity, 50 and less than 100																			
No. of Units																			
Transformer Capacity, 25 and less than 50																			
No. of Units																			
Transformer Capacity, 10 and less than 25																			
No. of Units																			
Transformer Capacity, less than 10																			
No. of Units																			
Total Upgrading				133	83	115	103	50	0	33	0	0	0	83	0	0	33	0	
MVA																			
16c. Substation Capacity, MVA (Retirement/Standby)				(ANNUAL)															
Transformer Capacity, 100 and up					133.33	133.33	133.33	150.00											
No. of Units					1	1	1	1											
Transformer Capacity, 50 and less than 100					83.33	83.33	83.33												
No. of Units					2	3	1												
Transformer Capacity, 25 and less than 50				32.00	33.33	33.33		32.00					33.00	33.00					
No. of Units				1	1	1		1					1	1					
Transformer Capacity, 10 and less than 25				12.50	15.80		14.31		15.63	12.50	16.50	12.50	12.50	16.17	15.80	16.25			
No. of Units				2	5		6		8	11	6	2	2	9	5	8			
Transformer Capacity, less than 10				0.83		6.67	6.46	0.83		4.00				5.00	7.00				
No. of Units				3		3	4	1		1				1	2				
Total Retirement				139	119	83	45	33	125	17	99	55	58	183	83	130	0	0	0
MVA																			

Forecast/Planning Results				Units	Historical														Forecast			
					2010-2024																	
					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	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	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	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	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	2 - 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	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	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														
Operation Control																						
Fixed																						
Variable																						
Automatic																						
Manual																						

Forecast/Planning Results	Units	Historical										Forecast					
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
(CUMULATIVE TOTAL)																	
18. Capital Expenditures:																	
18a. Network Projects																	
Subtransmission (Acquisition/Expansion)							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)							74.67	234.01	102.87	508.29	374.3	487.73	85.42	313.60	341.37	79.62	
Local (in Million)	Peso						74.67	234.01	102.87	508.29	374.3	487.73	85.42	313.60	341.37	79.62	
Foreign (in Million)	Peso																
Distribution (Expansion)							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)							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)							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)								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)								46.44				46.44					
Local (in Million)	Peso							46.44				46.44					
Foreign (in Million)	Peso																
Electrification																	
Local (in Million)	Peso																
Foreign (in Million)	Peso																
Other Network Assets							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							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)							9,263.66	8,078.27	8,316.58	6,791.47	14,951.60	20,219.53	19,779.14	17,029.25	17,470.82	17,455.16	
Local (in Million)	Peso						9,263.66	8,078.27	8,316.58	6,791.47	14,951.60	20,219.53	19,779.14	17,029.25	17,470.82	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
Maibarara Geothermal, Inc. (MGI) - 40 MW Steam Turbine - Sep 2012 - Brgy. San Rafael, Sto. Tomas, Batangas
Alternergy Wind One Corporation (AWOC) - 67.5 MW Wind Turbine - Aug 2011 - Sitio Bugarin, Brgy. Halayhayin, Piliila, 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 Sunmit Petrochemical Corporation (JGSPC) - 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
Alternergy Sembrano Wind Corporation - 72 MW - May 2014 - Bgy. Niogan, Piliila, 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
Millennium 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
DaeKyoung 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
FR 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 - Carlubang, Calamba City, Laguna
First Philec Solar Solutions - 2 MW PV Power Plant (PV Depot) - August 1, 2011 - Brgy. Maguyam, 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 José, Antipolo City Rizal
ATN Philippines Solar Energy Group Inc. (A TN) - 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 Mail 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 FQP-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

YEAR 2015 - 2024																
PROJECT TYPE	PROJECT CATEGORY	PROJECT NAME	PROJECT DESCRIPTION	START DATE	COMPLETION DATE	TOTAL PROJECT COST	TIMELINE									
							2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Capacity	Substation (Additional)	Expansion of Tuburan 115 kV - 34.5 kV GIS Substation (2nd Bank)	Installation of 1-83 MVA power transformer with associated SCADA and protective equipment as well as appropriate distribution lines.		2015	287,132,874	287,132,874									
Capacity	Substation (Additional)	Development of Dila 115 kV - 34.5 kV Substation	Installation of 1-83 MVA power transformer with associated SCADA, communication and protective equipment as well as appropriate subtransmission and distribution lines.		2015	316,910,064	316,910,064									
Capacity	Substation (Additional)	Development of PANGCOR-1 115 kV-34.5 kV GIS Substation (1st and 2nd bank)	Installation of 2-83 MVA power transformer with associated SCADA, communication and protective equipment as well as appropriate subtransmission and distribution lines.		2015	1,156,903,717	1,156,903,717									
Capacity	Substation (Additional)	Expansion of FBQC-4 115 kV-34.5 kV GIS Substation (2nd Bank)	Installation of 1-83 MVA power transformer with associated SCADA and protective equipment as well as appropriate distribution lines.		2015	253,523,269	253,523,269									
Capacity	Substation (Additional)	Development of Barawa 115 kV - 34.5 kV GIS Substation	Installation of 1-83 MVA power transformer with associated SCADA, protective and communication equipment as well as appropriate subtransmission and distribution lines.		2015	577,155,420	577,155,420									
Capacity	Substation (Additional)	Installation of 34.5 kV Metalclad Switchgear at Dasmarias (B3MVA 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	68,161,065	68,161,065									
Capacity	Substation (Additional)	Installation of 34.5 kV Metalclad Switchgear at LUP 3rd B3MVA 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 Masinaig 115 kV-34.5 kV Substation (2nd Bank)	Installation of 1-83 MVA power transformer with associated SCADA and protective equipment as well as appropriate 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 1-83 MVA power transformer with associated SCADA and protective equipment as well as appropriate distribution lines.		2015	167,580,219	167,580,219									
Capacity	Substation (Additional)	Development of Silo Guna 115 kV Switching Station	Installation of 115 kV subtransmission lines with associated SCADA and protective equipment.		2015	154,091,344	154,091,344									
Capacity	Substation (Additional)	Development of Mabalaring 115 kV 34.5 kV GIS Substation	Installation of 1-83 MVA power transformer with associated SCADA, protective and communication equipment as well as appropriate subtransmission and distribution lines.		2016	435,768,536	435,768,536									
Capacity	Substation (Additional)	Installation of 34.5 kV Metalclad Switchgear at NGCP-San Jose B3MVA 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	63,122,508	63,122,508									
Capacity	Substation (Additional)	Expansion of Tandang Banaag 115 kV Substation (2nd Bank)	Installation of 1-83 MVA power transformer with associated SCADA and protective equipment as well as appropriate distribution lines.		2016	167,082,548	167,082,548									
Capacity	Substation (Additional)	Development of Lucena 115 kV 34.5 kV Substation	Installation of 1-83 MVA power transformer with associated SCADA, communication and protective equipment as well as appropriate subtransmission and distribution lines.		2016	478,911,544	478,911,544									
Capacity	Substation (Upgrading)	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									

SWORN STATEMENT

I, Christopher Rainier Chua, of legal age, with office address at 8/F Rockwell Business Center Tower 1, Ortigas Avenue, Pasig City, after having been sworn in accordance with law, hereby depose and state that:

1. I am the duly authorized representative of Atimonan One Energy, Inc. ("A1E") for purposes of executing a sworn statement regarding the fuel procurement process relative to the Power Supply Agreement between A1E and the Manila Electric Company;
2. As the Assistant Vice President for Development, I have taken part in the internal management discussions and planning regarding the practicability and feasibility of entering into fuel supply agreements;
3. A1E has not yet entered into fuel supply agreements as of this date;
4. A1E intends to enter into a mix of short and long-term coal supply agreements and start discussions with potential suppliers during construction to manage likely minimum take-or-pay volume requirement of coal suppliers, especially those providing long-term supply.
5. A1E has engaged a third-party consultant to conduct studies on potential coal sources taking into account the required range of coal specifications and has identified Indonesia and Australia as the primary and secondary markets, respectively. Based on the said studies, A1E is confident that adequate supplies of coal can be procured economically and efficiently.
6. I am executing this sworn statement to attest to the truth of the foregoing and for whatever legal purpose it may serve.

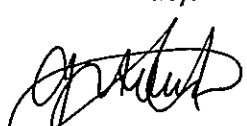
WITNESS MY HAND this 21th day of April 2016 in Pasig City, Metro Manila.


Christopher Rainier Chua
Affiant

APR 28 2016

SUBSCRIBED AND SWORN to before me this ___ the day of April 2016 at Pasig City, Metro Manila by affiant who exhibited to me his Passport No: EC0644682 as proof of identity.
Issued: 23 March 2014

Doc. No. 110 ;
Page No. 23 ;
Book No. 11 ;
Series of 2016.


ATTY. GRETCHELL L. TOLOSA
Notary Public
Pasig, San Juan, Taguig and Pateros
Issued on April 20, 2015 at Pasig City
Appointment No. 155 (2015-2016)
Phil No. 57454/ IBP No. 1020006/ 01-06-16 KCM Chapter
PTR No. 1465700-01-21-16 Pasig City
MCLE V-0002607-01/09/14
8th Floor Lopez Bldg., Ortigas Avenue Pasig City

**PROCUREMENT PROCESS
LEADING TO THE EXECUTION OF THE POWER SUPPLY AGREEMENT (PSA)
BETWEEN MANILA ELECTRIC COMPANY (MERALCO)
AND ATIMONAN ONE ENERGY, INC. (A1E)**

As early as the 3rd to 4th quarter of 2014, A1E discussed with Manila Electric Company (MERALCO) for an execution of a Power Supply Agreement (PSA). After which, in a letter dated April 8, 2015, A1E presented its proposed terms of reference to MERALCO for the execution of a 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 26, 2016, the Parties executed the PSA for the purchase of Contract Capacity and Associated Energy from the 2 x 600 MW (net) supercritical pulverized coal power plant that A1E will build in a land area in Barangay Villa Ibaba, Municipality of Atimonan in Quezon Province, the island of Luzon.

ANNEX " ~~X~~ "

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 km², 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 capacity

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, NERALCO 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 NERALCO'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.

NERALCO 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&CO;
3. Industrial Efficiency Program — customer value added services through an E&CO to discourage self-generation.

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 km², 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.

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	33.6%
Commercial Customer	253 640	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%
TOTAL	2 869 532		17 810 400	

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.

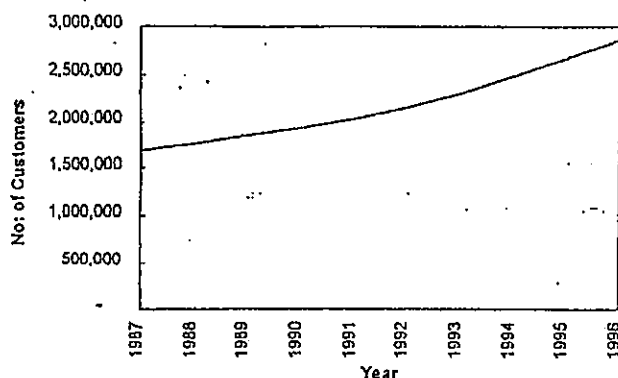


Figure 1 Historical Growth in Customer Numbers

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.

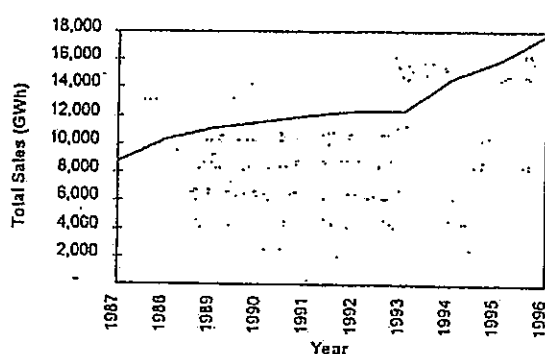


Figure 2 Historical Energy Sales

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.

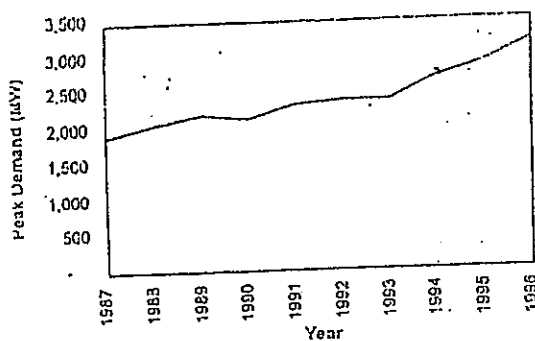


Figure 3 Historical
Peak Load

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^a 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.

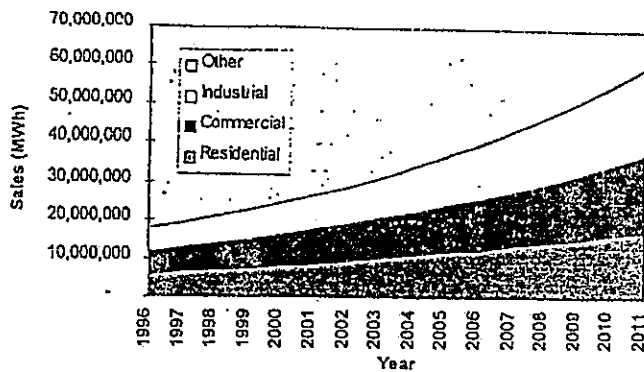


Figure 4 Electricity Sales Forecast (SJW2)

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.

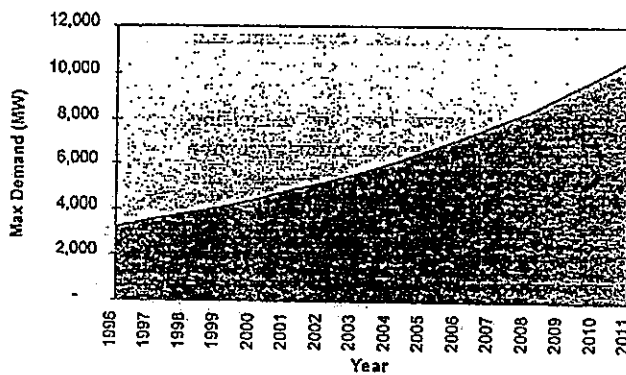


Figure 5 Electricity Demand Forecast

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 new conditions unfolding in the Company's environment, MERALCO is setting goals for competition in focusing on what it considers the most important dimensions of its business — the customers.

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.

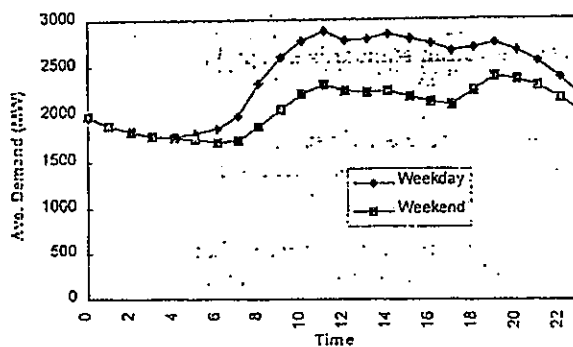
5 (i) 1 d
5 (i) 2 c

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 during 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 [SJW-4]

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

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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	"DSM" 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, 18 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 customers purchase the CFLs from approved retailers and pay for the lamps in instalments.

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 technical 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 Oxygen 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, 1363 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 only a minor component of the overall cost of production.

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.

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. MERALCO will continue

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 [SJW5] 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. [SJW6]

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.[SJW7] 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 amount

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:

- 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 ⁻¹
Demand	12 * 290.12 = 3481.68	P.kW ⁻¹ .y ⁻¹

Table 5 MERALCO's NPC Contract Charges used as Avoidable Costs in the Analysis

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).

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.

5 (i) 1 g & j
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.

Table 6 Technology
 Cost-Effectiveness of
 Compact Fluorescent
 Lighting Program

Technology	
Base Technology	2 x 50W Incandescent Lamp
DSM Technology	2 x 21W Compact Fluorescent Lamp
Service Life	6 years
Energy	
Base Annual Energy ¹	kWh
DSM Annual Energy ²	kWh
Delta Annual Energy	kWh
Marginal System Losses ³	kWh
System Annual Energy Impact	P/kWh ⁴
Present Value Avoidable Energy Costs ⁴	P
Present Value Reduced Energy Supply Costs	P
Demand	
Base Peak-Coincident Demand ⁵	kW
DSM Peak-Coincident Demand	kW
Delta Peak-Coincident Demand	kW
System Losses	kW
System Peak-Coincident Demand Impact	P/kW ⁴
Present Value Avoidable Demand Costs ⁴	P
Present Value Reduced Demand Supply Costs	P
Equipment Cost	
DSM Equipment Cost ⁷	P
Base Equipment Cost ⁵	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:

- Assuming 2 lamps * 0.05 kW * 3 hours * 365 days. [SJW16]
- Assuming 2 lamps * 0.021 kW * 3 hours * 365 days. [SJW17]
- 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]
- 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%.
- ⁴ The peak-coincident demand figures are calculated as the wattage for two lamps with a 90% coincidence factor meaning that 9/10 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⁻¹.y⁻¹. 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 Charge, from a straight energy rate of P 2.33 /kWh to a demand and energy rate of P 1.05 /kW each month and P 1.00 /kWh.

There are an average of 730 hours per month.² 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%.

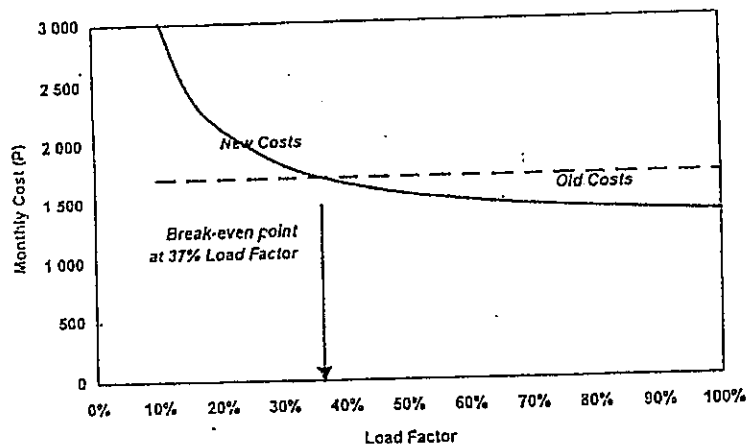


Figure 7 Comparison of New with Old Costs for as a Function of Load Factor

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[3JW27]

² 730 hours per month = 730 kWh per year divided by 12 months = 60.8 kWh per month

Technology	
Base Technology	
DSM Technology	
Service Life	years
Energy	
Base Annual Energy ¹	kWh
DSM Annual Energy ²	kWh
Delta Annual Energy	kWh
Marginal System Losses ³	
System Annual Energy Impact	kWh
Present Value Avoidable Energy Costs ⁴	P.kWh ⁴
Present Value Reduced Energy Supply Costs	P
Demand	
Base Peak-Coincident Demand ⁵	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 ⁴
Present Value Reduced Demand Supply Costs	P
Equipment Cost	
DSM Equipment Cost ⁶	P
Base Equipment Cost ⁷	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	

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 MERALCO avoidable energy cost is 1.2829 P/kWh. Avoiding 1 kWh for x.[SJW32] years (the life of the CFL) delivers MERALCO 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 MERALCO 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 P 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:38]

4.6.7 Streetlight Conversion Program

[SJW:39]

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

5 (i) 11 & j
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
	Pilot	Pilot
1998		
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 determined using the monitored results from the pilot stage of the program. [SNW41]

4.7.3 Industrial Efficiency Program

[SNW42]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 service (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.

5 (i) 1 i & j
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 MCHALCO 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 (1998 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 1999.

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
GFL Program					
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
Green Buildings Program					
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
Industrial Efficiency Program					
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
Industrial Demonstration Program					
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
Power Factor Correction Program					
<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	900 000		900 000
Contingency				357 353	357 353
Total					4 257 214

Table 11 Estimated Program Costs

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
CFR Program					
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
Green Buildings Program					
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
Industrial Efficiency Program					
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
Industrial Demonstration Program					
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
Power Factor Correction Program					
<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	900 900		900 000
Contingency				357 853	357 862
Total					4 257 214

Table 11 Estimated Program Costs

Load 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
1997					
DSM Plan Preparation					
Administration					
Erd Use Surveys					
Total					
1998					
Erd Use Surveys					
Analysis					
DSM Training Workshops					
Total					
1999					
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 P xx,[SJW46] but would incur program costs and reduced revenue totaling P yy,[SJW47] resulting in a net loss to Meralco of P zz,[SJW48] Using a utility discount rate of d%,[SJW49] a once-off residential tariff adjustment of cdj P/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 P imp[SJW52] per year.

Year	Projected Consumption MWh	Calculated Savings MWh	Projected Consumption With Program MWh	Recovered Revenue P
Once-off Tariff Adjustment (P.kWh ⁻¹)				
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. [SJW33]

5. FINANCIAL PLAN

5.1 Proposal for DSM Financial Incentives

This proposal provides financial incentives to encourage the implementation of 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 $xx \text{ P/kWh}$ to recover net losses over the life of the projected residential CFL program effects with a present value of $P \text{ } xx,xxx,xxx$ 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

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.

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- 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 $\text{xx P/kWh}(\text{S.W.56})$ to recover net losses over the life of the projected residential CFL program effects with a present value of $\text{P } \text{zzz}(\text{S.W.57})$ when discounted at $d\%(S.W.58)$. 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 final cost recovery rate for the 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 results of the review will be used to develop a new DSM plan for the next year.

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 that 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 above measures will be monitored and reported on.

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	3 040 966	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	5 319	3 825 932
2010	3 476 271	377 332	21 629	5 390	3 880 622
2011	3 518 430	387 999	22 604	5 465	3 931 498
Compound Annual Growth	1.6%	1.6%	1.6%	1.6%	1.6%

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	4 122	7.8%
2000	4 443	7.8%
2001	4 725	6.3%
2002	5 073	7.3%
2003	5 444	7.3%

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%	1.3%	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

[SJW39]

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 ERD!

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 numebers 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_f\lofprog.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® 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
[SJW36] Put the tariff impact value in here.

Page: 43
[SJW37] put the net revenue loss value in here.

Page: 43
[SJW38] Put the correct discount rate in here.

Page: 50
[SJW39] Put the long list, the screening process and the results here.

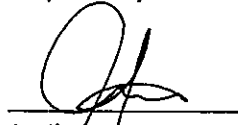
ANNEX " 7 "

Certification from the engine manufacturer of the net heat rate

This is not applicable to Atimonan One Energy, Inc. (A1E). A1E has not yet awarded an Engineering, Procurement and Construction contract as it is still evaluating bids received. The PSA has a provision on a Net Plant Heat Rate Test Certificate, which is a requirement for Commercial Operations Date (COD).

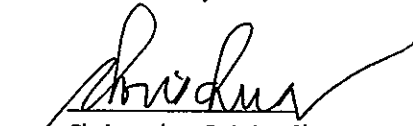
A1E will submit the Net Plant Heat Rate Test Certificate signed by the Independent Engineer as soon as available.

Prepared by:



April Rose Victoria

Reviewed by:



Christopher Rainier Chua

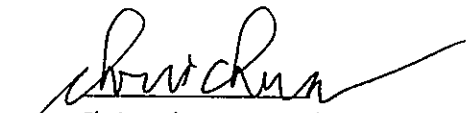
Minimum Energy Offtake (MEOT)

This is not applicable to Atimonan One Energy, Inc. (A1E). A1E does not have a Minimum Energy Offtake (MEOT) as there is no take-or-pay provision in the Power Supply Agreement. Meralco is obligated to pay fixed capacity payments, but no fixed energy payments.

Prepared by:


April Rose Victoria

Reviewed by:


Christopher Rainier Chua

Potential Cost of Ancillary Services

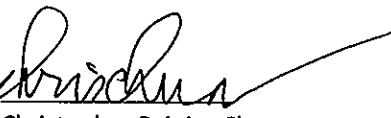
This is not applicable to Atimonan One Energy, Inc. (A1E). A1E is fully contracted hence will not have ancillary services.

Prepared by:



April Rose Victoria

Reviewed by:



Christopher Rainier Chua

BusinessMirror

A broader look at today's business

REPUBLIC OF THE PHILIPPINES)

MAKATI

) S.S.

AFFIDAVIT OF PUBLICATION

I, **JENNY J. NAMANG** legal age, Filipino and residing at c/o **BUSINESSMIRROR PUBLISHING., INC.** 2/F Dominga Bldg. III Annex, 2113 Chino Roces corner Dela Rosa Streets, Makati City Philippines. after having been duly sworn to in accordance with the law, hereby declare and testify.

That I am the **Credit & Collection** of **BUSINESS MIRROR**, a newspaper which is published in English, edited and printed in Metro Manila, and circulated nationwide from Monday to Sunday with editorial and business address at 3/F Dominga Bldg., 2113 Chino Roces Sts. cor. Dela Rosa Street Makati City.

That the
PLACE AD

APPLICANT/PETITIONER

MANILA ELECTRIC COMPANY (MERALCO) AND ATIMONAN ONE ENERGY, INC. (A1E)

(Joint Application With Motion for Confidential
Treatment of Information)

text of which could be read/deed as follows:

AS PER ATTACHED

has been published in **Business Mirror** in April 29, 2016.

AFFIANT FURTHER SAYETH NAUGHT
Manila, Philippines

JENNY J. NAMANG
Affiant

SUBSCRIBED and SWORN to before me this
_____ day of _____, 2016 at Makati
Philippines.

Affiant exhibited to me her TIN ID No. 297-257-600-000
issued 08-17-10 & SSS ID No. 09-3027971-0 with picture.

Doc.No. 96
Page No. 29
Book No. 138
Series of 2016.

RUBEN T.M. RAMIREZ

NOTARY PUBLIC

UNTIL DEC. 31, 2017

APPT. NO. M-23 (2015-2016)

IBP No. 1009530 / CY-2016

ROLL NO. 28947/MCLE-4 NO. 0006324/6-10-2012

PTR NO. MKT 5323573/1-4-16 MAKATI CITY

QUOTATIONS IN THE NEWS



"If you collude in business, or if you collude in the stock market, they put you in jail. But in politics, because it's a rigged system, because it's a corrupt enterprise, in politics you're allowed to collude." —DONALD TRUMP, after Ted Cruz and John Kasich (in photo) agreed to coordinate primary strategies in three of the 15 remaining primary states.



"[THE cell-phone destruction raised the stakes] from air in a football to compromising the integrity of a proceeding that the commissioner had convened." —BARRINGTON D. PARKER, judge for the 2nd US Circuit Court of Appeals in Manhattan, after the court overturned a lower judge and sided with the National Football League, restoring a four-game "Deflategate" suspension against New England Patriots quarterback Tom Brady (in photo), who destroyed a phone that contained thousands of messages the day before he was to meet with league investigators.



"THE resolution is nothing to celebrate because a 12-year-old child needlessly lost his life." —SUBODH CHANDRA, attorney for the family of Tamir Rice, who received a \$6-million wrongful death settlement from the city of Cleveland, alleging police acted recklessly when they confronted the boy who was playing with a pellet gun outside a recreation center on November 22, 2014. AP



BusinessMirror

A broader look at today's business

■ Friday, April 29, 2016 Vol. 11 No. 202

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10.0
NEWS
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INSIDE

ICC-CABCOM SAYS SHIFTING TO STANDARD-GAUGE TRACKS NOT NECESSARY

DOTC-proposed P100-B hike in NSRP cost nixed

By CAI ORDINARIO @caordinario

THE Department of Transportation

P170.69B

Caesar or nothing



Teddy Locsin Jr.

FREE FIRE

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
ATIMONAN ONE ENERGY, INC.
(A1E), WITH MOTION FOR
CONFIDENTIAL TREATMENT
OF INFORMATION

ERC CASE NO. 2016 - ____ RC

MANILA ELECTRIC COMPANY
(MERALCO) AND ATIMONAN
ONE ENERGY, INC. (A1E),
Applicants.
x-_____x

JOINT APPLICATION
with
MOTION FOR CONFIDENTIAL TREATMENT OF
INFORMATION

Applicants MANILA ELECTRIC COMPANY ("MERALCO") and
ATIMONAN ONE ENERGY, INC. ("A1E"), 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 A1E is a corporation duly organized and
existing under the laws of the Republic of the Philippines, with its
office address at 8th Floor, Tower 1, Rockwell Business Center,
Ortigas Avenue, Pasig City, Metro Manila. It may be served with
notices and other processes of this Honorable Commission through
its counsel at the address indicated herein.
4. A1E shall construct, own, operate, manage and maintain
a 2 x 600 MW (net) supercritical coal-fired power generating facility in
the Municipality of Alimodian, Quezon (the "Plant"), on the island of
Luzon in the Philippines.
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 ("EPRA"),
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 26 April
2016, MERALCO executed a Power Supply Agreement ("PSA") with
A1E, for the purchase of 1,200 MW Contract Capacity and Associated
Energy from the Plant that A1E 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:

2.1.1 [sic] Subject to Article 3, this Agreement shall become effective
on the Effective Date.

2.1.1.1 [sic] The term of this Agreement (the "Term") shall
commence on the Commercial Operations Date (Unit 1), and shall
expire on the date falling twenty (20) years and six (6) months
thereafter xxx xxx xxx xxx

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 3.1.1 have been
fulfilled;

9.1.2 During Scheduled Outages within the Full Load Equivalent
Scheduled Outage Allowance Days, Forced Outages within the Full
Load Equivalent Forced Outage Allowance Days, and Major
Maintenance Outages within the Full Load Equivalent Major
Maintenance Outage Allowance Days, Meralco shall procure
Replacement Power from the WESM and Power Supplier shall not
bill Meralco for these quantities; provided that, upon service of a
written notice to Meralco no later than ninety (90) Days prior to a
Scheduled Outage or Major Maintenance Outage, Power Supplier
shall have the option to purchase Replacement Power during
Scheduled Outages within the Full Load Equivalent Scheduled
Outage Allowance Days and Major Maintenance Outages within the
Full Load Equivalent Major Maintenance Outage Allowance Days,
which Replacement Power shall be deducted as ECQ and paid by
Meralco at five percent (5%) lower than the Price ("Replacement
Power Price").

Article 10 Assignment or Transfer of Contract Capacity

10.1 Meralco shall, also 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 and
Associated Energy that is no longer required by Meralco to any of its
business segments or wholly-owned Affiliates without the prior
consent of the Power Supplier.

Meralco shall also be entitled to Transfer its rights and obligations to
purchase a portion of Contract Capacity and Associated Energy that
is no longer required by Meralco 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
without such 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. xxx

10.3 Reduction in Contract Capacity and Associated Energy

10.3.1 Subject to the provisions of Section 10.3.2 below, Meralco
shall, from time to time, be entitled to a reduction in the Contract
Capacity and Associated Energy (the "Reduction" in Contract
Capacity and Associated Energy) equivalent to the reduction in the
demand of its captive customers by reason of the enforcement of
Retail Competition and Open Access, the Renewable Energy Law
and other Laws and Legal Requirements.

10.3.2 Meralco shall give a written notice to the Power Supplier of
such reduction at least five (5) Days prior to the first Day of the next
Billing Period. Upon receipt by Power Supplier of such written notice,
Meralco shall cease to have any rights and obligations under this
Agreement in respect of such Reduction in Contract Capacity and
Associated Energy.

Article 11 Billing and Payment

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.

Article 12 Taxes, Fees and Costs

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"), becomes 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

Article 18 Events of Default and Termination

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 in 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:

If, within one hundred eighty (180) Days after receipt from Meralco of the
written notice of Power Supplier Event of Default by Power Supplier (the
"Curing Period"), Power Supplier Event of Default has not been remedied
by Power Supplier, Meralco may, subject to a Direct Agreement, terminate this
Agreement and pursue any remedy available to it under this
Agreement, at law or in equity.

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 in or is accompanied by an actual failure by Meralco to receive,
and pay for, the Contract Capacity and Associated Energy in accordance
with this Agreement:

If, within one hundred eighty (180) Days after receipt from Power Supplier
of written notice of Meralco Event of Default by Meralco (the "Curing
Period"), Meralco Event of Default has not been remedied by Meralco,
Power Supplier may, subject to a Direct Agreement, terminate this
Agreement and pursue any remedy available to it under this Agreement,
at law or in equity.

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

D. PAYMENT UPON COMMERCIAL OPERATIONS
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), Component D
(MVOM), and Component E (MEEP). Other payments consist
of Component F (MIFP), and Component G (Reimbursable
Cost Payment (RCP)). Thus, the Monthly Power Bill ("MPB")
payment for Contract Capacity and Associated Energy for
each Billing Period shall be equal to:

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

The MPB is exclusive of the applicable Value Added Tax.

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 PPhP3,7587 per kWh (at plant
gate), as shown in the sample calculation below:

A1E PSA - Base Load (YEAR 2023)			
ITEM	UNIT	BASE RATE - 2023	ANNUAL TOTAL
A. Capacity Payment (MCP)	(Pph/kWh-y)	14.0000	17,840,000.00
B. Fixed Charge Payment (MFP)	(Pph/kWh-y)	34.344	4,282,080.00
C. Fuel Payment (MFP)	(Pph/kWh-y)	1,042,795	1,291,393,800.00
D. Variable O&M Payment (MFP)	(Pph/kWh-y)	0.297	3,662,400.00
E. Fixed O&M Payment (MFP)	(Pph/kWh-y)	0.114	1,414,800.00
F. Interconnection Facilities Payment (MFP)	(Pph/kWh-y)	34.530	4,282,080.00
G. Reimbursable Cost Payment (MFP)	(Pph/kWh-y)	34.530	4,282,080.00
TOTAL PAYMENT			11,994,112.88
Effective Rate at Plant Gate	(Pph/kWh)	3.7587	
WESM Use Based Rate	(Pph/kWh)	0.9118	
Delivered Rate	(Pph/kWh)	3.8465	
Effective Cost at WESM Price	(Pph/kWh)	2.8446	
Increase / Decrease over WESM Price	(Pph/kWh)	0.3310	
Meralco Capacity Energy Demand	(kWh)	9,485,421,000	
Increase / Decrease in Generation Cost	(Pph/kWh)	(2,030,690,881.99)	
Increase / Decrease in Generation Cost	(Pph/kWh)	(0.7793)	

Notes: 1. All rates are set forth in Appendix E of the PSA.
2. The Effective Rate at Plant Gate is calculated based on the assumptions set forth in the PSA.
3. The WESM Use Based Rate is calculated based on the assumptions set forth in the PSA.
4. The Delivered Rate is calculated based on the assumptions set forth in the PSA.
5. The Effective Cost at WESM Price is calculated based on the assumptions set forth in the PSA.
6. The Increase / Decrease over WESM Price is calculated based on the assumptions set forth in the PSA.
7. The Meralco Capacity Energy Demand is calculated based on the assumptions set forth in the PSA.
8. The Increase / Decrease in Generation Cost is calculated based on the assumptions set forth in the PSA.
9. The Increase / Decrease in Generation Cost is calculated based on the assumptions set forth in the PSA.

21. A1E hereby submits one (1) copy of Annexes "J"
"K", "L", "M", and "N", in a sealed envelope, with the envelope and each
page of the document stamped with the word "Confidential."

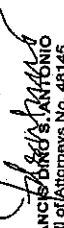
PRAYER

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

- a) ISSUE an Order: (i) treating Annexes "J", "K", "L", "M", and "N"
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 A1E.
Other reliefs 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

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ATIMONAN ONE ENERGY, INC.
Applicant

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PTR No. 4761136/1-9-15/Alabang City
MCLE Compliance No. V-0014157/2-15-2016

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

AND CERTIFICATION OF NON-FORUM SHOPPING

I, JOSE RONALDO V. VALLES, Filipino, of legal age, married, with office
address at 7th Floor, Tower 1, Rockwell Building, Alabang City,

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 "A"**;

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 28 day of APRIL, 2016, at Pasig City, Philippines.

JOSE RONALD V. VALLES
Affiant

SUBSCRIBED and SWORN to before me this 28 day of APRIL, 2016, affiant having exhibited to me his Social Security System ID bearing the number 33-109000088.

Doc. No. 344;
Page No. 10;
Book No. 34;
Series of 2016.

VERIFICATION AND CERTIFICATION

I, Christopher Rainier Chua, of legal age, Filipino, with business address at 8F Rockwell Business Center Tower 1, Ortigas, Pasig, after having been duly sworn in accordance with law, depose and say:

1. I am the duly authorized representative of Altiman One 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;

4. 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 thereafter.

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

Christopher Rainier Chua

SUBSCRIBED AND SWORN to before me this 28 day of APRIL, 2016, at PASIG CITY, Philippines, Affiant exhibiting to me his passport No. EC544282, issued at DFA Manila on 23 March 2014.

Doc. No. 109;
Page No. 23;
Book No. 34;
Series of 2016.

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 P10.77/99 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 A1E 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 Joint Application, the Judicial Affidavit of MR. CIRINOLO G. MENESES, Head of MERALCO's Energy Sourcing Office, is attached as **ANNEX "B"** and made an integral part hereof.

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

Description of Document	Annex
A1E's Certificate of Registration with the Securities and Exchange Commission	C
A1E's Articles of Incorporation & By-Laws	D
The latest General Information Sheet of A1E	E
The latest Audited Financial Statements of A1E	F
A1E's Certificate of Registration with the Board of Investments	G
A1E's Environmental Compliance Certificate	H
Executive Summary of the PSA	I
Source of Funds/Financial Plans	J
Basis Purchased Power Rate	K
Project Cash Flow	L
Operating Expenses	M
Indicative loan agreement documents	N
MERALCO's procurement process	O
Write-up regarding related contracts/agreements	P
Write-up regarding Department of Energy Certification	Q
Write-up regarding technical description and economic characteristics of project	R
Write-up regarding tangential transmission projects and grid connections	S
DOE Endorsement and Power Outlook Presentation	T
Load Forecast Projections per Distribution Development Plan of MERALCO	U
Sworn Statement on A1E's fuel procurement process	V
Procurement Process Leading to the Execution of the PSA	W
Demand Side Management program	X
Write-up regarding the (i) certification of the net heat rate; (ii) simulation of the operating units necessary to meet the MEOT; and (iii) potential cost of Ancillary Services	Y

MOTION FOR CONFIDENTIAL TREATMENT OF INFORMATION

19. A1E notes that Annexes "J", "K", "L", "M" and "N" of the instant case contain certain non-public information, data and calculations involving business operations and financial trade secrets reflecting A1E'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

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 16.6.6(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 Period 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 Circumstances, 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 16.6.6(b).

Article 14 Covenants xxx xxx xxx xxx

Article 14.3 ERC Approval

14.3.1 Subject to the non-occurrence of the Longstop Date, upon receipt of the ERC Final Approval, Meralco shall provide a copy of such ERC Final Approval to Power Supplier. Power Supplier shall have ten (10) Days from the date of receipt from MERALCO of such 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.

14.3.2 In case of Power Supplier's non-acceptance, Power Supplier shall be free to file with the ERC a motion for reconsideration. Any order on a motion for reconsideration shall be treated as an ERC Final Approval for purposes of the processes under this Section 14.3.

14.3.3 Following (i) a written notice of acceptance from Power Supplier with respect to the ERC Final Approval (including upon reconsideration under Section 14.3.2 above), or (ii) the lapse of the period referred to in Section 14.3.1 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 ("Acceptance Date"). 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.

Article 17 Force Majeure xxx xxx xxx xxx

Article 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

2.1.1.1 [sic] The term of this Agreement (the "Term") shall commence on the Commercial Operations Date (Unit 1), and shall expire on the date falling twenty (20) years and six (6) months thereafter xxx xxx xxx xxx

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 3.1.1 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 issued an ERC Final Approval, including the pricing structure as set out herein (or an alternative acceptable to Power Supplier), and (ii) the Acceptance Date has occurred; and

(d) Financial Close shall have occurred.

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 within ninety (90) Days from the Acceptance Date (the "Required Financial Completion Date"). xxx xxx xxx

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that the Plant shall achieve Commercial Operations Date fifty-eight (58) months from the Commencement Date for Unit 1 (the "Scheduled Commercial Operations Date (Unit 1)") and six (6) months thereafter for Unit 2 (the "Scheduled Commercial Operations Date (Unit 2)").

3.3.2 The Plant shall achieve Commercial Operations Date for each Unit of the Plant upon the delivery of the Power Supplier of the documents enumerated below, in form and substance satisfactory to Meralco:

xxx xxx xxx xxx

3.4 Early Occurrence of the Commercial Operations Date

3.4.1 In the event that Power Supplier anticipates that the Plant shall achieve Commercial Operations Date prior to the Scheduled Commercial Operations 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.

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

(a) Consider that the Scheduled Commercial Operations 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 Scheduled Commercial Operations Date, such portion of the Contract Capacity and Associated Energy required by Meralco, for which it shall pay the Non-Firm Price. xxx xxx xxx

xxx xxx xxx xxx

6.1 Supply of Power

Subject to the terms and conditions of this Agreement:

6.1.1 From the Commercial Operations Date for each Unit of the Plant until the expiration of the Term or earlier termination of this Agreement, 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) deliver and sell 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.

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

6.1.2 Unless otherwise expressly permitted by this Agreement, Power Supplier shall not, without Meralco's prior written consent

(e) self, divert, grant, transfer, dedicate, reserve or assign all or any portion of the Contract Capacity and Associated Energy to any Person other than Meralco; or

(b) provide Meralco with capacity and/or electrical energy from any source other than the Plant. xxx xxx xxx

Article 9 Outages

9.1 Outage Allowances and Replacement Power

9.1.1 After Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages of thirty (30) Full Load Equivalent Outage Days ("Full Load Equivalent Scheduled Outage Allowance Days") and Forced Outages of fifteen (15) Full Load Equivalent Outage Days ("Full Load Equivalent Forced Outage Allowance Days") each Contract Year; provided that no more than four (4) times during the Term, Power Supplier shall be entitled to an additional twenty (20) Full Load Equivalent Outage Days to undertake major



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 Atimonan One Energy, Inc.'s (A1E) 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 ATIMONAN ONE ENERGY, INC. (A1E), 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 29th day of April 2016 at Pasig City.


LOIDA U. VILLANUEVA
Acting City Council Secretary



ORTIGAS AVENUE, PASIG CITY
0300 PHILIPPINES

ANNEX " Z "

SECRETARY'S CERTIFICATE

I, WILLIAM S. PAMINTUAN, a duly elected, qualified and incumbent Assistant 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 Board of Directors of the Company duly convened and held on April 26, 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 Atimonan One Energy, Inc. (A1E);

"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 Atimonan One Energy, Inc. (A1E), 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

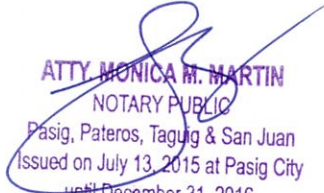
as may aid in the prompt disposition of such case,
proceeding or action."

WITNESS THE SIGNATURE of the undersigned as such officer of the Company and its
corporate seal hereunto affixed on this APR 27 day of April 2016.


WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

SUBSCRIBED AND SWORN to before me this APR 27 day of April 2016, affiant exhibited
to me his Taxpayer Identification Number (TIN) 146-473-562, issued by the Bureau of Internal
Revenue (BIR) as his competent evidence of identity.

Doc. No. 333 ;
Page No. 48 ;
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
PTR No. 1473411; 01/21/16; Pasig City
7th Floor, Lopez Bldg., Ortigas Ave., Pasig City