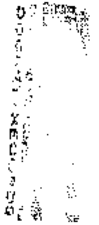


Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City

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**IN THE MATTER OF THE JOINT
APPLICATION FOR APPROVAL OF
THE POWER SUPPLY AGREEMENT
BETWEEN MANILA ELECTRIC
COMPANY ("MERALCO") AND
MASINLOC POWER PARTNERS
CO., LTD. ("MPPCL"), WITH MOTION
FOR CONFIDENTIAL TREATMENT
OF INFORMATION,**

ERC CASE NO. 2021- 018-RC

**MANILA ELECTRIC COMPANY
("MERALCO") and MASINLOC
POWER PARTNERS CO. ("MPPCL"),
LTD.,**

Applicants.

X-----X

JOINT APPLICATION

[with Motion for Confidential Treatment of Information]

Applicants **MANILA ELECTRIC COMPANY (MERALCO)** and **MASINLOC POWER PARTNERS CO., LTD., (MPPCL)** by undersigned counsel, and to this Honorable Commission, most respectfully state: That -

1. Applicant **MERALCO** is a private corporation existing under the laws of the Republic of the Philippines, with principal office located at Lopez Building, Ortigas Avenue, Brgy. 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/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 the Honorable Commission.

3. Applicant **MPPCL** is a partnership duly organized and existing under the laws of the Republic of the Philippines, with principal office located at Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales. It may be served with notices and other processes of this Honorable Commission through its counsel at the address indicated herein.

4. **MPPCL** shall construct, own, operate, manage and maintain a coal-fired thermal Power Plant to be located in Barangay Bani, Masinloc, Zambales and capable of supplying 600 MW.

5. Based on its power situation outlook for 2024 and succeeding years, as shown in its 2020 Power Supply Procurement Plan approved by the Department of Energy (“DOE”), MERALCO foresees a baseload capacity deficit in its portfolio covering 1,800 MW.

6. Thus, in order to ensure continuous and reliable electricity for MERALCO’s customers, there is a need for MERALCO to source additional baseload 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 the conduct of a Competitive Selection Process (“CSP”) for the procurement of baseload capacity, on 02 March 2021 MERALCO executed a Power Supply Agreement (“PSA”) with MPPCL, for the purchase of electric energy corresponding to 600 MW. The conduct of CSP proceeded as follows:

8.1. Pursuant to DOE Department Circular No. DC2018-02-0003 (“DOE 2018 CSP Rules”), MERALCO submitted to the DOE and the DOE approved the Terms of Reference (“TOR”), the salient provisions of which are shown below:

Scheduled Commercial Operations Date (“COD”)	<ul style="list-style-type: none">• 1,200 MW (net) by December 2024, with option by Meralco to take available energy up to 1,200 MW (net), at Commissioning Energy Charge, starting December 2023.• Additional 600 MW (net) by May 2025, with option by Meralco to take available energy up to 600 MW (net), at Commissioning Energy Charge, starting May 2024. For clarity, the total Contract Capacity by May 2025 will be 1,800 MW (net).
Supply Type	<ul style="list-style-type: none">• Baseload (firm and dispatchable)• Single or portfolio of plant/s, provided that the power plant/s should be in commercial operation not earlier than January 2020 but no later than May 2025.
Tariff Structure	<ul style="list-style-type: none">• Two-part Tariff consisting of Fixed and Variable Costs (inclusive of separate line item proposal for Line Rental cap).• For Contract Years 1 to 10 implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor following the formula provided by the DOE.• For Contract Years 11 to 20, the fuel cost shall be a pass-through cost.

8.2. On 1 October 2020, MERALCO caused the publication of an Invitation to Bid (“Invitation”), which contained the TOR, indicating a summary of the process and timelines of the CSP, and inviting power generation companies to submit an Expression of Interest and Confidentiality Undertaking on or before the deadline set out in said Invitation. At the same time, MERALCO caused the posting thereof on its website. A second publication was done on 8 October 2020.

8.3. On 27 January 2021, the bidders submitted their compliance with the Bid Requirements and the respective submissions of the bidders were opened by the Third-Party Bids and Awards Committee (“TPBAC”). On 19 February 2021, the respective bid offers of bidders who passed the pre-qualification evaluation were opened. MPPCL’s bid was declared as one of the best bids on even date.

8.4. On 26 February 2021, TPBAC sent a letter-notice to MPPCL as one of the winning power suppliers, confirming after post-qualification evaluation that its proposed energy price was found to be among the best bids. The said letter-notice also contained the Notice of Award in its favor.

8.5. A copy of the TPBAC Summary-Report regarding the conduct of the CSP is attached as part of **ANNEX "C"**.

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

"Commercial Operations Date means the date that the conditions set out in Section 3.3.2 (other than the Commercial Operations Date Certificate) have been satisfied, and 600MW of the Plant shall have consequently entered into commercial operation.¹

xxx

Contract Capacity shall be, subject to Article 10, 600 MW (net) sourced from the Plant.²

xxx

2.2 Term of Agreement

Subject to Article 3, this Agreement shall become effective on the Execution Date. The term of this Agreement (the **"Term"**) shall commence on the Commercial Operations Date, and shall expire on the last day of the 20th Contract Year, unless terminated earlier in accordance with the terms of this Agreement or extended by the application of Section 2.2 and Section 17.3.3.

The Term may be renewed for an additional period of up to one (1) year 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.

xxx

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that 600 MW of the Plant shall achieve Commercial Operations Date no later than 26 April 2025 (the **"Scheduled Commercial Operations Date"**).

3.3.3 If the Commercial Operations Date has not occurred by the Scheduled Commercial Operations Date, from and after the Scheduled 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 (net), as may be applicable, subject to Article 6 and in accordance with Appendix E, to be paid for by Meralco at the lower between WESM price and the Price; or (ii) to the extent that such Replacement Power is not available due to inadequate supply from WESM or from any other source, pay to Meralco a fine equivalent to Nine Hundred Eight Philippine Pesos (Php 908.00) multiplied by each affected MWh nomination by Meralco, until the earlier of: (a) the Commercial Operations Date, and (b) sixty (60) Days after the Delay Limit Date (as

¹ See PSA, p. 4, clause 1.1, "Commercial Operations Date".

² See PSA, p. 4, clause 1.1, "Contract Capacity".

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.

xxx

6.1 Supply of Power

6.1.1 Subject to the terms and conditions of this Agreement:

From the Commercial Operations Date 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 (and Replacement Power), to the extent of Meralco's relevant day-ahead nominations.

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; provided, however, that Power Supplier shall be allowed to deliver and sell to Meralco the Associated Energy from WESM or any other source only when the Plant is on Outage beyond Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days. For this purpose, should Power Supplier fail to source from the Plant when it is available, Meralco shall pay the lower between WESM price and Price, in accordance with Appendix G.

xxx

Outages

9

Outage Allowances and Replacement Power

9.1

After Commercial Operations Date, Power Supplier shall be allowed Scheduled Outages not exceeding fifteen (15) Full Load Equivalent Outage Days ("**Full Load Equivalent Scheduled Outage Allowance Days**") and Forced Outages not exceeding three (3) Full Load Equivalent Outage Days ("**Full Load Equivalent Forced Outage Allowance Days**") each Contract Year; provided that a Forced Outage may be counted towards the Full Load Equivalent Forced Outage Allowance Days upon provision by Power Supplier to Meralco of a copy of the acknowledgement letter from the System Operator or report from the Market Operator that a Forced Outage has occurred.

9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.

9.1.3 During Scheduled Outages that exceed the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages that exceed the Full Load Equivalent Forced Outage Allowance Days, Power Supplier shall purchase Replacement Power, which shall be declared as BCQ and paid by Meralco at the lower between WESM price and Price.

xxx

9.5 Fine for Failure to Provide Replacement Power

In case Power Supplier fails to provide Replacement Power from any other source or WESM due to inadequate supply, Power Supplier shall pay a fine equivalent to Nine Hundred Eight Philippine Peso (PhP908) multiplied by each affected MWh nomination by Meralco, which shall be used to reduce the generation charge to the consumers. For the avoidance of doubt, in case Power Supplier fails or refuses to supply Replacement Power despite availability thereof, then Section 18.3.1 shall apply.

xxx

10 Assignment or Transfer of Contract Capacity

10.1 Transfer of Contract Capacity and Associated Energy

10.1.1 Contract Capacity and Associated Energy that is no longer required by Meralco shall not be assigned, transferred, designated, delegated or allocated (collectively in this context, "Transfer") to another, except (i) if required for project financing in the case of the Power Supplier, as provided in Article 21; (ii) when allowed by the ERC; or (iii) when necessary to mitigate or avoid any losses or costs due to stranded contract capacity; provided that any assignment or transfer to a distribution utility shall comply with applicable competitive selection process rules. In the case of item (iii), Meralco shall 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 (a) to any of its business segments or wholly-owned Affiliates without the prior consent of Power Supplier, or (b) 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. In the case of (b), 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; and 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.

10.1.2 In respect of Transfers not requiring Power Supplier's consent, Meralco shall give a written notice to 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 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 Power Supplier of the written acceptance of such Transfer by the transferee:

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

10.2 Reduction in Contract Capacity and Associated Energy

- 10.2.1 Subject to the provisions of Section 10.2.2 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 in order to avoid stranded contract capacities or costs, or by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.
- 10.2.2

Meralco shall give a written notice to Power Supplier of the Reduction in Contract Capacity and Associated Energy 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

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."

10. The Payment Structure under Appendix E of the PSA is as follows:

B. MONTHLY POWER BILL UPON COMMERCIAL OPERATIONS DATE

The MPB upon COD shall consist of Capacity Payment, Energy Payment, and Other Payment. The Capacity Payment consists of Component A (MCP), Component B (MIFP) and Component C (MFOM), and the Energy Payment consists of Component D (MFP) and Component E (MVOM). Other Payments are Component F (RCP), Component G (LRAP), and Component H (ASCRP). Thus, the MPB upon COD ("MPB") for Contract Capacity and Associated Energy (and Replacement Power) for each Billing Period shall be equal to:

$$\text{MPB} = \text{MCP} + \text{MIFP} + \text{MFOM} + \text{MFP} + \text{MVOM} + \text{RCP} - \text{LRAP} + \text{ASCRP}$$

The MPB is exclusive of the applicable Value Added Tax.

11. Based on the foregoing, and given a certain set of assumptions, the annual effective rate under the PSA is **PhP 3.3708 per kWh** (at plant gate, VAT inclusive), as shown in the rate impact analysis below:

**Masinloc Power Partners Co. Ltd. PSA - Rate Impact at 95.07% pcf
(YEAR 2025)**

BILLING COMPONENT	UNIT	BASE RATE ^(a)	CPI Adj Factor ^(b)	BILLING DETERMINANT ^(c)		AMOUNT (PHP)
A. Capacity Payment (IACP)						
Peso Portion	(Php/kW-yr)	9,289.5967		600,000	(kW)	5,573,758,020.00
B. Interconnection Facilities Payment (MIFP)						
Interconnection Facilities Capacity Portion	(Php/kW-yr)	-		600,000	(kW)	0.00
Interconnection Facilities FOM Portion	(Php/kW-yr)	-	1.151964	600,000	(kW)	0.00
C. Fixed O&M Payment (MFOM)						
Non-escalating US Dollar Portion	(USD/kW-yr)	-		600,000	(kW)	0.00
Escalating US Dollar Portion	(USD/kW-yr)	-	1.078194	600,000	(kW)	0.00
Non-escalating Peso Portion	(Php/kW-yr)	4,803.0160		600,000	(kW)	2,881,809,600.00
Escalating Peso Portion	(Php/kW-yr)	-	1.151964	600,000	(kW)	0.00
D. Fuel Payment (MFP)						
	(Php/kWh) ^(b)	1.1357		4,996,800,000	(kWh)	5,674,686,907.29
E. Variable O&M Payment (MVOM)						
Non-escalating US Dollar Portion	(USD/kWh)	-		4,996,800,000	(kWh)	0.00
Escalating US Dollar Portion	(USD/kWh)	-	1.078194	4,996,800,000	(kWh)	0.00
Non-escalating Peso Portion	(Php/kWh)	0.1818		4,996,800,000	(kWh)	908,418,240.00
Escalating Peso Portion	(Php/kWh)	-	1.151964	4,996,800,000	(kWh)	0.00
Total Energy Payment (VAT exclusive)	(Php/kWh)	3.0097				15,038,672,767.29
VAT Payment	(Php)					1,804,640,732.07
Total Energy Payment (VAT inclusive)	(Php)					16,843,313,499.36
Effective Rate at Plant Gate	(Php/kWh)					3.3708
WESM Line Rental Rate ^(c)	(Php/kWh)					0.1000
Delivered Rate (VAT inclusive) ^(d)	(Php/kWh)					3.4708
Effective Cost if sourced from WESM ^(d)	(Php/kWh)					4.7293
Increase / (Decrease) over WESM Price	(Php/kWh)					(1.2585)
Meralco Captive Energy Demand ^(f)	(kWh)					40,256,100,690
Increase / (Decrease) in Generation Cost	(Php)					(6,288,586,062.97)
Increase / (Decrease) in Generation Cost	(Php/kWh)					(0.1562)

NOTE:

- ^(a) Base Rates as set forth in Schedule 1 of Appendix E of the PSA.
- ^(b) Fuel Payment calculated based on Guaranteed Net Plant Heat Rate at 100.00% load factor for Contract Year 1, and Forex = PhP 51.352/USD.
- ^(c) Line Rental rate for Masinloc Power Partners Co. Ltd. is based on the maximum allowable value for Contract Year 1 as stated in the PSA.
- ^(d) Delivered Rate (VAT inclusive) will include AS Cost Recovery rate once imposed under existing rule or regulation. AS Cost Recovery rate for Masinloc Power Partners Co. Ltd. shall be based on the lower between actual rate and cap of PhP 0.28/kWh.
- ^(e) Cost if equivalent volume of Masinloc Power Partners Co. Ltd. is sourced from the WESM based on forecasted average hourly prices from May 2025 to Apr 2026, inclusive of 6% VAT.
- ^(f) Forecasted Meralco Captive Energy for May 2025 to Apr 2026 based on Power Supply Procurement Plan as submitted to DOE.
- ^(g) Forecasted Indices for 2025.
- ^(h) Energy Payments based on 95.07% plant capacity factor.

12. MERALCO notes that the annual delivered rate of **PhP 3.4708 per kWh** (VAT, and line rental inclusive) is **lower** by about PhP 1.2585 per kWh than the effective cost of PhP 4.7293 (VAT inclusive), if the equivalent capacity under the instant PSA will be sourced from the WESM. In fact, by sourcing the capacity through the instant PSA, MERALCO's average blended generation rate will be reduced by about PhP 0.1562 per kWh (as seen in the rate impact above) resulting in savings to consumers of about PhP 6.29 Billion.

13. In support of this Joint Application, the Judicial Affidavits of **MR. RYAN S. MORALES**, Head of MERALCO's Energy Sourcing Office is attached as **ANNEX "E"**, respectively, and made an integral part hereof.

14. Likewise, in support of the instant Joint Application, the Applicants provide the following documents, which underwent the pre-filing conference and pre-filing marking of annexes with this Honorable Commission:

Description of Document	Annex
MERALCO's Articles of Incorporation and By-Laws	"F"
MERALCO's Latest General Information Sheet ("GIS")	"G"
MERALCO's Demand Side Management Program	"H"
Write-up on the Non-Applicability of National Power Corporation ("NPC") Certification regarding whether or not Transition Supply Contract ("TSC") capacity and energy is expected to be available during the contractual period	"I"
Excerpt of MERALCO's Distribution Development Plan – Power Supply Procurement Plan (Supply and Demand Scenario);	"J"
Average Daily Load Curve scenarios	"J-1"
Documents showing MERALCO's conduct of CSP	"K" and series
Write-up - Explanation on the Requirements of Articles of Incorporation and List of Shareholders	"L"
MPPCL 2007 Articles of Partnership	"L-1"
MPPCL 2020 Amended Articles of Partnership	"L-2"
Write-up Explanation on the Requirement of Shareholders Agreement	"M"
MPPCL SEC Registration Page	"N"
SMC Global Power Holdings Corp. Corporate Structure Chart	"O"
MPPCL Registration to the Board of Investments	"P"
MPPCL Environmental Compliance Certificate Application	"Q"
Write-up – Explanation on Non-availability of Certificate of Compliance	"R"
Receiving Copy of Letter to DOE on Application for Certificate of Endorsement to the Power Development Plan	"S"
Write-up – Explanation on the Non-applicability of the Requirements regarding Renewable Energy Plant	"T"
Write-up – Explanation on the Requirements regarding Transmission Projects and Submission of Project Feasibility Study	"U"
Project Feasibility Study (Confidential)*	"U-1"
Write-up – Explanation on the Funding Sources of the Project	"V"
Details of the Power Rate Calculations and Financial Model (Confidential)*	"W and series"
Write-up – Explanation on Fuel Procurement Process	"X"
Fuel Supply Plan (Confidential)*	"X-1"
Cost Analysis (Confidential)*	"Y"
MPPCL 2019 Audited Financial Statement (BIR Stamped)	"Z"
Write-up – Explanation on the Non-applicability of Minimum Energy Off-take Provision	"AA"
Write-up – Explanation on the Non-applicability of Requirements regarding the Ancillary Services Procurement Agreement	"BB"

Description of Document	Annex
Write-up – Explanation that all Information on Technical Characteristics and Net Heat-rate can be found in the Project Feasibility Study	"CC"

*** Subject of the Motion for Confidential Treatment of Information.**

ALLEGATIONS IN SUPPORT OF MOTION FOR CONFIDENTIAL TREATMENT OF INFORMATION

15. Under *Rule 4 of the ERC Rules of Practice and Procedure*, a party to any proceeding before the Honorable Commission may request that certain information not be disclosed and be treated as confidential, by describing with particularity the information to be treated as confidential, specifying the ground for the claim of confidential treatment of the information and, if applicable, specifying the period during which the information must not be disclosed.

16. With respect to the documents marked and attached as **ANNEXES "U-1", "W and series", "X-1" and "Y"**, MPPCL respectfully moves that these be treated as confidential and not be disclosed to any party for the reason that these contain non-public, proprietary information, data and calculations involving the investments, financial calculations, and business operations of MPPCL. The data and information contained therein are part of the overall formula and process in arriving at the competitive rates of MPPCL. These formula and process are specifically developed for the use of MPPCL and are treated as trade secrets. If the information contained in these documents are unduly disclosed, it will seriously prejudice the competitiveness of MPPCL. These documents are neither generally available to the public nor already in the possession of the Honorable Commission on a non-confidential basis.

17. In the case of *Air Philippines Corporation vs. Pennswell Inc.*,³ the Supreme Court defined "trade secret" as follows:

"A trade secret is defined as a plan or process, tool, mechanism or compound known only to its owner and those of his employees to whom it is necessary to confide it. The definition also extends to a secret formula or process not patented, but known only to certain individuals using it in compounding some article of trade having commercial value. A trade secret may consist of any formula, pattern, device, or compilation of information that (1) is used in one's business; and (2) gives the employer an opportunity to obtain advantage over competitors who do not possess the information. Generally, a trade secret is a process or device intended for continuous operation of the business, for example, a machine or formula, but can be a price list or catalogue or specialized customer list. It is indubitable that trade secrets constitute proprietary rights." (Emphasis supplied.)

18. The protection of trade secrets is likewise recognized by the Honorable Commission in its Decision in ERC Case No. 2015-111 RC:

³ G. R. No. 172835, 13 December 2007.

"In the case of PNOC RC, the documents sought to be protected from disclosure contains formula and pricing structures used in arriving at their proposed tariff. The prices cited in the documents were components of the proposed tariff. In fact, all three (3) documents were used by the Commission in evaluating the reasonableness of the proposed rate. In electric power industry [where] prices is a major consideration in selecting one's supplier, it is apparent that the assumption used in arriving at one's proposed tariff is considered a competitive leverage by one player against its competitors.

Thus, the Commission resolved to treat the said documents confidential and may not be publicly disclosed.⁴

19. MPPCL hereby submits one (1) copy of each of the foregoing confidential documents in sealed envelopes, with the envelopes and each page of the documents marked "Confidential."

20. The interest of the consumers of MERALCO is sufficiently protected by the review and evaluation of the rates under the PSA by the Honorable Commission, without the need to disclose the contents of ANNEXES "U-1", "W and series", "X-1" and "Y". The reasonableness and transparency of the prices of electricity is to be assured by the Honorable Commission through its own review and verification of the foregoing documents sought to be afforded confidential treatment in the evaluation and handling thereof.

21. Lastly and corollary to the foregoing, MPPCL would like to implore the discerning wisdom of the Honorable Commission to include in its issuance for this purpose the ***"procedures for the handling or returning the confidential information, as appropriate, upon the close of the proceedings or at the end of the period for which the information is to be treated as confidential"***⁵.

22. This is guided by the fact that MPPCL will seek for the return of these sought to be declared confidential annexes after its utilization as evidence in this case and/or at the close of the proceedings hereof, so as to relieve the Honorable Commission of the burden of safekeeping the trade secrets of MPPCL enclosed in the subject annexes.

PRAYER

WHEREFORE, premises considered, Applicants respectfully pray that the Honorable Commission:

a) Issue an Order **TREATING** Annexes "U-1", "W and series", "X-1", and "Y", and all other information contained therein **AS CONFIDENTIAL**, directing their non-disclosure to persons other than officers and staff of this Honorable Commission, continuously protecting the said information from public disclosure by maintaining the same separate and apart from the records of the case, and ensuring that these are not divulged to unauthorized persons, and that the same

⁴ In the Matter of the Application for the Approval of the Power Supply Agreement Between Nueva Ecija II Electric Cooperative, Inc. – Area 2 (NEECO II – Area 2) and PNOC Renewables Corporation (PNOC RC) with Prayer for Provisional Authority, ERC Case No. 2015-111 RC, Decision dated 30 May 2017, p. 26. Emphasis and underscoring supplied.

⁵ Letter (d), Section 4, of the ERC Rules and Practice and Procedure.

will be returned to Applicant MPPCL, pursuant to Rule 4 of the ERC Rules of Practice and Procedure; and

b) After hearing on the merits, render a Decision **APPROVING THE PSA** and the terms and conditions thereunder, including the price.

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

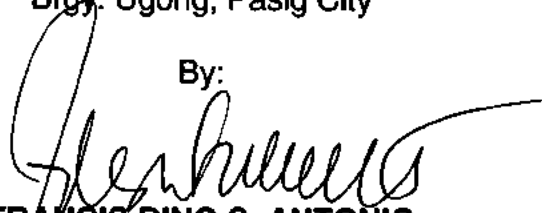
Pasig City and Mandaluyong City for Pasig City, 02 March 2021.

MANILA ELECTRIC COMPANY

Applicant

Lopez Building, Ortigas Avenue
Brgy. Ugong, Pasig City

By:



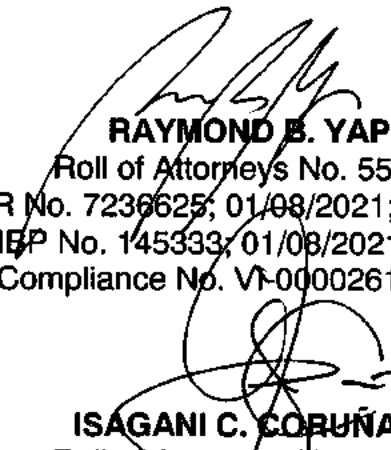
FRANCIS DINO S. ANTONIO

Roll of Attorneys No. 48145

PTR No. 7236629; 01/08/2021; Pasig City

IBP No. 145337; 01/08/2021; RSM

MCLE Compliance No. VII-0001788; 02 December 2019



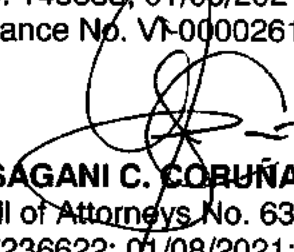
RAYMOND B. YAP

Roll of Attorneys No. 55889

PTR No. 7236625; 01/08/2021; Pasig City

IBP No. 145333; 01/08/2021; Capiz

MCLE Compliance No. VI-0000261; 11 July 2016



ISAGANI C. CORUÑA II

Roll of Attorneys No. 63123

PTR No. 7236622; 01/08/2021; Pasig City

IBP No. 145332; 01/08/2021; RSM

MCLE Compliance No. VI-0007787; 6 April 2018



MA. ELISHA S. ELORIAGA

Roll of Attorneys No. 73497

PTR No. 7236623; 01/08/2021; Pasig City

IBP No. 145330; 01/08/2021; Quezon City

Admitted to the Phil. Bar on 19 June 2019

MCLE No. Governing Board Order No. 1

Series of 2008, 04 July 2008

7th Floor, Lopez Building,
Ortigas Avenue, Barangay Ugong, Pasig City
Tel no. 1622-2260; Fax No: 1622-3550
Email: regaffairs@meralco.com.ph

MASINLOC POWER PARTNERS CO., LTD.,
Co-Applicant
Masinloc Coal-Fired Thermal Power Plant,
Barangay Bani, Masinloc, Zambales

By



JUPITER M. CABAGUIO

Roll of Attorneys No. 47112

PTR No. 4577718 / 07 January 2021 / Mandaluyong City IBP No. 06372 /
Lifetime / Makati City

MCLE Compliance No. VI – 0015891 / 13 December 2018

23rd Floor San Miguel Properties Centre,

No. 7. St. Francis Street, Mandaluyong City

Telephone No. (02) 8702 4512 / jcabaguio@smcgph.sanmiguel.com.ph



AVELINO G. CEDÓ III

Roll of Attorneys No. 54500

PTR No. 4580603 / 07 January 2021 / Mandaluyong City IBP No. 010380 /
Lifetime / PPLM

MCLE Compliance No. VI-0011960 / 3 September 2018

23rd Floor San Miguel Properties Centre,

No. 7. St. Francis Street Mandaluyong City

Telephone No. (02) 8702 4509 / acedodiii@smcgph.sanmiguel.com.ph

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

VERIFICATION/CERTIFICATION OF NON-FORUM SHOPPING

I, JOSE RONALD V. VALLES, Filipino, of legal age, married, with office address at 12th Floor, Lopez Building, MERALCO Compound, Ortigas Avenue, Pasig City, after being sworn in accordance with law, hereby depose and say that—

1. I am the First Vice President and Head of the Regulatory Management Office of Applicant Manila Electric Company ("MERALCO"), and is authorized to represent in this Joint Application as per the attached Secretary's Certificate (ANNEX "A");

2. I have caused the preparation of the instant Joint Application and read the contents thereof, and I attest that the allegations herein contained are true and correct:

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. The foregoing Joint Application is not filed to harass, cause unnecessary delay, or needlessly increase the cost of litigation;

5. The factual allegations therein have evidentiary support or, if specifically so identified, will likewise have evidentiary support after a reasonable opportunity for discovery;

6. I have not commenced any other action or proceeding involving the same issues before the Supreme Court, the Court of Appeals or any court, tribunal, or quasi-judicial agency and, to the best of my knowledge, no such other action or claim is pending therein; and

7. Should I hereinafter learn that the same or a similar action or claim has been filed or is pending in the Supreme Court, the Court of Appeals, or any court, tribunal, or quasi-judicial agency, I shall report such fact to this Honorable Commission within five (5) days from discovery of such fact.

IN WITNESS WHEREOF, I have hereunto affixed my signature this _____ day of _____ 2021 at Pasig City, Philippines.

MAR 02 2021

JOSE RONALD V. VALLES
Affiant

SUBSCRIBED and SWORN to before me this 22 day of MAY, 2021,
affiant having exhibited to me his Social Security System ID bearing the number
33-109060-88

Doc. No. 376
Page No. 77
Book No. IV
Series of 2021.

[illegible]

**VERIFICATION AND
CERTIFICATION AGAINST FORUM SHOPPING**

I, **PAUL BERNARD D. CAUSON**, Filipino, of legal age, and with office address at the 19th Floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City, after having been duly sworn to in accordance with law, depose and state, that:

1. I am the authorized representative of Masinloc Power Partners Co. Ltd. ("MPPCL") a co-applicant in the above-captioned case;
2. I have caused the preparation and filing of the subject Joint Application and that I have read the contents thereof and all the allegations contained therein are true and correct based on my personal knowledge and on authentic and official records/documents;
3. Pursuant to the amended Rules of Civil Procedure which took effect on 01 May 2020, the Joint Application is not filed to harass, cause unnecessary delay, or needlessly increase the cost of litigation and that the factual allegations therein have evidentiary support or, if specifically so identified, will likewise have evidentiary support after a reasonable opportunity for discovery; and,
4. I further certify that I have not filed any action involving the same issues in the Supreme Court, Court of Appeals, or any other courts or tribunals or quasi-judicial bodies/ agencies and to the best of my knowledge, no such other action or claim is pending therein. If ever there is a case pending before the said courts or tribunals involving the same issues, I undertake to inform the Honorable Commission of such fact within five (5) calendar days from knowledge thereof.

I am executing this undertaking in support of the Joint Application and the veracity of the allegations therein as well as for any other legal purpose this may serve.

IN WITNESS WHEREOF, I have hereunto set my hand this MAR 02 2021 at Mandaluyong City.


PAUL BERNARD D. CAUSON
Affiant

SUBSCRIBED AND SWORN to before me this MAR 02 2021 at Mandaluyong City. Affiant personally appeared and exhibited to me his Philippine Passport No. P8120059A issued on 27 July 2018 at the Department of Foreign Affairs (DFA), NCR East as his competent proof of identity.

Doc. No.: 358;
Page No.: 73;
Book No.: II;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 035229; 10/08/2010; Quezon City Chapter
MCLC Compliance No. VI-0012627; 02/18/2019; Pasig City

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

VERIFIED DECLARATION

I, **MARY GRACE M. DEVARAS**, of legal age, Filipino, with office address at the 7th floor, Lopez Building, Ortigas Avenue, Pasig City, after having duly sworn in accordance with law, hereby depose and state:

1. I am one of the Dedicated Liaison Officers of Manila Electric Company (MERALCO) as stated under the Certificate of Registration ER No. 2020-0079-1 issued by the Energy Regulatory Commission (ERC). As such, I am one of the duly authorized representatives to undertake the pre-filing process with respect to the application to be pre-filed by MERALCO for the **Approval of the Power Supply Agreement between MERALCO and Masinloc Power Partners Co. Ltd. (MPPCL)**.

2. I hereby declare that, in compliance with ERC Resolution No. 9, Series of 2020, the documents submitted by MERALCO electronically as part of the virtual pre-filing process are complete and true copies of the original documents.

IN WITNESS WHEREOF, I hereby affix my signature this day of MAR 03 2021 March 2021.


MARY GRACE M. DEVARAS

SUBSCRIBED AND SWORN to before me this MAR 03 2021 2021 at Pasig City, Philippines, affiant exhibiting to me her SSS ID No. 3371309592.

Doc. No. 394
Page No. 80
Book No. 11
Series of 2021.





VERIFIED DECLARATION

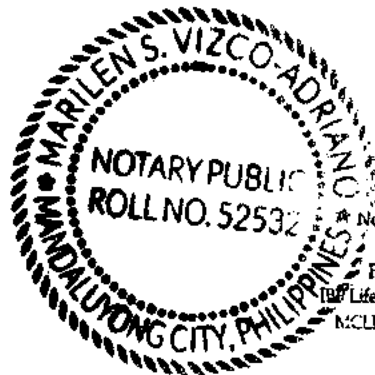
I, **Jared Carlo L. Echevarria**, of legal age, with office address at the 23rd Floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City, hereby declare that all the documents submitted for EERI/MPPCL hereto submitted electronically in accordance with ERC Resolution No. 09, series of 2020, are complete and are the original or true copies of the documents (and annexes).

IN WITNESS WHEREOF, I have hereunto set my hand this MAR 11 2021 at Mandaluyong City.


Jared Carlo L. Echevarria
Affiant

SUBSCRIBED AND SWORN to before me this MAR 11 2021 2021 in Mandaluyong City. Affiant personally appeared and exhibited to me his Philippine Passport with No. EC7699013 issued on May 12, 2016 at the DFA NCR East as his competent proof of identity.

Doc. No.: 413;
Page No.: 84;
Book No.: II;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
★ No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
LBP Lifetime BLP No. 035229; 10/06/2010; Quezon City Chapter
MCLE Compliance No. VI-0018697; 02/12/2019; Pasig City

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 March 1, 2021, at which meeting a quorum was present, acted throughout and voted, the following resolution was approved, and said resolution is in full force and effect on the date hereof:

“RESOLVED, in connection with, and upon conclusion of, the conduct of a competitive selection process for 1800 MW baseload capacity, the Board of Directors of the Manila Electric Company (MERALCO) hereby ratifies/accepts the Notices of Award issued to, and authorizes the signing of the Power Supply Agreements (PSAs) with, the Winning Power Suppliers, Excellent Energy Resources Inc. (EERI) and Masinloc Power Partners Co. Ltd. (MPPCL);

“RESOLVED, FURTHER, that the following officers, namely Messrs. **MANUEL V. PANGILINAN**, Chairman, **RAY C. ESPINOSA**, President and Chief Executive Officer, **SIMEON KEN R. FERRER**, Corporate Secretary, **RONNIE L. APEROCHO**, Senior Vice President & Head, Networks, **WILLIAM S. PAMINTUAN**, Senior Vice President, Assistant Corporate Secretary, Compliance Officer and Head, Legal and Corporate Governance, **FERDINAND O. GELUZ**, First Vice President and Chief Commercial Officer, Customer Retail Services and **JOSE RONALD V. VALLES**, First Vice President & Head, Regulatory Management, 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 **JOSE RONALD V. VALLES**, First Vice President and Head, Regulatory Management, or any lawyer or employee of MERALCO that he may designate, name or appoint:

1. To file the appropriate applications with the Energy Regulatory Commission (ERC) for the approval of MERALCO’s PSAs with EERI and MPPCL, for the supply and delivery of energy 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 MAR 02 2021 day of March 2021.



WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

MAR 02 2021

SUBSCRIBED AND SWORN to before me this _____ day of March 2021, 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. 391;
Page No. 80;
Book No. TV;
Series of 2021.



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

SECRETARY'S CERTIFICATE

I, **JULIE ANN B. DOMINO-PABLO**, of legal age, married, Filipino, with office address at the 19/F San Miguel Properties Center, No. 7 St. Francis St., Mandaluyong City 1550, after having been duly sworn, depose and state that:

1. I am the duly appointed Corporate Secretary of **MASINLOC POWER PARTNERS CO. LTD.**, a partnership duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal place of business at the Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales (the "Partnership").
2. On 30 January 2020, the Partnership adopted and approved the following resolutions:

"xxx

"II. Authority to Appoint and Designate Representative to Prosecute, Defend, Arbitrate, Settle and/or Collect

RESOLVED, that a Group A signatory or any one Group B signatory be, as they hereby are, authorized and empowered to represent, act, negotiate, sign, conclude and deliver for and in the name of the Partnership the application, prosecution, defense, arbitration, conciliation, execution, collection, compromise or settlement of:

- (a) Any and all claims or suits for or against the Partnership or to be brought or instituted by the Partnership, including, but without in any manner restricting or limiting to, the acceptance of pledges, real estate or chattel mortgages, bonds or any forms of undertaking as collateral security for the payment of obligations to the Partnership, extension of credit; or any and all claims or suits for or against the Partnership, or to be brought or instituted by the Partnership, arising from, or in connection with, any disputes involving any and all contracts, deeds or acts of whatever kind and nature where the Partnership is a party directly or indirectly, and all disputes involving all acts and products of the Partnership;

xxx

RESOLVED, FURTHER, that a Group A signatory or any one Group B signatory, be, as they are hereby, authorized to do and perform on behalf of the Partnership, whatever act such signatory may deem necessary, including, but not limited to, causing the preparation and filing of pleadings, motions and other papers, verifying the same and the allegations therein, executing affidavits or sworn statements, giving testimonies, and making certifications against forum shopping in the cases (a), (b), (c), (d) and (e) mentioned above;

RESOLVED, FURTHER, that a Group A signatory or any one Group B signatory, be, as they are hereby, authorized and empowered to engage the services of, and designate and appoint as representatives, agents, or attorneys-in-fact of the Partnership, any individual, party, entity or firm for the application, prosecution, defense, arbitration, conciliation, execution, collection, compromise or settlement of (a), (b), (c), (d) and (e) mentioned above;

RESOLVED, FINALLY, that in connection with the foregoing powers and authority, the aforementioned authorized signatories of the Partnership be, as they are hereby, authorized to assign the enforcement of any of the causes of

action or defense of the Partnership in favor of a trustee or plaintiff for collection or defense, and to designate, in writing, such lawyers or law firms to appear, act for, or otherwise represent the Partnership in all judicial, quasi-judicial, administrative or arbitration board hearings, incidents and other proceedings, including, but without in any manner restricting or limiting to, all pre-trial conferences and to do any and all of the following acts and deeds:

- (a) To negotiate, conclude, enter into and execute a compromise or amicable settlement of the case or dispute;
- (b) To agree on the simplification of the issues;
- (c) To amend the pleadings;
- (d) To agree to stipulations or obtain admissions of facts and of documents to avoid unnecessary proofs;
- (e) To limit the number of witnesses;
- (f) To undertake a preliminary reference of issues to a commissioner;
- (g) To explore and/or consider alternatives modes of dispute resolution, such as but not limited to mediation proceedings; and
- (h) To do and agree on such other matters as may aid the prompt disposition of the case or dispute.

xxx

“XIV. Designation of Officers and Persons with Signing Authorities

RESOLVED, that for purposes of the implementation of the foregoing resolutions, the following officers and persons are hereby appointed as signatories under the Group appearing before their names:

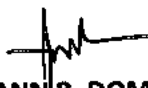
GROUP	AUTHORIZED SIGNATORIES
A	xxx
B	Elenita D. Go Paul Bernard D. Causon Ramon U. Agay
C	xxx
xxx	xxx

RESOLVED, FINALLY, that these resolutions cancel and supersede, as they hereby cancel and supersede, all previous resolutions, and shall continue and remain in full force and effect until repealed and/or amended by subsequent resolutions of the Partnership.”

- 3. By virtue of the delegation letter hereto attached as Annex “A”, any one (1) of Atty. Avelino G. Cedo III and Atty. Jupiter M. Cabaguio has been duly designated and authorized by Paul Bernard D. Causon to do any of the following acts in connection with the filing with the Energy Regulatory Commission of the Power Supply Agreement dated 26 February 2020 between the Partnership and the Manila Electric Company for the supply of 600 MW contract capacity.

- i. to execute and sign affidavits, verifications, and all necessary documents relative to the above-mentioned application;
- ii. to cause the preparation and filing of pleadings, motions and other papers to be filed with the ERC, verifying the same and the allegations therein, executing affidavits or sworn statements, giving testimonies, and making certifications against forum shopping;
- iii. to represent the Partnership appearance in all hearings and proceedings before the Energy Regulatory Commission, including, but without in any manner restricting or limiting to, all pre-trial conferences;
- iv. the implementations and conduct of the following acts and deeds:
 - a) To negotiate, conclude, enter into and execute a compromise or amicable settlement of the case or dispute;
 - b) To agree on the simplification of the issues;
 - c) To amend the pleadings;
 - d) To agree to stipulations or obtain admissions of facts and of documents to avoid unnecessary proofs;
 - e) To limit the number of witnesses;
 - f) To undertake a preliminary reference of issues to a commissioner;
 - g) To explore and/or consider alternatives modes of dispute resolution, such as but not limited to mediation proceedings; and
 - h) To do and agree on such other matters as may aid the prompt disposition of the application, case or dispute."
4. The foregoing resolutions have not been revoked, amended, or in any manner modified; accordingly, the same may be relied upon until written notice to the contrary is issued by the Partnership.
5. The foregoing matters are in accordance with the records of the Partnership.

IN WITNESS WHEREOF, I have hereunto signed these presents on FEB 26 2021 at Mandaluyong City.


JULIE ANN B. DOMINO-PABLO
Corporate Secretary

SUBSCRIBED AND SWORN to before me on FEB 26 2021 at Mandaluyong City, affiant exhibiting to me her Philippine Passport No. P3581210A issued on July 5, 2017 at DFA Manila.

Doc. No. 838;
Page No. 69;
Book No. II;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLP Compliance No. V1-0019687; 02/15/2019; Pasig City

SECRETARY'S CERTIFICATE

I, **JULIE ANN B. DOMINO-PABLO**, of legal age, married, Filipino, with office address at the 19th Floor, San Miguel Properties Centre, No. 7 St. Francis St., Mandaluyong City 1550, after having been duly sworn, depose and state that:

1. I am the duly appointed Corporate Secretary of **MASINLOC POWER PARTNERS CO. LTD.**, a partnership duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal place of business at the Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales (the "Partnership").

2. On **09 October 2020**, the Partnership adopted and approved the following resolutions:

"RESOLVED, AS IT IS HEREBY RESOLVED, that the Masinloc Power Partners Co. Ltd. (the "Company") be, and is hereby, authorized to participate in the Bidding to make available the Contract Capacity and supply associated energy, under the terms and conditions set out in the PSA template, to the Manila Electric Company pursuant to its 1,800 MW (net), COD 2024-2025 competitive selection process ("Project");

"RESOLVED FURTHER, that in the event the Company is declared as the Winning Power Supplier, the Company commits to fulfill all the Post-Qualification compliances, if deemed necessary by the TPBAC, including the execution of the Power Supply Agreement with the Manila Electric Company;

"RESOLVED FURTHER, that *Paul Bernard D. Causon, Gonzalo B. Julian Jr. or Melvin G. Rabanes* is hereby appointed as the authorized representative of the Company during the Bidding, authorized to execute, sign, submit and receive documents for, and otherwise act in the name of, the Company;

"RESOLVED FINALLY, that any and all acts done or performed by *Paul Bernard D. Causon, Gonzalo B. Julian Jr. or Melvin G. Rabanes* under and by virtue of this resolution be, as they are hereby, confirmed and ratified."

3. The foregoing resolutions have not been revoked, amended, or in any manner modified. Accordingly, the same may be relied upon until written notice to the contrary is issued by the Partnership.
4. The foregoing matters are in accordance with the records of the Partnership.

IN WITNESS WHEREOF, I have hereunto signed these presents on FEB 24 2021 day of _____ 2021 at Mandaluyong City.


JULIE ANN B. DOMINO-PABLO
Corporate Secretary

SUBSCRIBED AND SWORN to before me on FEB 24 2021 at Mandaluyong City, affiant exhibiting to me her Philippine Passport No. P3581210A issued on July 5, 2017 at DFA Manila.

Doc. No. 333
Page No. 68
Book No. II
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLE Compliance No. VI-0018687; 02/18/2019; Pasig City

1 March 2021

ANNEX " C "

ATTY. RAY C. ESPINOSA

President and Chief Executive Officer

Manila Electric Company (Meralco)

Lopez Building, Meralco Center

Ortigas Ave., Pasig City

Re: Third Party Bids and Awards Committee's (TPBAC) Report to
Meralco in connection with Meralco's competitive selection
process (CSP) for 1,800 MW (net), COD 2024-2025

Dear Atty. Espinosa:

We write in connection with Meralco's CSP for 1,800 MW (net), COD 2024-2025 after its conclusion with the TPBAC's issuance of Notices of Award to EXCELLENT ENERGY RESOURCES, INC. and MASINLOC POWER PARTNERS CO. LTD, both dated 26 February 2021.

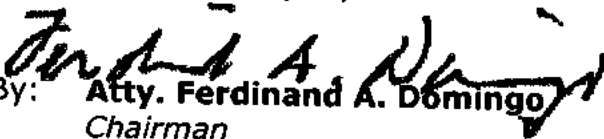
For your information and reference, attached is the TPBAC's Summary-Report dated 1 March 2021 of the CSP for 1,800 MW (net), COD 2024-2025, which was prepared and signed by the TPBAC Secretariat, Mr. Lawrence S. Fernandez, and duly approved by the TPBAC on the same date.

This TPBAC's Summary-Report shall also serve as the TPBAC's report for whatever legal purpose it may serve and the TPBAC Secretariat, Mr. Lawrence S. Fernandez, is hereby authorized and designated to represent the TPBAC in attesting and affirming the same.

Thank you very much.

Very truly yours,

Third Party Bids and Awards Committee (TPBAC)
Manila Electric Company

By: 
Atty. Ferdinand A. Domingo
Chairman

THIRD PARTY BIDS AND AWARDS COMMITTEE's SUMMARY-REPORT

Competitive Selection Process (CSP) for 1,800 MW (net), COD 2024-2025
1 March 2021

I, **LAWRENCE S. FERNANDEZ**, as the Secretariat of the Manila Electric Company's ("**Meralco**") Third Party Bids and Awards Committee ("**TPBAC**"), which was constituted by Meralco pursuant to Section 5 of the Department of Energy's ("**DOE**") Department Circular No. DC2018-02-0003 dated 1 February 2019 ("**DOE 2018 CSP Rules**"). Pursuant to Section 5.2.5 of the DOE 2018 CSP Rules, as the TPBAC Secretariat, I am tasked to fully document the CSP, including TPBAC proceedings, and below is my summary-report of the TPBAC's conduct of Meralco's CSP for 1,800 MW (net), COD 2024-2025 ("**1,800 MW CSP**")

1. Based on the available records provided to the TPBAC, prior to publishing the Invitation to Bid in newspapers of general circulation, Meralco sought guidance from the DOE on its Power Supply Procurement Plan ("**PSPP**") and the Terms of Reference ("**TOR**"), both of which were prepared pursuant to Section 4 and Section 8, respectively, of the DOE 2018 CSP Rules. The final TOR incorporating recommendations from the DOE is shown below:

Contract Capacity	1,800 MW (net)
Bid Type	<ul style="list-style-type: none"> • Pay-as-Bid • The minimum Offered Contract Capacity per Bidder shall be at least 150 MW (net). • A Bidder shall submit a Bid Price indicating its Headline Rate and Levelized Cost of Electricity ("LCOE"). • If the Bidders' total Offered Contract Capacities go beyond the required Contract Capacity (i.e. more than 1,800 MW), the Bidder that fills up the last stack (hereinafter referred to as the "Marginal Bid Offer") shall have its Offered Contract Capacity reduced accordingly up to the extent of the required Contract Capacity at its Proposed Price.
Bid Offer Evaluation	<ul style="list-style-type: none"> • The Bidding will be open to all serious Bidders that meet the financial, technical, commercial, and legal requirements of this TOR. In evaluating the financial offers of the Bidders, the best interest of Meralco's captive customers shall be paramount. As such, and to this end, the principle of least cost in the supply of power to captive customers, as provided in Section 23 of EPIRA, shall prevail and be applied to establish and determine the Best Bid/s. • All Bid Prices shall be evaluated based on LCOE at 87.67% PCF. • The Bidder's Headline Rate and LCOE are subject to a pre-determined Reserve Price, which will only be revealed by the TPBAC to the Bidders during the Opening of Bid Prices.
Scheduled Commercial Operations Date ("COD")	<ul style="list-style-type: none"> • 1,200 MW (net) by December 2024, with option by Meralco to take available energy up to 1,200 MW (net), at Commissioning Energy Charge, starting December 2023. • Additional 600 MW (net) by May 2025, with option by Meralco to take available energy up to 600 MW (net), at Commissioning Energy Charge, starting May 2024. For clarity, the total Contract Capacity by May 2025 will be 1,800 MW (net).

Required Contract Period	Twenty (20) Contract Years from the Scheduled COD defined above (i.e. 20 Contract Years from December 2024 and May 2025, respectively)
Supply Type	<ul style="list-style-type: none"> • Baseload (firm and dispatchable) • Single or portfolio of plant/s, provided that the power plant/s should be in commercial operation not earlier than January 2020 but no later than May 2025.
Technical Parameters	<ul style="list-style-type: none"> • One Delivery Point (for purposes of settlement and transfer of risk and loss), which Delivery Point should be within the Luzon Grid, nearest to Meralco's load center, and subject to Meralco's approval. • If multiple units, minimum of 150 MW per unit, which shall have the same fuel type and Guaranteed Net Plant Heat Rate. • Bidder shall offer fuel using a technology that complies with the prevailing emission standards under pertinent DENR issuances on emission and other environmental standards for power plants. • No capacity and electrical output, to the extent of Contract Capacity, of the Plant shall be contracted under an agreement apart from the Power Supply Agreement ("PSA") resulting from this Bidding. • If Bidder forms a partnership or consortium for the purpose of this bidding, must be evidenced by an agreement showing that their liability in this Bidding and the resulting PSA is solidary.
Tariff Structure	<ul style="list-style-type: none"> • Two-part Tariff consisting of Fixed and Variable Costs (inclusive of separate line item proposal for Line Rental cap). • Capital Recovery Fee component of the Tariff should be fixed for the whole Required Contract Period and in Philippine currency. • No Take-or-Pay on Variable Costs, which includes Fuel and Variable O&M. • The fuel handling and freight costs should be included in Bidder's proposed Variable and/or Fixed O&M expense. • The Bidder shall provide a quarterly fuel price forecast for the third quarter of 2022 until second quarter of 2023, in USD/MMBtu. The simple average of this quarterly fuel price forecast shall be used as the reference price (F_0). • For Contract Years 1 to 10 implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor and shall serve as the Quarterly Fuel Price Cap. The adjustment factor for a given calendar quarter shall be equal to the ratio of P_n to P_0, as defined below. Expressed in formula, $\text{Quarterly Fuel Price Cap}_{\text{Contract Years 1 to 10}} = F_0 \times \left(\frac{P_n}{P_0} \right)$ <p>Where:</p> <p>F_0 is the simple average of the quarterly fuel price forecast for the four quarters beginning third quarter of 2022 as submitted by the Bidder, in USD/MMBtu</p> <p>P_0 is the simple average of the actual quarterly fuel price for the four quarters beginning third quarter of 2022, in USD/MMBtu</p> <p>P_n is the simple average of the actual quarterly fuel prices from the preceding four calendar quarters, in USD/MMBtu. For clarity, the calendar quarters are defined by the following dates:</p> <p>(i) December 26 to March 25</p>

	<p>(ii) March 26 to June 25</p> <p>(iii) June 26 to September 25</p> <p>(iv) September 26 to December 25</p> <p>The Bidder can only nominate fuel prices based on the relevant indices published by the World Bank's Commodity Markets Outlook (i.e. [i] Coal, Australia; [ii] Natural Gas, US; [iii] Natural Gas LNG, Japan), CoalSpot.com for other coal ranks, or any other index that is easily accessible by Meralco and the electric power industry participants.</p> <p>For clarity, upon implementation of the PSA, the fuel price shall be the lower between the result of the aforesaid formula and the actual fuel costs.</p> <ul style="list-style-type: none"> • For Contract Years 11 to 20, the fuel cost shall be a pass-through cost. • For purposes of evaluation of this Bidding, for Contract Years 1 to 20, the Bidder's F_0 as submitted shall be escalated at a rate of 2% p.a., based on the 2020 Philippine inflation forecast of the Economist Intelligence Unit (EIU) as of August 2020, and the resulting fuel prices shall be used for each respective Contract Year. • If the Bidder's Nominated Power Plant will use a fuel source other than coal or natural gas, the Bidder shall submit its own fuel forecast and nominated fuel price index for evaluation of the TPBAC. • In addition, the winning Power Supplier shall undertake to submit a detailed protocol for conducting a competitive selection process for the fuel supply and its freight for the Plant.
Outage Allowance ("OA")	<ul style="list-style-type: none"> • Scheduled OA not exceeding thirty (30) days • Forced OA not exceeding fifteen (15) days • No carry-over of OA • No Major Maintenance OA
Replacement Power	<ul style="list-style-type: none"> • If COD has not occurred as scheduled, (a) Power Supplier, for each day of unexcused delay, shall procure Replacement Power up to the capacity of the relevant Unit/s, to be paid for by Meralco at the lower between WESM price and the Price; or (b) if Replacement Power is not available, pay Meralco Nine Hundred Eight Philippine Peso (PHP908) multiplied by each affected MWh nomination by Meralco, until the earlier of: (x) the COD and (y) the date sixty (60) Days after the Delay Limit Date (as defined in the PSA template) • After COD, Replacement Power will be provided in the following manner: <ul style="list-style-type: none"> a. If within OA, to be purchased by Meralco. b. If beyond OA, to be provided by Power Supplier and paid for by Meralco at the lower between WESM price and the Price. <p>If Power Supplier cannot provide Replacement Power from any other source or WESM due to inadequate supply, Power Supplier shall pay a fine equivalent to Nine Hundred Eight Philippine Peso (PHP908) multiplied by each affected MWh nomination by Meralco, which shall be used to reduce the generation charge to the consumers.</p>
Delay in COD	Parties shall meet and confer about the terms on which the PSA may be continued. If agreement is not reached within sixty (60) Days of

	the Delay Limit Date, the PSA may be terminated by Meralco and the Performance Security may be forfeited.
Assignment or Transfer of Contract Capacity	The Contract Capacity and Associated Energy that is no longer required by Meralco shall not be assigned or transferred to another entity, except (i) if required for project financing in the case of Power Supplier; (ii) when allowed by the ERC; or (iii) when necessary to mitigate or avoid any losses or costs due to stranded contract capacity, provided that, in all cases, any assignment or transfer to a distribution utility shall comply with applicable competitive selection process rules.
Reduction in Contract Capacity	The Contract Capacity and Associated Energy may be reduced equivalent to the reduction in the demand of captive customers of Meralco in order to avoid stranded contract capacity or by reason of the implementation of Retail Competition and Open Access, the Renewable Energy Law, or other Laws and Legal Requirements.
Grounds for Termination	<ul style="list-style-type: none"> • Event of Default • Non-Fulfilment of Conditions to Effective Date • Non-Occurrence of Commencement Date or COD • Certain Events of Force Majeure • Expiration of Term • Upon Mutual Agreement • Change in Circumstances
Other Relevant Information	<ul style="list-style-type: none"> • Should TPBAC receive less than two Expressions of Interest (as defined below) by 4:00 P.M. of 12 November 2020 (Expression of Interest Deadline), it shall declare a failure of the Bidding process. • In order to become an Interested Bidder and obtain a copy of the Bidding Documents, a party must submit the Expression of Interest and Confidentiality Undertaking, and pay the Participation Fee by the Expression of Interest Deadline (all defined below).

2. Thus, after DOE's approval of the PSPP and TOR, Meralco turned over the TOR to the TPBAC for the conduct of the 1,800 MW CSP. Upon receipt of the TOR, the TPBAC started to convene to approve the TOR and to prepare for the conduct of the 1,800 MW CSP.

3. Thereafter, the Invitation to Bid for the 1,800 MW CSP was first published by the TPBAC in a newspaper of general circulation on 1 October 2020. A second publication was done on 8 October 2020. In addition, on 1 October 2020, the Invitation to Bid and Bid Requirements were likewise posted in Meralco's website (<https://company.meralco.com.ph/news-and-advisories/invitation-to-bid> or <https://company.meralco.com.ph/news-and-advisories>). Also on 1 October 2020, the TPBAC sent a letter-request to the DOE for the Invitation to Bid and Bid Requirements to be posted in the DOE's CSP Portal (<https://www.doe.gov.ph/ducsp>). The publication and posting requirements were done pursuant to Section 8.5 of the DOE 2018 CSP Rules.

4. At the deadline of the Expressions of Interest on 13 November 2020,¹ the TPBAC received Expressions of Interest from 18 Interested Bidders with a total capacity of 6,050 MW.

5. On 17 December 2020, the TPBAC conducted a Pre-Bid Conference via Zoom virtual meeting.

¹ The original 12 November 2020 deadline of the Expressions of Interest was extended for 24 hours due to the unexpected severe effects brought about by Typhoon Ulysses/Vamco on 11-12 November 2020.

6. In accordance with Section 7 of the DOE 2018 CSP Rules, the DOE and ERC were invited to send Observers to the Pre-Bid Conference, through invitations dated 16 November 2020 and received by the DOE and ERC on 17 November 2020. The Pre-Bid Conference was attended by the authorized representatives of all Interested Bidders and by observers from the DOE, led by Electric Power Industry Management Bureau Director Mario C. Marasigan.

7. At the start of the Pre-Bid Conference, the TPBAC received the sealed Reserve Price envelope from the authorized representative of Meralco, then transferred the custody of the sealed Reserve Price envelope to the TPBAC's independent bank custodian, Asia United Bank ("**AUB**"), for safekeeping and to be returned upon instruction of the TPBAC.

8. During the Pre-Bid Conference, the TPBAC discussed initial responses to the advanced queries submitted by the Interested Bidders, as well as any follow-up queries made during the Pre-Bid Conference. The TPBAC issued the appropriate Bid Bulletins to address queries of Interested Bidders, in accordance with Section 8.6 of the DOE 2018 CSP Rules.

9. On 23 December 2020, the TPBAC received a letter from the DOE of the same date which directed Meralco to amend the "Tariff Structure" provision of the TOR, particularly to change the reference year on the fuel price forecasts to 2021 instead of the average of 2022 to 2023. To reflect this change, a bid bulletin was issued on 5 January 2021 to show the following amendments to the TOR:

TOR, Tariff Structure, p.2 to 3
[...]

- The Bidder shall provide a quarterly fuel price forecast for the ~~third~~ **first** quarter of ~~2021~~ 2022 until second ~~fourth~~ quarter of ~~2021~~ 2023, in USD/MMBtu. The simple average of this quarterly fuel price forecast shall be used as the reference price (F_0).
- For Contract Years 1 to 10 Implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor and shall serve as the Quarterly Fuel Price Cap. The adjustment factor for a given calendar quarter shall be equal to the ratio of P_n to P_0 , as defined below. Expressed in formula,

$$\text{Quarterly Fuel Price Cap}_{\text{Contract Years 1 to 10}} = F_0 \times \left(\frac{P_n}{P_0} \right)$$

Where:

F_0 is the simple average of the quarterly fuel price forecast for the four quarters beginning ~~third~~ **first** quarter of ~~2021~~ 2022 as submitted by the Bidder, in USD/MMBtu

P_0 is the simple average of the actual quarterly fuel price for the four quarters beginning ~~third~~ **first** quarter of ~~2021~~ 2022, in USD/MMBtu

P_n is the simple average of the actual quarterly fuel prices from the preceding four calendar quarters, in USD/MMBtu. For clarity, the calendar quarters are defined by the following dates:

[...]

10. In preparation of the Bid Submission Deadline, after a conduct of competitive selection process for independent engineering services, Leidos Engineering, LLC. was selected by the TPBAC as its Independent Engineer in the evaluation of the bidders' technical qualifications and proposals.

11. The Bid Submission Deadline and schedule of the opening and Pre-Qualification Evaluation of Bids was set on 27 January 2021 via Zoom virtual meeting.²

12. In accordance with Section 7 of the DOE 2018 CSP Rules, the DOE and ERC were invited on 15 January 2021 to send Observers to the submission and opening of bids. The Bid Submission Deadline and opening and Pre-Qualification Evaluation of Bids was attended by the authorized representatives of the Interested Bidders and by observers from the DOE, led by Assistant Secretary Redentor E. Delola.

13. On 27 January 2021, nine (9) Interested Bidders (out of the eighteen (18) who filed Expressions of Interest), with a total offered capacity of 5,850 MW, submitted their bid documents. The Interested Bidders were, in alphabetical order: Atimonan One Energy, Inc., Excellent Energy Resources, Inc., GNPowr Dinginin Ltd. Co., Kingstone Energy Power Corp., Mariveles Power Generation Corp., Masinloc Power Partners Co. Ltd., Santa Cruz Solar Energy, Inc., Solar Philippines Central Luzon Corp., and St. Raphael Power Generation Corp.

14. Considering the number of bidders submitting bid documents, the opening of the bids only proceeded with the initial check for completeness of Interested Bidders' Qualification Documents (Envelope 1) and Technical Proposals (Envelope 2), and the more detailed Pre-Qualification Evaluation was scheduled to continue in the following days. In anticipation of this, the TPBAC transferred the custody of the Interested Bidders' sealed Bid Prices (Envelope 3) to the TPBAC's independent bank custodian, AUB, for safekeeping and to be returned upon instruction of the TPBAC.

15. On 2 February 2021, the TPBAC conducted a Pre-Qualification Evaluation clarificatory meeting with the Interested Bidders, which was attended by the authorized representatives of the Interested Bidders and by observers from the DOE, led by Engr. Victor Buathong from the Office of Undersecretary Emmanuel P. Juaneza.

16. On 9 February 2021, after a full and detailed Pre-Qualification Evaluation of the Interested Bidders' Qualification Documents (Envelope 1) and Technical Proposals (Envelope 2) submitted on the Bid Submission Deadline, the TPBAC found the submission of only six (6) Interested Bidders to be compliant with the TOR, Bid Requirements, Instructions to Prospective Bidders (IPB), and relevant Bid Bulletins. Arranged alphabetically, the Pre-Qualification Evaluation resulted in the following findings:

BIDDER'S NAME	RESULT [PASS / FAIL]
1. Atimonan One Energy, Inc.	PASS
2. Excellent Energy Resources, Inc.	PASS
3. GNPowr Dinginin Ltd. Co.	PASS
4. Kingstone Energy Power Corporation	FAIL
5. Mariveles Power Generation Corporation	PASS
6. Masinloc Power Partners Co. Ltd.	PASS
7. Santa Cruz Solar Energy, Inc.	FAIL
8. Solar Philippines Central Luzon Corporation	FAIL
9. St. Raphael Power Generation Corporation	PASS

17. The notices of result of the Pre-Qualification Evaluation were transmitted to the respective Interested Bidders and DOE on 10 February 2021. The said notices also advised them that on account of the Dispute Resolution and Protest Mechanism in the IPB

² Due to venue availability and logistical considerations, the Bid Submission Deadline originally set on 25 January 2021 was moved to 27 January 2021.

and in the interest of due process, the Opening of the Bid Prices (Envelope 3) was rescheduled to 19 February 2021.

18. On 12 February 2021, Santa Cruz Solar Energy, Inc. and Solar Philippines Central Luzon Corporation filed their requests for reconsideration with the TPBAC. On 15 February 2021, Kingstone Energy Power Corporation also filed its request for reconsideration.

19. On 17 February 2021, after the examination of the issues and considering the points raised in the requests for reconsideration, the TPBAC issued individual notices of resolution resolving to deny the three (3) requests for reconsideration.

20. On 18 February 2021, the TPBAC issued a bid bulletin informing the Qualified Bidders and the DOE that the Opening of the Bid Prices (Envelope) 3 shall proceed as scheduled on 19 February 2021. On the same date, the TPBAC received written manifestations from Kingstone Energy Power Corporation and Santa Cruz Solar Energy, Inc. that they will no longer avail of the protest mechanism under the IPB.

21. The Opening of Bid Prices (Envelope 3) proceeded on 19 February 2021 via Zoom virtual meeting.

22. The Opening of Bid Prices (Envelope 3) was attended by the authorized representatives of the Interested Bidders and by observers from the DOE, led by Undersecretary Emmanuel P. Juaneza.

23. Right before the Opening of the Bid Prices (Envelope 3), the TPBAC received back from its independent bank custodian, Asia United Bank (AUB), the sealed Reserve Price envelope and the Qualified Bidders' sealed Bid Prices (Envelope 3). Upon receipt, the TPBAC proceeded to open the sealed Reserve Price envelope and disclose the Reserve Prices for Headline Rate and Levelized Cost of Electricity ("LCOE"). Thereafter, the TPBAC proceeded to open and evaluate the Qualified Bidders' Bid Prices (Envelope 3). Finding these initially complete, subject to Post-Qualification, the TPBAC proceeded to determine whether the Headline Rate and computed LCOE of the Qualified Bidders were equal to or less than the Reserve Prices. The details and results are as follows:

RESERVE PRICES	TOTAL (VAT Inclusive)
1. Headline Rate	4.4883 PhP/kWh
2. LCOE	5.2559 PhP/kWh

BIDDER'S NAME	TOTAL LCOE (VAT Inclusive)	RESERVE PRICES COMPLIANT? [Yes / No]
1. Atimonan One Energy, Inc.	4.6338 PhP/kWh	Yes
2. Excellent Energy Resources, Inc.	4.1462 PhP/kWh	Yes
3. GNPowder Dinginin Ltd. Co.	5.2500 PhP/kWh	Yes
4. Mariveles Power Generation Corporation	4.3321 PhP/kWh	Yes

5. Masinloc Power Partners Co. Ltd.	4.2605 PhP/kWh	Yes
6. St. Raphael Power Generation Corporation	5.4426 PhP/kWh	No

All the Headline Rates submitted by the Qualified Bidders were lower than the Reserve Price of the Headline Rate. However, the total LCOE of St. Raphael Power Generation Corporation is higher than the Reserve Price for the LCOE, hence, the bid price of St. Raphael Power Generation Corporation was found to be non-compliant and the TPBAC resolved to disqualify it.

24. After an evaluation and ranking of the LCOE of the remaining five (5) Qualified Bidders' proposed prices, the TPBAC found the bids submitted by the following Qualified Bidders to be the Best Bids, arranged from lowest to highest computed LCOE:

BIDDER'S NAME	TOTAL LCOE (VAT Inclusive)	OFFERED CONTRACT CAPACITY	COMMERCIAL OPERATIONS DATE
1. Excellent Energy Resources, Inc.	4.1462 PhP/kWh	1,200 MW	December 2024
2. Masinloc Power Partners Co. Ltd.	4.2605 PhP/kWh	600 MW	May 2025
TOTAL		1,800 MW	

25. After the Opening of the Bid Prices (Envelope 3), the respective Notifications of Best Bid were issued in favor of Excellent Energy Resources, Inc. and Masinloc Power Partners Co. Ltd., informing them that the Post-Qualification process for their bids shall proceed. The TPBAC also prepared an Abstract of Bids.

26. On 24 February 2021, the TPBAC received written manifestation from Solar Philippines Central Luzon Power Corporation that it will no longer avail of the protest mechanism under the IPB.

27. On 26 February 2021, the TPBAC determined that all Best Bids for the 1,800 MW CSP passed the Post-Qualification stage. The Winning Power Suppliers, namely: Excellent Energy Resources, Inc. and Masinloc Power Partners Co. Ltd., were then issued their respective Notices of Award.

28. Thereafter, the TPBAC already referred the Winning Power Suppliers to the PSA team of Meralco for the signing/execution of their respective PSAs, as well as the preparation and/or submission of the PSAs to the Energy Regulatory Commission.


LAWRENCE S. FERNANDEZ
 TPBAC Secretariat

ANNEX "D"

600 MW (net), 2025

POWER SUPPLY AGREEMENT

Between

MANILA ELECTRIC COMPANY

and

MASINLOC POWER PARTNERS CO., LTD.

2 March 2021



Table of Contents

Article	Page
Article 1 Definitions and Interpretation	2
1.1 Definitions	2
1.2 Interpretation.....	14
Article 2 Purpose and Term	15
2.1 Purpose	15
2.2 Term of Agreement	15
Article 3 Execution Date, Conditions Precedent, Commencement Date and Commercial Operations Date	15
3.1 Execution Date.....	15
3.2 Commencement Date	16
3.3 Commercial Operations Date.....	17
3.4 Early Occurrence of the Commercial Operations Date.....	20
Article 4 Bid Security and Performance Security	20
Article 5 Commissioning Energy	22
Article 6 Sale and Purchase of Contract Capacity and Associated Energy	23
6.1 Supply of Power	23
6.2 Title Transfer and Risk of Loss.....	23
6.3 Nominations.....	23
6.4 WESM Declarations.....	24
Article 7 Interconnection, Transmission and Metering	24
7.1 Connection Agreement, Transmission Services Agreement, and Metering Service Agreement.....	24
7.2 Copies of Documents; Amendments.....	25
7.3 Interconnection and Transmission Undertaking	25
Article 8 Construction, Operation and Maintenance of the Plant	25
8.1 Construction, Operation, Maintenance and Repair	25
8.2 Coordination with Market Operator and System Operator	26
8.3 Operations Log.....	26
8.4 Tests.....	26
8.5 Emergency Planning.....	27
8.6 Allocation of Available Capacity	27
Article 9 Outages	27
9.1 Outage Allowances and Replacement Power	27
9.2 Scheduling Outages.....	28
9.3 Early Completion of a Scheduled Outage	28
9.4 Notification of Forced Outages.....	28
9.5 Fine for Failure to Provide Replacement Power	28

Article 10	Assignment or Transfer of Contract Capacity	29
Article 11	Billing and Payment.....	30
11.1	Billing	30
11.2	Payments.....	30
11.3	Setoff	31
Article 12	Taxes, Fees and Costs	31
12.1	Responsibility for Taxes, Fees and Costs.....	31
12.2	Charges Due to Change in Circumstances.....	33
Article 13	Metering	35
Article 14	Covenants	35
14.1	Net Dependable Capacity Test and Net Plant Heat Rate Test.....	35
14.2	ERC Application	35
14.3	ERC Approval.....	36
14.4	Replacement of Plant O&M Contractor	37
14.5	Fuel Supply	37
14.6	Compliance with Laws	37
14.7	Other Covenants of Power Supplier	37
Article 15	Insurance.....	38
15.1	Insurance Policies.....	38
15.2	Evidence of Insurance	39
15.3	Change to Policies.....	39
15.4	Notification to Claims and Application of Proceeds.....	39
Article 16	Indemnity and Liability.....	39
16.1	Indemnity by Power Supplier	39
16.2	Indemnity by Meralco	39
16.3	Notice of Proceedings.....	40
16.4	Conduct of Proceedings	40
16.5	Consequential Losses	40
Article 17	Force Majeure.....	41
17.1	Events of Force Majeure.....	41
17.2	Instances of Force Majeure.....	41
17.3	Effect of Event of Force Majeure.....	43
17.4	Effect of Uninsured Events of Force Majeure	43
17.5	Effect of Extended Force Majeure	44
17.6	Force Majeure Prior to Commercial Operations Date.....	44
17.7	Notice of Force Majeure; Procedure	44
Article 18	Events of Default and Termination.....	45
18.1	Power Supplier Events of Default.....	45
18.2	Meralco Events of Default.....	47
18.3	Remedies in case of Event of Default	48
18.4	Termination upon Event of Default	50
18.5	Exculpatory Provisions.....	51
18.6	Termination other than upon Event of Default	52

18.7 Other Rights and Remedies	54
Article 19 Representations and Warranties	54
19.1 Representations and Warranties of Power Supplier	54
19.2 Representation and Warranties of Meralco	55
Article 20 Settlement of Disputes	55
20.1 Amicable Settlement	55
20.2 ERC Proceedings/Arbitration	56
Article 21 Assignment and Change of Control	56
Article 22 Miscellaneous	57
22.1 Language	57
22.2 Notices	57
22.3 Confidentiality	59
22.4 Survival	59
22.5 Severability of Provisions	59
22.6 Waiver	60
22.7 Amendment	60
22.8 Entire Agreement	60
22.9 Further Acts and Assurances	60
22.10 Third Party Rights	60
22.11 Expenses	61
22.12 Warranty Against Corruption	61
22.13 Counterparts	61
22.14 No Partnership	61
22.15 Governing Law	61
22.16 Independent Engineer	62

Appendices

Appendix A	Plant Description and Site Location
Appendix B	Performance Guarantees
Appendix C	Documents to be Delivered by the Parties
Appendix D	Form of Performance Security
Appendix E	Calculation of Payment
Appendix F	List of Allowed Banks
Appendix G	Operating Procedures
Appendix H	Invoicing and Payment Procedures
Appendix I	Form of Direct Agreement
Appendix J	Tests

POWER SUPPLY AGREEMENT

This Power Supply Agreement (the “Agreement”) is entered into as of 2 March 2021 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 principal place of business at Lopez Building, Ortigas Avenue, Pasig City, Metro Manila; and
2. **Masinloc Power Partners Co., Ltd.** (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 Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales.

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 the Masinloc Coal-Fired Thermal Power Plant located in Masinloc, Zambales (the “**Plant**”), on the island of Luzon in the Philippines, 600 MW of which is scheduled to become operational by 26 April 2025.
- C. Power Supplier desires to sell the Contract Capacity and Associated Energy from the Plant to Meralco, under the terms and conditions specified in this Agreement.
- D. Meralco, through its Third Party Bids and Awards Committee, conducted a competitive selection process, in which Power Supplier emerged as the winning bidder.
- E. Meralco desires to purchase the Contract Capacity and Associated Energy from Power Supplier, under the terms and conditions specified in this Agreement.
- F. Meralco and Power Supplier desire to define in this Agreement their respective rights and obligations with respect to the sale and purchase of Contract Capacity and Associated Energy 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:

Allowed Bank has the meaning given to it in Section 4.2.

Acceptance Date has the meaning given to it in Section 14.3.3.

Affiliate shall mean, with respect to any Person, any other Person that directly or indirectly, through one or more intermediaries, Controls (e.g. parent or grandparent company), is Controlled by (e.g. subsidiary) or is under common control (e.g. sister company) with the specified entity.

Agreed Rating Agency has the meaning given to it in Section 4.5.

Agreement means this Power Supply Agreement, including its Appendices, attachments, and Schedules, as may be 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 12.2.2.

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

Assessments has the meaning given to it in Section 12.1.6.

Associated Energy means energy generated by the Plant and declared by Power Supplier to the WESM as BCQ for Meralco, in accordance with Appendix G.

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.

Bid Security has the meaning given to it in Section 4.1.

Bilateral Contract Quantities or BCQ refers to the aggregate of Associated Energy and Replacement Power as declared by Power Supplier to the WESM at the Delivery Point for Meralco for all applicable Trading Interval/s and in accordance with Appendix G.

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.

Buy-Back has the meaning given to it in Section 18.3.3.

Buy-Back Notice has the meaning given to it in Section 18.3.3.

Buy-Back Price has the meaning given to it in Section 18.3.3.

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 J 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; or
- (d) any extraordinary event (other than arising from or as a result of items [a], [b] and [c] above) that results in a price increase of more than twenty percent (20%) in actual calendar quarter fuel prices from Power Supplier's fuel index for one (1) calendar quarter, subject to the conditions in Section 12.2.2 (the "**Fuel Price Change in Circumstances**").

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, except for (d) above, 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 or COD means the date that the conditions set out in Section 3.3.2 (other than the Commercial Operations Date Certificate) have been satisfied, and 600 MW 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 development, construction and installation 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 NGCP Bolo (Kadampat) 500kV Transmission Line.

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

Contract Capacity or CC shall be, subject to Article 10, 600 MW (net) sourced from the Plant.

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 means:

- (a) the ownership (whether directly or indirectly) of more than fifty percent (>50%) of the total issued voting share capital or other voting interest of that company or corporation; or
- (b) the ability to unilaterally appoint a majority of the board of directors or equivalent body of that company or corporation through the ownership of securities with voting power or otherwise, without the need of the vote or approval of another; or
- (c) the ability to otherwise unilaterally direct the business affairs and/or operations of that company or corporation, without the need of the vote or approval of another.

The terms Controls, Controlled and Controlling shall have correlative meanings. For the avoidance of doubt, if a corporation is owned by two (2) shareholders at exactly fifty percent (50%) each, that corporation shall not be considered under the control of each shareholder.

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.

Curtailement has the meaning attributed to it as defined in the OATS Rules under ERC Case No. 2006-015 RC.

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 NGCP Bolo (Kadampat) 500kV Substation, which is the high side of the connection of 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 I.

Disallowed Pass-Through Amounts has the meaning given to it in Section 12.2.3(i).

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 4.5.

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.

ECC means Environmental Compliance Certificate issued by the Department of Environment and Natural Resources.

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 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 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.

Excess Energy means, on a Trading Interval basis, the Metered Quantity or portion thereof nominated by Meralco and declared as BCO by Power Supplier in excess of the energy corresponding to one Trading Interval of the Contract Capacity, in accordance with Section 1 (Component A) of Appendix E.

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

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

Execution Date has the meaning given to it in Section 3.1.

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

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.

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 has the meaning given to it in the Recitals.

Fuel Price Change in Circumstances has the meaning given to it in Section 1.1 (definition of Change in Circumstances) vis-à-vis Section 12.2.2.

Full Load Equivalent Days of Availability means the equivalent duration (expressed in number of Days) over which the Plant's Net Dependable Capacity is available to generate electricity, whether or not the Plant generated electricity with respect to the Contract Capacity.

Full Load Equivalent Forced 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.

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.

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.

Incremental Energy means, on a Trading Interval basis, the Metered Quantity or portion thereof nominated by Meralco and declared as BCQ by Power Supplier in excess of the Day-Ahead Nomination Schedule up to Contract Capacity, as determined in accordance with Section 5.3 of Appendix G.

Independent Engineer has the meaning given to it in Section 22.16.

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 and Power Supplier of their Joint 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, no more than five (5) times during the entire Term of this Agreement and no more frequent than once every four (4) years, 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.

Major Maintenance Outage Days means the Full Load Equivalent Outage Days when the Plant is out due to a Major Maintenance Outage.

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.

Metered Quantity means the actual output of the Plant as metered by the Metering Services Provider. If the Plant is only partially contracted to Meralco, the Parties shall agree on a mechanism to allocate the metered quantity of the Plant with respect to the Contract Capacity of Meralco.

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.

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 8.4.1.

Net Book Value means the value of the Plant, net of (i) capitalized interest, (ii) depreciation, and (iii) outstanding principal amount of (and, if applicable, accrued interest on), loans incurred in relation to the financing of the development, construction, acquisition, ownership, operation and maintenance of the Plant.

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 8.4.2.

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 J 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 12.2.2.

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.

Operating Procedures means the procedures set out in Appendix G.

Outage means a Forced Outage or Scheduled Outage.

Payment Date has the meaning given to it in Appendix H.

PhP BVAL Reference Rate means the PhP BVAL 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., calculated by Bloomberg, as Benchmark Calculation Agent engaged by the Bankers Association of the Philippines, the Benchmark Administrator, using BVAL Evaluated Pricing Services; 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 Guarantees means the limits and constraints relating to the operation, maintenance and dispatch of the Plant described in Appendix B.

Performance Security has the meaning given to it in Section 4.2.

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, are calculated as provided in Appendix E, 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 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 10.2.1.

Refundable Amounts has the meaning given to it in Section 12.2.3(ii).

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 energy procured by Power Supplier from the WESM or any other source during Outage of the Plant or during a period of unexcused delay of the Commercial Operations Date and declared by Power Supplier to the WESM as BCQ for Meralco. For clarity, the cost of Replacement Power shall form part of the price that Meralco will charge to its customers.

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 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, and scheduled and approved by the System Operator, for regular scheduled inspection, testing, preventive maintenance, corrective maintenance, repairs, replacement or improvement that has been scheduled in accordance with Section 9.2.

Security Amount has the meaning given to it in Section 4.2.

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 ERC 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.

Term has the meaning given to it in Section 2.2.

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).

Trading Interval means an hourly interval, unless otherwise agreed upon by the Parties as consistent with WESM Rules.

Transfer has the meaning given to it in Section 10.1.1.

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.

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.
- 1.2.17 The provisions of this Agreement shall be read in light of Meralco's bidding documents, including relevant bid bulletins, and Power Supplier's envelopes 1, 2 and 3 bid document submissions. In case of any conflict between this Agreement, on one hand, and Meralco's bidding documents, including relevant bid bulletins, and Power Supplier's envelopes 1, 2 and 3 bid document submissions, on the other hand, the latter shall prevail.

Article 2 Purpose and 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

Subject to Article 3, this Agreement shall become effective on the Execution Date. The term of this Agreement (the "Term") shall commence on the Commercial Operations Date, and shall expire on the last day of the 20th Contract Year, unless terminated earlier in accordance with the terms of this Agreement or extended by the application of Section 2.2 and Section 17.3.3.

The Term may be renewed for an additional period of up to one (1) year 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 Execution Date, Conditions Precedent, Commencement Date and Commercial Operations Date

3.1 Execution Date

The Execution Date shall be the date the Parties sign this Agreement, provided the conditions precedent in Section 3.1.1 have been submitted by the relevant Party (the "Execution 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 Execution 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 and Part 3 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 the Execution Date, the Commencement Date, each of the Scheduled Commercial Operations Date, and each of the Commercial Operations Date.

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 of 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

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: (i) affecting the Philippine 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 (ii) resulting in the non-finality of the ERC Final Approval that renders Power Supplier unable to obtain non-recourse project financing equivalent to seventy percent (70%) of the borrowing commitment 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 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, provided that Meralco cannot terminate this Agreement due to Section 3.2.3(b).

3.3 Commercial Operations Date

3.3.1 Power Supplier covenants that 600 MW of the Plant shall achieve Commercial Operations Date no later than 26 April 2025 (the "Scheduled Commercial Operations Date").

3.3.2 Provided that the period for provision of Commissioning Energy under and pursuant to Section 5.1 has been completed, the Plant shall achieve Commercial Operations Date for 600 MW upon the delivery by Power Supplier of the documents enumerated below, in form and substance satisfactory to Meralco:

- (a) Capacity Test Certificate dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate confirming value of the Net Dependable Capacity, which shall be at least 600 MW;
- (b) Net Plant Heat Rate Test Certificate dated no earlier than fifteen (15) Days prior to the date of the Commercial Operations Date Certificate;

- (c) Compliance Certificate issued by Independent Engineer confirming that: (i) the Plant meets Power Supplier's commitments under Appendix B of this Agreement, (ii) the Plant's fuel source is from a technology that complies with the prevailing emission standards under pertinent Department of Environment and Natural Resources issuances on emission and other environmental standards for power plants; and (iii) the Plant's key components (e.g., boiler, turbine and generator) are of proven design and technology, thus, confirming compliance to the technical proposal (attached hereto as Schedule 1 of Appendix A) submitted by Power Supplier during the competitive selection process conducted for this Agreement.
- (d) all permits, licenses, authorizations and other approvals from all Government Instrumentalities and third parties needed for the operation of the Plant and the supply of electricity by Power Supplier to Meralco, including but not limited to, the certificate of compliance of 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;
- (e) a Commercial Operations Date Certificate; and
- (f) Power Supplier certification that the insurances required 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, Compliance 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.

Within seven (7) days from MERALCO's receipt of these documents from Power Supplier, the Parties shall issue a joint certification of the occurrence of Commercial Operations Date. Following the Commercial Operations Date, the obligations of Power Supplier and Meralco under this Agreement with respect to sale and purchase of Contract Capacity and Associated Energy, 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, 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 (net), as may be applicable, subject to Article 6 and in accordance with Appendix E, to be paid for by Meralco at the lower between WESM price and the Price; or (ii) to the extent that such Replacement Power is not available due to inadequate supply from WESM or from any other source, pay to Meralco a fine equivalent to Nine Hundred Eight Philippine Pesos (PhP 908.00) multiplied by each affected MWh nomination by Meralco, until the earlier of: (a) the Commercial Operations Date, and (b) 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 lower between the WESM price and the Price specified in Appendix E.

If Power Supplier fails to provide Replacement Power despite its availability from WESM or any other source, Meralco will be deemed to have sourced the Replacement Power, subject to reimbursement by Power Supplier of the difference between (i) WESM price and (ii) the Price, plus all relevant transaction cost and taxes. If Power Supplier fails to reimburse Meralco on or before twelve (12) Business Days from the end of the relevant Billing Period indicated in the notice of Meralco to Power Supplier, Meralco shall have the right to draw on the entire amount of the Performance Security, apply the proceeds to the amount for reimbursement by Power Supplier and hold the proceeds in trust for Power Supplier as security if Power Supplier fails to procure a replacement Performance Security within the time required under this Section 3.3.3 until the Performance Security is: (i) replaced by the Power Supplier; (ii) returned to the Power Supplier in accordance with Section 4.7; or (iii) forfeited in favour of Meralco in accordance with 18.6.2. In case of any draw by Meralco against the Performance Security, Power Supplier shall, no later than ten (10) Days after the amount falls below thirty percent (30%) of the then required Security Amount, immediately replace and deliver irrevocable stand-by letter of credit or bank guarantee to meet the required Security Amount. In the event that Power Supplier fails to replace and deliver the irrevocable stand-by letter of credit or bank guarantee as required under this Section 3.3.3, Meralco shall have the right to terminate this Agreement and, in such case, Meralco shall have the right to exercise its remedies at law or equity.

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 Date 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 the fine provided 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(b), except that only Power Supplier can terminate this Agreement if the Excused Delay Event is solely due to Section 3.3.3(c).

3.4 Early Occurrence of the Commercial Operations Date

3.4.1 In the event that Power Supplier anticipates that a unit of the Plant shall achieve Commercial Operations Date prior to the Scheduled Commercial Operations Date ("Early Commercial Operations Date" or "Early COD"), Power Supplier shall promptly deliver a written notice to Meralco of such anticipated Early Commercial Operations Date indicating the anticipated date thereof (the "Early COD Notice"), at least three (3) months prior to the then anticipated date of the Early Commercial Operations Date. For clarity, in no case shall Early COD occur earlier than 26 April 2024.

3.4.2 Upon receipt of such Early COD Notice, Meralco shall, by written notice to Power Supplier, determine whether or not to 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. Meralco reserves its right to declare Early COD per unit of the Plant.

Article 4 Bid Security and Performance Security

4.1 Power Supplier's bid security in connection with the competitive selection process or bidding process where it was declared the winning power supplier for this Agreement ("Bid Security"), shall be retained by Meralco until replacement thereof with a Performance Security (defined in Section 4.2). Power Supplier must extend the validity of the Bid Security, no later than fifteen (15) Days prior to its expiration, to ensure that it remains valid until replaced by the required Performance Security. Failure of Power Supplier to timely replace the Bid Security at any time after signing of this Agreement shall entitle Meralco to draw on the same, to be held in trust, less amounts properly due and owing, until a new Bid Security, or the Performance Security, is provided by Power Supplier.

If Power Supplier fails to secure an Environmental Compliance Certificate (the "ECC") from the Department of Environment and Natural Resources within six (6) months from filing of the ERC Application, Power Supplier shall increase its Bid Security by one hundred percent (100%) of the original value, and shall continue to increase the same by 100% of the prevailing value every six (6) months thereafter until the ECC is actually submitted to the ERC, provided, however, that in no case shall the total Bid Security exceed the total project cost of the Plant corresponding to the Contract Capacity,

provided further, that if Power Supplier still fails to secure the ECC and submit it to the ERC by the date falling six (6) months before the COD, Meralco shall have the right to forfeit the Bid Security in its entirety and to terminate the PSA. In no case shall Power Supplier's failure to secure and submit the ECC, for any reason, be deemed as an Event of Force Majeure or as a situation that is beyond the control of Power Supplier.

- 4.2 Power Supplier shall, within fifteen (15) Days from Acceptance Date, deliver to Meralco one or more security (each, a "Performance Security") in an aggregate amount equivalent to Two Billion Seven Hundred Ninety-One Million Four Thousand Four Hundred Eighty-Five Pesos and Forty-Nine Centavos (PhP 2,791,004,485.49) (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 Allowed Bank, (ii) at the time of issuance thereof, be issued by an Allowed Bank, and (iii) have a face value, when aggregated with the other Performance Securities, equivalent to not less than the Security Amount. A Performance Security template is attached as Appendix D.

As used herein, "Allowed 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 list of Allowed Banks is set forth in Appendix F.

- 4.3 Within sixty (60) Days from each anniversary of the Acceptance Date, the Parties shall meet to review the list of Allowed Banks and mutually agree on the list of Allowed Banks from which any amended or replacement Performance Security shall be procured.
- 4.4 If a Performance Security is subject, pursuant to its terms, to a fixed expiry date, Power Supplier shall, not less than fifteen (15) 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 4.2 of this Agreement.
- 4.5 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 Allowed Bank, Power Supplier shall procure a replacement Performance Security from another Allowed Bank within thirty (30) Days from the occurrence of the Downgrade Event. For this purpose, "Downgrade Event" means (i) in respect of an Allowed Bank that is an international bank, (a) two consecutive downgrades from its credit rating at the time of the last review of the list of Allowed Banks or (b) a credit rating downgrade below investment grade, in each case as publicly announced by the Agreed Rating Agency; and (ii) in respect of an Allowed 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 Twenty-Five Billion Philippine Pesos (PhP25,000,000,000.00) while "Agreed Rating Agency" means Standard & Poor's or Moody's Investor Services.
- 4.6 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.

- 4.7 Within (30) Days after the later of the Scheduled Commercial Operations Date or Commercial Operations Date, Meralco shall return to Power Supplier the Performance Security or replacement thereof 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 4.4 and 4.5 above.

Article 5 Commissioning Energy

- 5.1 Subject to an agreement by the Parties to declare Early COD in accordance with Section 3.4, Power Supplier shall make available to Meralco the electrical energy quantities in MWh generated by the Plant to the extent of the Contract Capacity after 26 October 2024 (the "Commissioning Energy"), and Meralco shall have the option to purchase a portion or all of such available Commissioning Energy. For clarity, this provision applies regardless of the date the Plant has achieved actual commercial operations. If the Plant has achieved commercial operations as of 26 October 2024, Power Supplier shall, beginning 26 October 2024, make available to Meralco the Commissioning Energy for the maximum period for Commissioning allowed under relevant regulations reckoned from 26 October 2024, which maximum period shall not exceed six (6) months. If the Plant is still under or is about to undergo Commissioning, Power Supplier shall notify Meralco of the availability of the Commissioning Energy and make available to Meralco the Commissioning Energy for the longer period between (i) the actual Commissioning of such Plant, and (ii) the maximum period for Commissioning allowed under relevant regulations reckoned from the start of actual Commissioning, which maximum period shall not exceed six (6) months. Power Supplier may be excused from providing Commissioning Energy under this Section only when prevented by technical constraints or an Event of Force Majeure.
- 5.2 The purchases by Meralco of the Commissioning Energy under Section 5.1 shall be at a rate equivalent to the actual landed fuel cost and 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, as approved by the ERC.
- 5.3 On and after the Scheduled Commercial Operations Date, if the Plant is still under Commissioning or the maximum period for providing Commissioning Energy under relevant regulations (that shall not exceed six (6) months) pursuant to Section 5.1 has not yet been completed, Power Supplier shall likewise provide Meralco with Replacement Power in excess of the Commissioning Energy up to the extent of the day-ahead nomination at a rate equivalent to the lower between the WESM price and Commissioning Energy Charge as computed in accordance with Article C, Section 1 (Component J) of Appendix E. To the extent that such Replacement Power is not available due to inadequate supply from WESM or from any other source, Power Supplier shall pay to Meralco a fine equivalent to Nine Hundred Eight Philippine Pesos (PhP 908.00) multiplied by each affected MWh nomination by Meralco.

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 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 (and Replacement Power), 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 (*Performance Guarantees*).

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; provided, however, that Power Supplier shall be allowed to deliver and sell to Meralco the Associated Energy from WESM or any other source only when the Plant is on Outage beyond Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days. For this purpose, should Power Supplier fail to source from the Plant when it is available, Meralco shall pay the lower between WESM price and Price, in accordance with Appendix G.

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 For administrative and planning purposes only, Power Supplier shall furnish Meralco with year-ahead, month-ahead and day-ahead capacity availability and Meralco shall furnish Power Supplier with year-ahead, month-ahead and day-ahead nominations of Contract Capacity and Associated Energy (and Replacement Power), 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.

- 6.3.2 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 (*Performance Guarantees*), and in accordance with the WESM Rules and the Operating Procedures.
- 6.3.3 Notwithstanding Section 6.3.2, Meralco shall have the option to increase or decrease its day-ahead nominations, subject to the Technical Limits, Operating Procedures, WESM Rules and Grid Code.

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 day-ahead 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 Trading Interval of erroneous BCQ declaration, which is due to Power Supplier's fault.

Power Supplier shall ensure that the Plant can be dispatched in accordance with the Performance Guarantees. Any incremental costs as a result of failure to dispatch in accordance with the Performance Guarantees shall be for the account of Power Supplier.

- 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 Meralco's review, Meralco shall inform Power Supplier of any discrepancies or exceptions Meralco 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 specified under Section 7.1. 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, 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 and the Dispatch Instructions, and subject to the Performance Guarantees.

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 G.

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 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.

8.4 Tests

8.4.1 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.

8.4.2 Power Supplier shall, at its own cost, conduct a heat rate test ("Net Plant Heat Rate Test") in conjunction with the initial NDC Test 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.

8.4.3 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.

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

8.5 Emergency Planning

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

8.6 Allocation of Available Capacity

If the availability of the Plant is impaired for any reason such that Power Supplier is unable to make available all or a portion of the Contract Capacity, Power Supplier shall promptly notify Meralco in writing of such impairment. In the event that Meralco exercises its right under Article 10, 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 not exceeding fifteen (15) Full Load Equivalent Outage Days ("Full Load Equivalent Schedule Outage Allowance Days") and Forced Outages not exceeding three (3) Full Load Equivalent Outage Days ("Full Load Equivalent Forced Outage Allowance Days") each Contract Year, provided that a Forced Outage may only be counted towards the Full Load Equivalent Forced Outage Allowance Days upon provision by Power Supplier to Meralco of a copy of the acknowledgment letter from the System Operator or report from the Market Operator that a Forced Outage has occurred.
- 9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.
- 9.1.3 During Scheduled Outages that exceed the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages that exceed the Full Load Equivalent Forced Outage Allowance Days, Power Supplier shall purchase Replacement Power, which shall be declared as BCQ and paid by Meralco at the lower between WESM price and 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 Power Supplier shall inform and coordinate with Meralco regarding its annual Scheduled Outages and Major Maintenance Outages for the succeeding calendar year as submitted to the System Operator ("Annual Maintenance Plan"). In case of any revisions to the Annual Maintenance Plan approved or initiated by the System Operator, Power Supplier shall coordinate with and keep Meralco informed thereof immediately, and procure Meralco's favorable endorsement thereof.
- 9.2.2 In case of Scheduled Outages other than those in the Annual Maintenance Plan, Power Supplier shall (i) notify Meralco in writing prior to notifying the System Operator and (ii) comply with the requirements of the System Operator, including obtaining Meralco's favorable endorsement, which endorsement will not be unreasonably withheld, delayed or conditioned.

9.3 Early Completion of a Scheduled Outage

- 9.3.1 If a Scheduled Outage is completed earlier than the date originally anticipated, Power Supplier shall immediately advise Meralco of such event and the availability of Contract Capacity, and submit to Meralco a revised month-ahead, 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, and day-ahead energy nomination schedule, as may be applicable, to avail of the Contract Capacity made available as a result of the early completion of the Scheduled Outage. In such case, subject to Section 9.1.1, the Full Load Equivalent Days of the maintenance, inspection and testing hours not used during the Scheduled Outage shall not be counted as availments of the Full Load Equivalent Scheduled Outage Allowance Days.

9.4 Notification of Forced Outages

Subject to Article 10 of Appendix G, 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 from such occurrence. Power Supplier shall inform Meralco promptly of changes in the expected duration of a Forced Outage.

9.5 Fine for Failure to Provide Replacement Power

In case Power Supplier fails to provide Replacement Power from any other source or WESM due to inadequate supply, Power Supplier shall pay a fine equivalent to Nine Hundred Eight Philippine Peso (PhP908) multiplied by each affected MWh nomination by Meralco, which shall be used to reduce the generation charge to the consumers. For the avoidance of doubt, in case Power Supplier fails or refuses to supply Replacement Power despite availability thereof, then Section 18.3.1 shall apply.

Article 10 Assignment or Transfer of Contract Capacity

10.1 Transfer of Contract Capacity and Associated Energy

10.1.1 Contract Capacity and Associated Energy that is no longer required by Meralco shall not be assigned, transferred, designated, delegated or allocated (collectively in this context, "Transfer") to another, except (i) if required for project financing in the case of the Power Supplier, as provided in Article 21; (ii) when allowed by the ERC; or (iii) when necessary to mitigate or avoid any losses or costs due to stranded contract capacity; provided that any assignment or transfer to a distribution utility shall comply with applicable competitive selection process rules. In the case of item (iii), Meralco shall 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 (a) to any of its business segments or wholly-owned Affiliates without the prior consent of Power Supplier, or (b) 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. In the case of (b), 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; and 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.

10.1.2 In respect of Transfers not requiring Power Supplier's consent, Meralco shall give a written notice to 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 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 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.

10.2 Reduction in Contract Capacity and Associated Energy

10.2.1 Subject to the provisions of Section 10.2.2 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 in order to avoid stranded contract capacities or costs,

or by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

- 10.2.2. Meralco shall give a written notice to Power Supplier of the Reduction in Contract Capacity and Associated Energy 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 H. Meralco shall pay Invoices when due and payable in accordance with this Agreement and Appendix H.

11.2 Payments

- 11.2.1 Meralco shall pay the entire amount indicated in the Final Invoice (subject to Appendix H) when due and payable, provided that Meralco shall not be required to make payment on any Invoice that is manifestly in error, apparently invalid or not in the form or substance contemplated by this Agreement until the same has been corrected following prompt notice by Meralco to Power Supplier of such error, invalidity or absence of proper form or substance.
- 11.2.2 If Meralco disputes all or any portion of an Invoice for a reason other than a manifest error in, or the apparent invalidity or incorrect form or substance of, such Final Invoice, Meralco shall nonetheless pay the full amount of such Invoice (subject to Appendix H). Any payment by Meralco under this Section 11.2.2 is without prejudice to Meralco's right at a later date within one (1) year following such payment to dispute, protest or question any amount so paid.
- 11.2.3 If applicable, Meralco will endeavor to dispute, protest or question a Final Invoice within fifteen (15) Days from the date of its receipt. In such a case, the dispute, protest or question shall be resolved within thirty (30) Days from the date of filing thereof. If the dispute, protest or question is not resolved, Meralco may at any time refer such dispute, protest or question for resolution in accordance with Article 20.
- 11.2.4 If any withheld amount under Section 11.2.1 is subject to objection or Dispute, or 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 PhP BVAL Reference Rate 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 4 of Appendix H, 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 PhP BVAL Reference Rate 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 4 of Appendix H, 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 PhP BVAL Reference Rate 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 4 of Appendix H, 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 Commercial Operations Date, Power Supplier shall make timely payment of the same, and these amounts (inclusive of applicable VAT) shall be charged to Meralco in accordance with Section 12.1.3, in the proportion that its Contract Capacity bears to the Net Dependable Capacity.
- 12.1.3 The following amounts that Meralco is responsible for paying to third parties shall form part of the price that Meralco will charge to its customers:
- (a) VAT on Contract Capacity and Associated Energy and Replacement Power (if any VAT is payable) in accordance with Philippine tax Laws and regulations; and
 - (b) actual WESM line rental charges or line rental cap provided in Table 3, Schedule 1 of Appendix E, whichever is lower.
- 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 or, alternatively, a certification or similar document agreed by the Parties, to evidence reversal of 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") become payable with respect to this Agreement, the New Charges or Increased Charges shall form part of the price that Meralco will charge to its customers.

12.2.2 If:

- (a) as a result of a Change in Circumstances affecting Power Supplier, Power Supplier becomes liable to pay any New Charges or any Increased Charges; or
- (b) a Change in Circumstances

- (i) materially and adversely affects the ability of Power Supplier to perform, or 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, or
- (ii) adversely affects the sale by Power Supplier of Contract Capacity and Associated Energy in accordance with this Agreement, or
- (iii) 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
- (iv) causes serious damage to, or materially and adversely affects the financial condition of Power Supplier;

then 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. Within thirty (30) Days of such Notice of Change in Circumstances, Meralco and Power Supplier shall meet to discuss, in good faith, remedial measures to mitigate the impact of such Change in Circumstances. Each Party shall cooperate in good faith to secure the required approval of the ERC or any Governmental Authorizations to implement any agreed remedial measures ("**Application for Price Adjustment**"), provided that the Parties shall continue to perform their respective obligations under this Agreement pending any such approval. If the Parties fail to reach a mutually satisfactory resolution within ninety (90) 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(a).

For clarity, any change in the proportionate allocation of ancillary service charges contemplated under the competitive selection process for this Agreement pursuant to DOE Circular DC 2019-012-0018, or pass through nature of ancillary service charges under prevailing regulations, that results in the imposition of ancillary services charges on Power Supplier shall be deemed a Change in Circumstance under this Article. It is understood that ancillary service charges shall form part of the price that Meralco will charge to its customers only upon final approval or resolution by the ERC.

For Fuel Price Change in Circumstances, Power Supplier may invoke the remedy under this Section only (a) to recover fuel costs in excess of the twenty percent (20%) in actual calendar quarter fuel prices from Power Supplier's fuel index; (b) to include the relevant Billing Period[s] in the immediately preceding one (1) year; and (c) once every five (5) years; *provided that*, under highly exceptional cases, Power Supplier may apply for fuel recovery more than once every five (5) years, and an Application for Price Adjustment will be filed only upon concurrence of Meralco and will take effect upon ERC approval. If the Parties fail to reach a mutually satisfactory resolution within ninety (90) Days from the commencement of negotiations, or Power Supplier does not accept the ERC approval, Power Supplier shall be entitled to terminate this Agreement subject to Power Supplier's payment of liquidated damages, which shall be in lieu of all other damages to which Meralco may be entitled, in the amount equivalent to the product of the Price (at the time of failure to reach a mutually satisfactory resolution or Power Supplier's notification of non-acceptance of the ERC approval, whichever is applicable) and the

Associated Energy with respect to the Contract Capacity computed using an 87.67% plant capacity factor for five (5) years, or the remaining Term, whichever is shorter.

12.2.3 In the event that, as a result of a Change in Circumstances and pursuant to a corresponding order of the ERC or any other Governmental Instrumentality:

- (i) Meralco is prevented from making a 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
- (ii) 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. 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.

It is agreed that New Charges or Increased Charges for which Power Supplier sends a Notice of Change in Circumstances in accordance with this Section 12.2 shall not include charges, fees, taxes, duties, assessments or other similar amounts relating to taxes on the income of Power Supplier.

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 Section 8.4.2.

14.2 ERC Application

14.2.1 Within five (5) Days after receipt from Power Supplier of the documents set forth in 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 Appendix C prior to execution of this Agreement; 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.

In the event that a delay in ERC Final Approval is due to Power Supplier's failure to comply with any order or directive of the ERC or provide any document required by the ERC, including the ECC, Meralco reserves the right to forfeit ten percent (10%) of the original Bid Security amount for each month of such delay.

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, it has the following options:

- (i) Power Supplier shall be free to file a motion for reconsideration with the ERC. 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. If the ERC Final Approval requires any amendment to or modification of any provision of this Agreement that is not acceptable to either Party, acting reasonably, then the Parties shall cooperate in good faith to resolve the required amendment, including seeking a reconsideration by the ERC. If the motion for reconsideration is not resolved by the ERC within one hundred twenty (120) days after its filing, or the amendment is disapproved by the ERC, or approved by the ERC but still contains any material term or condition that is not acceptable to either Party, acting reasonably, then either Party may terminate this Agreement, and the Bid Security or Performance Security shall be returned to Power Supplier.

Meralco reserves the right to forfeit the Bid Security or Performance Security in the event that Power Supplier fails to comply with any order or directive of the ERC or provide any document required by the ERC, including the ECC, resulting in non-performance of its obligations under this Agreement.

- (ii) If Power Supplier does not file a motion for reconsideration with the ERC and/or notifies Meralco that it intends to terminate this Agreement, Meralco shall have the right to forfeit the Bid Security to the extent of twenty-five percent (25%) thereof.

- 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 Power Supplier's acceptance of such ERC Final Approval and the Longstop Date has not occurred.

14.4 Replacement of Plant O&M Contractor

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 O&M Contract (other than the expiration of the Plant O&M Contract at the end of its stated term).

14.5 Fuel 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 fuel to the Plant throughout the Term.

14.5.2 Power Supplier shall ensure that at all times there is fuel 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 sufficient to supply energy 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 year-ahead or month-ahead nominations of Meralco at a plant capacity factor of 100% to the extent of the Contract Capacity.

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.

14.6.3 Any disallowance or refund of any part of the Price that may be directed by a Governmental Instrumentality shall be for the account of Power Supplier.

14.7 Other Covenants of Power Supplier

14.7.1 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 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 and among 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) construction or erection all risk insurance on an all risk basis in an amount not less than the full replacement or estimated maximum less 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) shall be 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; and
- (e) workers compensation insurance as required by Governmental Requirements.

It is agreed that insurance procured by Power Supplier that 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 that 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 advisors as to the insurance obtained by Power Supplier in connection with this Agreement following the inception or renewal of the relevant policies.

15.3 Changes to Policies

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

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 that 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 defense 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 the indemnified Party to the full extent provided by this Article 16, and (iii) reimburses the indemnified Party for the reasonable costs and expenses previously incurred by it prior to the assumption of such defense 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 latter's prior written consent.

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

- (a) acts of war or the public enemy whether war is declared or not;
- (b) public disorders, civil disturbance, insurrection, rebellion, acts or campaigns of terrorism, piracy, embargo, sabotage, blockade, revolution, riots or violent demonstrations;

- (c) explosions, fires, earthquakes, lightning, typhoon, tsunami, flood, cyclone, volcanic eruptions, landslide or other natural disasters, acts of God, epidemic, quarantine or plague;
- (d) any action or aggregation of actions or failure to act by any Governmental Instrumentality, including expropriation, requisition, confiscation, nationalization or other compulsory acquisition; export or import restriction or other restrictions, rationing or allocations imposed by any Governmental 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;
- (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) unavailability of power from the System;
- (g) any System Emergency or Transmission Failure that prevents delivery by Power Supplier, or acceptance by Meralco, of Contract Capacity and Associated Energy (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 ERC, which certification shall bind both Parties;
- (h) appropriate actions taken in response to any orders, warnings or advice given by a Governmental Instrumentality or 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
- (i) Curtailment of the Plant output by the 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, 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 the avoidance of doubt, 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 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. In case of an Event of Force Majeure, the Parties may agree that Power Supplier shall make available the Contract Capacity and deliver the Associated Energy from WESM and/or any other source, and pay Power Supplier at the Price. For the avoidance of doubt and notwithstanding any other provision of this Agreement, should Meralco decide not to exercise such option, Meralco shall not be required to make any Capacity Payment, Interconnection Facilities Payment and Fixed O&M Payment in respect of (i) any Contract Capacity and Associated Energy that is unavailable due to an Event of Force Majeure or (ii) any Contract Capacity and Associated Energy that Meralco cannot receive or deliver to its customers due to an Event of Force Majeure. 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 the affected 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 from the Plant, the applicable provisions of Section 9.1 shall apply. If any Event of Force Majeure prevents Meralco from taking or delivering to its customers capacity and energy from Power Supplier, Power Supplier may sell such capacity and energy to third parties, on terms that 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. However, the option of Power Supplier to sell the Contract Capacity and Associated Energy or a portion thereof to third parties under Section 17.3.2 hereof and the Term Extension under this Section 17.3.3 are mutually exclusive remedies.

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 or delivering to its customers 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 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.

17.7 Notice of Force Majeure; Procedure

- 17.7.1 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.

17.7.2 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.

17.7.3 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 (b) and (f)) results in or is accompanied by an actual failure by Power Supplier to make available the Contract Capacity and/or deliver the Associated Energy to 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 Plant's annual Full Load Equivalent Days of Availability is less than two hundred seventy-three (273) days for at least two (2) consecutive Contract Years and the Plant fails to improve its Full Load Equivalent Days of Availability above 273 days during the Curing Period; provided that a Major Maintenance Outage year shall be excluded from the reckoning of such two-year consecutive period. For this purpose, should the continuous conduct of a Major Maintenance Outage cover two Contract Years, only the Contract Year with the higher Major Maintenance Outage Days shall be excluded from the determination of the two-year consecutive period. To establish the Plant's Full

Load Equivalent Days of Availability, Power Supplier shall provide Meralco with the necessary supporting documents;

- (c) 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; or 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;
- (d) 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 after such resolution or filing, as applicable; 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 after such filing;
- (e) 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 after such filing; subject to the terms of Direct Agreements, Power Supplier 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 after such filing;
- (f) It becomes 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 is not removed, withdrawn or corrected within sixty (60) Days; or
- (g) 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 Power Supplier's receipt from Meralco of written notice of Power Supplier Event of Default for Sections 18.1 (a)(c)(d)(e)(f) or (g), or the lapse of one (1) year following the Power Supplier Event of Default in Section 18.1(b) (the "Curing Period"), such 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/or pay for the Contract Capacity and Associated Energy in accordance with this Agreement:

- (a) Meralco fails to perform any material obligation under this Agreement, excluding the making of any payment which is due, which failure has not been remedied within sixty (60) Days after receipt from Power Supplier of a written notice of Meralco Event Default;
- (b) The appointment of a receiver or liquidator or trustee of Meralco or of any material property of Meralco 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; or 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 after such resolution or filing, as applicable; 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 after such filing;
- (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 after such filing; 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 after such filing;
- (e) It becomes illegal for Meralco to accept the Contract Capacity and Associated Energy due to Meralco's fault, and such illegality is not 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 Remedies in case of Event of Default

- 18.3.1 During the Curing Period with respect to a Power Supplier Event of Default, Meralco shall, for each time Power Supplier fails to make Available the Contract Capacity or to deliver the Associated Energy, be entitled to source energy from the WESM. In such case, and provided that Power Supplier is able to cure the Power Supplier Event of Default prior to the exercise by Meralco of its rights under Section 18.3.3, Power Supplier shall be liable to pay Meralco the difference between the amount Meralco actually paid for such energy and the Price. In the event there is inadequate supply from WESM, Power Supplier shall pay a fine in accordance with Section 9.5.
- 18.3.2 During the Curing Period with respect to a Meralco Event of Default, Power Supplier shall, from the time of Meralco's failure to accept or pay for the Contract Capacity and Associated Energy, be entitled to sell the Contract Capacity and Associated Energy to interested parties, including the WESM. In case of sale to the WESM, and provided that Meralco is able to cure the Meralco Event of Default prior to the exercise by Power Supplier of its rights under Section 18.3.4, Meralco shall be liable to pay Power Supplier the difference between the amount Power Supplier actually received from such sale to the WESM and the Price; provided that, if Plant capacity is offered to WESM but not dispatched, then Meralco shall only be liable to pay Power Supplier the Capacity Payment, Interconnection Facilities Payment and Fixed O&M Payment. For clarity, Power Supplier's exercise of its option to sell to interested parties pursuant to this provision shall be under such terms and conditions as to allow it to resume availability of the Contract Capacity and delivery of the Associated Energy to Meralco, upon remedy of the Meralco Event of Default.
- 18.3.3 In the event that (i) a Power Supplier Event of Default continues unremedied upon the expiration of the relevant Curing Period; and (ii) where applicable, Power Supplier fails to make Available the Contract Capacity or to deliver the Associated Energy, Meralco shall be entitled to any of the following reliefs, at the option of Meralco, to be exercised, by written notice to Power Supplier in accordance with Section 18.4:
 - (a) payment by Power Supplier of liquidated damages, which shall be in lieu of all other damages to which Meralco may be entitled, in the amount equivalent to the product of (i) the Price (at the time of the occurrence of the Power Supplier

Event of Default) and (ii) the Associated Energy with respect to the Contract Capacity computed using 87.67% plant capacity factor for five (5) years, provided that, in the event that Meralco elects this option, Meralco shall have the right (but not the obligation) to terminate this Agreement, by written notice to Power Supplier; or

- (b) avail of remedies at law, subject to the restrictions and limitations under this Agreement (including Section 16.5); *provided that*, availment of this option shall be understood as a waiver of all remedies that Meralco may have under this Agreement; *provided further that*, in the event that Meralco elects this option, Meralco shall have the right (but not the obligation) to terminate this Agreement, by written notice to Power Supplier; or
- (c) require Power Supplier to sell the Plant at the price equivalent to the Net Book Value of the Plant at the time of occurrence of the Power Supplier Event of Default, it being understood that any tax and levies due on the acquisition of the Plant shall be paid by Power Supplier; provided that, in the event Meralco elects this option and following an acquisition by Meralco of the Plant under this Section 18.3.3 (c), Meralco shall also have the right (but not the obligation) to suspend the performance by the Parties of their respective obligations in respect of the sale and purchase of Contract Capacity and Associated Energy. In case of such suspension, the Parties understand and agree that the period of suspension shall be counted against (and shall reduce) the Term of this Agreement.

Following the completion of Meralco's acquisition of the Plant:

- (a) Meralco shall have the option (but not the obligation) to operate, maintain, repair, and/or rehabilitate the Plant; and
- (b) Power Supplier shall have the right (but not the obligation), by written notice to Meralco (the "Buy-Back Notice"), exercisable only within a period of three (3) years reckoned from the later of the date of the execution of the sale or transfer documents in relation to Meralco's acquisition of the Plant pursuant to the exercise of its option under Section 18.3.3 (c) above and the completion of the repair or the rehabilitation of the Plant (if applicable), to reacquire the Plant ("Buy-Back"), at the price equivalent to the sum of (w) the Net Book Value of the Plant at the time of the reacquisition (which Net Book Value shall not be less than the Net Book Value paid by Meralco at the time of its acquisition of the Plant), (x) the amount provided by Meralco to finance the costs and expenses relating to the operation or maintenance, repair and/or rehabilitation of the Plant, (without double counting with amounts included in the Net Book Value), (y) the interest on (w) and (x) at the rate of eight percent (8%) *per annum*, reckoned from the time Meralco exercised its right under Section 18.3.3 (c), and calculated on a compounding basis, and (z) any loss suffered by Meralco, calculated as the difference between (i) the WESM price that Meralco paid for sourcing energy from the WESM due to the unavailability of the Plant; and (ii) the Energy Payments that Meralco would have paid under this Agreement, for the period from the occurrence of the Power Supplier Event of Default until the resumption of operations of the Plant (the "Buy-Back Price"). In computing component (x) of the Buy-Back Price, it is understood that (i) all indebtedness,

fees, costs and expenses incurred by Meralco to finance the operation, maintenance, repair and/or rehabilitation of the Plant shall be included. Further, it is understood that the net margin from the Plant's operations, commencing from the resumption of operations of the Plant until the execution of the sale and transfer documents relating to the Buy-Back, shall accrue to Meralco, will not be in any form included in (x), and shall not be deducted from the Buy-Back Price. Furthermore, any tax and levies due on the Buy-Back shall be paid by Power Supplier.

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

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

- (a) require Meralco to pay liquidated damages, in lieu of all other damages to which it may be entitled, in the amount equivalent to the product of the Capacity Payments and the Contract Capacity for five (5) years; or
- (b) avail of remedies at law, subject to the restrictions and limitations under this Agreement (including Section 16.5); provided that availment of this option shall be understood as a waiver of all remedies that Power Supplier may have under this Agreement; or
- (c) require Meralco to buy the Plant at the price equivalent to Net Book Value of the Plant at the time of occurrence of the Meralco Event of Default, it being understood that any tax and levies due on the acquisition of the Plant shall be paid by Meralco.

18.3.5 To be valid, a notice of the exercise by a Party of its rights under this Section 18.3 must be delivered no later than sixty (60) Days after the effective date of suspension of obligations or termination of this Agreement, as applicable.

The remedies in this Section 18.3 are exclusive remedies in cases of the occurrence of a Power Supplier Event of Default or Meralco Event of Default, as applicable.

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 a 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 omissions 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 availability of Contract Capacity and supply of 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-Fulfillment of Conditions to Execution Date

If any condition precedent set out in Section 3.1.1 in respect of the Execution 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 fulfillment 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 Execution Date, the Parties may agree in writing to (i) extend the aforementioned thirty (30)-day period or (ii) waive the non-fulfilment of such condition to the Execution 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 procurement of Replacement Power or payment of the fine in accordance with Section 3.3.3). If an 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, and the Performance Security

may be forfeited. 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 the fine 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 (i) either Party for an Excused Delay Event due to Section 3.3.3 (a), (b), (d) or (e), or (ii) by Power Supplier for an Excused Delay Event due to Section 3.3.3 (c), upon delivery of written notice of termination. In case of (i), 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 2.2, 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, either Party may terminate this Agreement upon sixty (60) Days' prior written notice thereof to the other Party.

18.6.6 Termination in the Event of Change in Circumstances

- (a) Subject to Section 18.6.6(b), if a Change in Circumstances occurs under the circumstances and having the consequences described in Section 12.2.2 or Section 12.2.3, and the Parties have failed to agree on a solution satisfactory to each of the Parties, then Power Supplier may terminate this Agreement upon sixty (60) Days' prior written notice to the other Party. Until termination occurs, the Parties shall continue to perform their respective obligations under this Agreement.
- (b) In case a Fuel Price Change in Circumstances occurs under the circumstances and having the consequences described in Section 12.2.2, and the Parties have failed to agree on a solution satisfactory to each of the Parties, then Power Supplier may terminate this Agreement upon sixty (60) Days' prior written notice to the other Party subject to payment of the liquidated damages in Section

12.2.2. 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 fulfill 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 settled by arbitration in accordance with the Philippine Dispute Resolution Center Inc. (PDRCI) Arbitration Rules (the "Arbitration Rules") in force on the date of commencement of the arbitration. The dispute shall be settled by three (3) arbitrators (the "Tribunal"), two (2) of them to be appointed separately by the Parties and the third (3rd) arbitrator to be appointed by the President of PDRCI. The place and seat of the arbitration shall be in Pasig City.
- 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 Contract Capacity and supply 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, or rights and obligations under this Agreement, 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: +632-86328257
Telephone: +632-82523738

With copy to:

MERALCO
4/F Technical Services Building
Ortigas Avenue
Pasig City, Metro Manila
Philippines 0300

Attention: Head - Energy Management
E-mail Address: ppalanzo@meralco.com.ph
Telephone: +632-16226457

MERALCO
4/F Technical Services Building
Ortigas Avenue
Pasig City, Metro Manila
Philippines 0300

Attention: Head - Energy Sourcing
Email Address: rsmorales@meralco.com.ph
Telephone: +632-16226222

22.2.2 In the case of Power Supplier, to:

MASINLOC POWER PARTNERS CO. LTD.

Attention: Mr. Paul Bernard D. Causon
Chief Finance Officer
Facsimile: +632-87024602
Telephone: +632-87024607

With copy to:

Attention: Mr. Gonzalo B. Julian Jr.
Authorized Representative
Facsimile: +632-87024602
Telephone: +632-87024607

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 Section 22.3.1 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
WSP (formerly, WSP|Parsons Brinckerhoff and Parsons Brinckerhoff)
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, 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 Power Supplier's or the requisite majority of Finance Parties' opinion, the firm acting as Independent Engineer should be replaced, 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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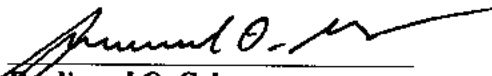
IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed as of the Day and year first above written.

MANILA ELECTRIC COMPANY

**MASINLOC POWER PARTNERS CO.
LTD.**

By: 
Name: **Ronnie L. Aperocho**
Title: **Senior Vice President and Head, Networks**

By: 
Name: **Paul Bernard D. Causon**
Title: **Authorized Signatory**

By: 
Name: **Ferdinand O. Geluz**
Title: **First Vice President and Chief Commercial Officer**

WITNESSED BY:

WITNESSED BY:

By: 
Name: **Ryan S. Morales**
Title: **Head, Energy Sourcing Office**

By: 
Name: **Gonzalo B. Julian Jr.**
Title: **Authorized Signatory**

[Remainder of the page intentionally left blank.]

ACKNOWLEDGMENT

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

BEFORE ME, a Notary Public for and in Mandaluyong City, Philippines, this March 2, 2021, personally appeared:

Name	Competent Evidence of Identity	Date and Place Issued
Paul Bernard D. Causon	Passport No. P8120059A	Jul 25, 2018 / DFA NCR East

all known to me and to me known to be the same persons who executed the foregoing instrument for and in behalf of their respective corporations, and they acknowledged before me that the same is their free and voluntary act and deed, as well as that of their respective corporations, and that they are duly authorized to sign, execute and deliver the same.

This instrument consists of [150] pages, including this page on which this Acknowledgment is written, and Appendix A to Appendix J, which are attached to this Power Supply Agreement, and all pages have been signed by the 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: 357
Page No: 73
Book No: II
Series of 2021.



Marilen S. Vizco-Adriano
MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLE Compliance No. VI-0018687; 02/18/2019; Pasig City

ACKNOWLEDGMENT

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

BEFORE ME, a Notary Public for and in Pasig City, Philippines, this MAR 02, 2021, personally appeared:

Name	Competent Evidence of Identity	Date and Place Issued
Ronnie L. Apercho	Philippine Passport No. P6699886A	April 13, 2023 / DFA NCR East
Ferdinand O. Geluz	Driver's License No. D06-B8-035370	November 3, 2022

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 [152] pages, including this page on which this Acknowledgment is written, and Appendix A to Appendix J, which are attached to this Power Supply Agreement, and all pages have been signed by the 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: 373
Page No: 76
Book No: 11
Series of 2021.



Appendix A

PLANT DESCRIPTION and SITE LOCATION

1. PLANT DESCRIPTION

Masinloc Power Partners Co. Ltd. ("MPPCL"), a partnership duly registered with the Securities and Exchange Commission, is developing a 2 x 315.0 MW (net) for a total plant capacity of 630.0 MW (net) Supercritical Pulverized Coal-Fired Power Plant, with the necessary balance of plant and auxiliary systems (the "MPPCL 4 & 5" or "Masinloc 4 & 5" or "Plant"). The MPPCL 4 & 5 will be located in an area of approximately 47.74 hectares in Barangay Bani, Municipality of Masinloc, forming part of the real properties leased by MPPCL from Alpha Water and Realty Services Corporation in Zambales. See site location map below.

An application for an Environmental Compliance Certificate ("ECC") is currently pending before the Department of Environment and Natural Resources ("DENR") for construction and development of MPPCL 4 & 5. The MPPCL 4 & 5 will include installation of modern air pollution control equipment and effluent treatment facilities to meet the DENR environmental emission and discharge standards specified in the ECC.

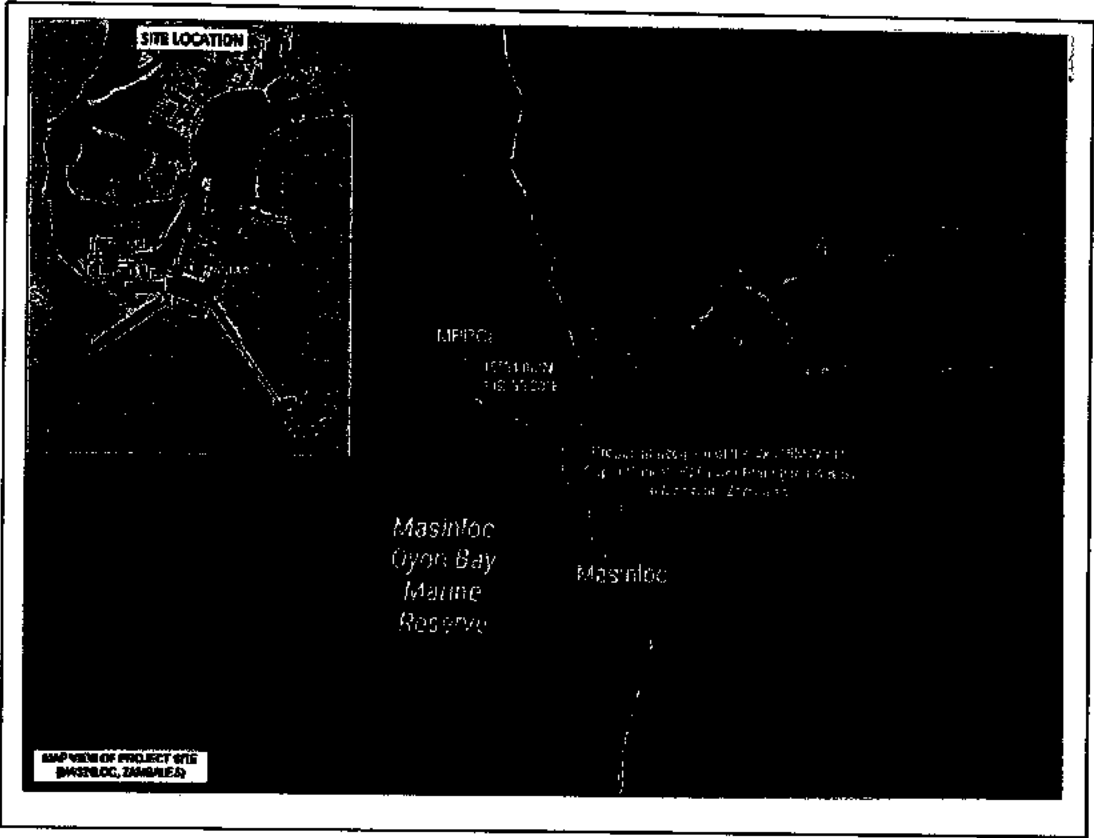
The MPPCL 4 & 5 Project will include a number of other auxiliary systems necessary for operation. These include coal handling system, pollution control system, continuous emission monitoring system, fire protection system, ventilation and air conditioning system, etc.

The MPPCL 4 & 5 will be designed to operate as a baseload and will use proven Supercritical Pulverized Coal technology and contract with highly respected construction contractors and equipment manufacturers. Given the size of the MPPCL 4 & 5 Project, the MPPCL 4 & 5 will be designed to utilize low rank sub-bituminous coal which shall be primarily sourced from Indonesia, and in case of disruptions, Australia, Russia, Colombia and South Africa through a competitive selection process.

The MPPCL 4 & 5 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 estimated 5.5-km 500 kV transmission line ("Power Supplier TL"). The Power Supplier TL will start from the 500 kV switchyard located within the Power Supplier Plant site, shall pass also through Barangay Bani, Municipality of Masinloc, and will connect to the new 500 kV Masinloc collector substation. The collector substation will connect to the Luzon Grid through the Bolo 500 kV Substation by utilizing the 90 km segment of NGCP's Western Luzon 500 kV Backbone – Stage 2 project. The delivery point is at the NGCP Bolo 500 kV Substation ("Bolo Substation").

Details of the Plant's Performance Guarantees, including capacity and other electrical parameters, ramp rates, and start times are provided in Appendix B – Performance Guarantees.

2. SITE LOCATION



[Handwritten signatures and initials]

Schedule 1 of Appendix A

Table 1. Power Plant Requirement

1. Power Plant Technology
Technology of Boiler: Pulverized Coal
Operating Unit: Supercritical
2. Power Plant Key Components
a. Plant Boiler
Manufacturer: Mitsubishi Hitachi Power Systems (MHPS)
Make/Type/Model: PC supercritical, variable pressure, once-through
b. Plant Turbine
Manufacturer: Siemens AG
Make/Type/Model: SST6-5000
c. Plant Generator
Manufacturer: Siemens AG
Make/Type/Model: SGen6-2000P

Appendix B

PERFORMANCE GUARANTEES

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 PERFORMANCE GUARANTEES

The Power Supplier will cause the Plant to operate under the following Performance Guarantees:

Technical Parameter	Performance Guarantees
Net Plant Output	630MW
Frequency Limits (Hertz)	<ul style="list-style-type: none">• Any generating unit shall be capable of continuously supplying its Active Power output within the Power System Frequency range of 59.4 to 60.6 Hz.• If the Power System frequency momentarily rises to 62.4 Hz or falls to 57.6 Hz, all generating units shall remain in synchronism with the Grid for at least five (5) seconds
Voltage Limits (kV)	<p>The Plant shall be capable of supplying its Active Power and Reactive Power outputs within the voltage variations within the range $\pm 10\%$ during normal operating conditions</p> <p>Plant shall operate with an output transformer rated at 500 KV</p>
Reactive Power	The generating units shall be capable of supplying its Active Power output, as specified in the Generator's Declared Data, within the limits of 0.85 Power Factor lagging and 0.90 Power Factor leading at the Generating Unit's terminals, in accordance with its Reactive Power Capability Curve
Grid System Fault Level	Plant is capable to withstand a fault level of 63 kA
Critical Fault detection and Clearing Time Limits	85 milliseconds

Start-up times (in minutes) * (Times from light off) a. Cold Start: ≥ 36 hours from unit shutdown b. Warm Start: > 8 hours to < 36 hours from unit shutdown c. Hot Start: ≤ 8 hours from unit shutdown	a. to Pmin = 560 minutes to TMCR = 715 minutes b. to Pmin = 190 minutes to TMCR = 285 minutes c. to Pmin = 75 minutes to TMCR = 160 minutes
Dispatch Ramp Rates (MW/min) * a. Hot condition b. Warm condition c. Cold condition	a. Pmin to 50% = 3.5 MW/Minute 50% to 95% = 7.0 MW/Minute 95% to 100% = 3.5 MW/Minute b. Pmin to 30% = 1.75 MW/Minute 30% to 50% = 3.5 MW/Minute 50% to 95% = 5.25 MW/Minute 95% to 100% = 3.5 MW/Minute c. Pmin to 50% = 1.75 MW/Minute 50% to 100% = 3.5 MW/Minute
Plant Pmin	175 MW
Generating Unit Pmin	87.5 MW

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

3 PERFORMANCE FUEL SPECIFICATION

The Performance Fuel shall have the following specifications:

Test Parameter	Basis	Units	Value
Gross Calorific Value	Gross as Received (GAR)	kcal/kg	4,200
Hard Grove Index (HGI)	NA	None	45 – 50
Proximate Analysis			
Total Moisture	As Received (AR)	%	34.00 – 38.00
Surface Moisture	As Determined (Air Dried), (AD)	%	N/A
Ash	As Received (AR)	%	4.00 – 6.00
Volatile Matter (VM)	As Received (AR)	%	32 – 34
Fixed Carbon	As Received (AR)	%	29 – 31
Ultimate Analysis			
Carbon	Dry Basis	%	60.00 – 80.00
Hydrogen	Dry Basis	%	4.00 – 6.50
Nitrogen	Dry Basis	%	0.70 – 2.00
Sulfur	Dry Basis	%	0.12 – 0.40
Oxygen	Dry Basis	%	12.00 – 24.00
Ash	Dry Basis	%	6.00 – 10.00

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 Execution Date.
4. A certificate dated no earlier than two (2) Days prior to the Execution 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 Execution 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 Execution Date.
4. A certificate dated no earlier than two (2) Days prior to the proposed Execution 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 Execution Date.
5. Copy of Certificate of Public Convenience and Necessity.

PART THREE: Documents to be provided by Power Supplier to Support ERC Application (as required in the ERC pre-filing checklist)

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
 - 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

FORM OF PERFORMANCE SECURITY

[On Bank Letterhead]

TO: MANILA ELECTRIC COMPANY
ORTIGAS AVENUE
PASIG, METRO MANILA PHILIPPINES

[DATE]

DEAR SIR,

LETTER OF CREDIT NO.

AMOUNT : PHP/US\$

STATED
EXPIRATION
DATE : [.....]

ACCOUNT
PARTY :

WE HEREBY ESTABLISH OUR IRREVOCABLE LETTER OF CREDIT NO. IN YOUR FAVOR FOR THE ACCOUNT OF _____, A PHILIPPINES _____ (THE ""), FOR AN AMOUNT NOT EXCEEDING A TOTAL OF PHP/US\$..... (PHILIPPINE PESOS/US DOLLARS [AMOUNT IN WORDS]) (THE "STATED AMOUNT"). FUNDS UNDER THIS LETTER OF CREDIT ARE AVAILABLE TO MANILA ELECTRIC COMPANY ("YOU" OR THE "BENEFICIARY") UPON OUR RECEIPT OF A CERTIFICATE IN THE FORM OF EXHIBIT A ATTACHED HERETO (THE "DEMAND CERTIFICATE"), PURPORTEDLY SIGNED BY YOUR DULY AUTHORIZED OFFICER OR EMPLOYEE AND APPROPRIATELY COMPLETED, IF SUCH DEMAND CERTIFICATE IS PRESENTED AS HEREINAFTER SPECIFIED ON OR BEFORE THE LOC EXPIRATION DATE (AS HEREINAFTER DEFINED).

DRAWING PROCEDURES. ONE DEMAND CERTIFICATE SHALL BE PRESENTED FOR EACH DRAWING HEREUNDER. EACH DEMAND CERTIFICATE SHALL BE DATED THE DATE OF PRESENTATION AND SHALL BE PRESENTED BY ANY OF THE DELIVERY METHODS PROVIDED HEREIN TO [NAME OF BANK AND ADDRESS], SPECIFICALLY REFERRING TO THE NUMBER AND DATE OF THIS LETTER OF CREDIT. IF YOUR DEMAND CERTIFICATE IS PRESENTED BY [TIME] A.M. ([CITY] TIME) ON ANY DAY ON WHICH WE OPEN FOR BUSINESS (A "BUSINESS DAY"), IN STRICT CONFORMITY WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT, WE WILL HONOR THE SAME BY MAKING PAYMENT, IN ACCORDANCE WITH YOUR PAYMENT INSTRUCTIONS BY [TIME] P.M. ([CITY] TIME) ON SUCH BUSINESS DAY, OTHERWISE WE WILL HONOR YOUR DEMAND CERTIFICATE BY



MAKING PAYMENT, IN ACCORDANCE WITH YOUR PAYMENT INSTRUCTIONS, BY [TIME] A.M. ([CITY] TIME) ON THE FOLLOWING BUSINESS DAY.

LOC EXPIRATION DATE. THIS LETTER OF CREDIT SHALL AUTOMATICALLY TERMINATE AT [TIME] P.M. ([CITY] TIME) ON THE EARLIEST TO OCCUR OF (A) THE SURRENDER BY YOU OF THE ORIGINAL LETTER OF CREDIT FOR CANCELLATION ALONG WITH THE BENEFICIARY'S AUTHORIZATION LETTER, (B) OUR HONORING OF DRAFTS PRESENTED HEREUNDER THAT EQUALS THE AMOUNT ORIGINALLY AVAILABLE TO BE DRAWN HEREUNDER AND (C) THE STATED EXPIRATION DATE (AS SUCH DATE MAY BE EXTENDED BY US IN WRITING) (OR, IF NOT A BUSINESS DAY, THE IMMEDIATELY SUCCEEDING BUSINESS DAY). THE EARLIEST OF THE DATES DESCRIBED IN THE PRECEDING SENTENCE IS HEREIN REFERRED TO AS THE "LOC EXPIRATION DATE".

TRANSFER. THIS LETTER OF CREDIT IS TRANSFERABLE UPON DELIVERY TO US OF THIS LETTER OF CREDIT ACCOMPANIED BY A NOTICE OF TRANSFER IN THE FORM ATTACHED AS EXHIBIT B. UPON RECEIPT THEREOF AND SURRENDER OF THIS LETTER OF CREDIT TO US, WE SHALL ISSUE A REPLACEMENT IRREVOCABLE LETTER OF CREDIT ON THE SAME TERMS AS THIS LETTER OF CREDIT BUT WITH A REVISED EXHIBIT A TO THE LETTER OF CREDIT SHOWING THE NAME OF THE TRANSFEREE INSTEAD OF THE NAME OF MANILA ELECTRIC COMPANY.

FULL AGREEMENT. THIS LETTER OF CREDIT SETS FORTH IN FULL OUR UNDERTAKING AND SUCH UNDERTAKING SHALL NOT IN ANY WAY BE MODIFIED, AMENDED, AMPLIFIED, OR LIMITED BY REFERENCE TO ANY DOCUMENT, INSTRUMENT, OR AGREEMENT REFERRED TO HEREIN, EXCEPT ONLY THE DEMAND CERTIFICATES AND DRAFTS.

GOVERNING LAW. THIS LETTER OF CREDIT, EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, SHALL BE GOVERNED BY THE INTERNAL LAWS OF THE REPUBLIC OF THE PHILIPPINES. THIS LETTER OF CREDIT SHALL BE SUPPLEMENTED BY THE PROVISIONS (TO THE EXTENT THAT SUCH PROVISIONS ARE NOT INCONSISTENT WITH THIS LETTER OF CREDIT AND SUCH ARTICLE 5) OF THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (2007 REVISION), INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 600, EXCEPT ARTICLE 32 THEREOF.

ALL DOCUMENTS PRESENTED TO US IN CONNECTION WITH ANY DEMAND FOR PAYMENT HEREUNDER, AS WELL AS ALL NOTICES AND OTHER COMMUNICATIONS TO US IN RESPECT OF THIS LETTER OF CREDIT SHALL BE IN WRITING AND ADDRESSED AND PRESENTED TO US AT OUR OFFICE AT [NAME OF BANK AND ADDRESS], SPECIFICALLY REFERRING TO THE NUMBER AND DATE OF THIS LETTER OF CREDIT. SUCH DOCUMENTS, NOTICES AND OTHER WRITTEN COMMUNICATIONS MAY BE: (A) PERSONALLY DELIVERED TO US; OR (B) SENT TO US BY FACSIMILE TO: [FAX NUMBER] AND PROMPTLY CONFIRMED BY ELECTRONIC MAIL FROM THE AUTHORIZED SIGNATORY TO: [EMAIL ADDRESS]. IF DELIVERY IS MADE IN ACCORDANCE WITH SUB-CLAUSE (B), YOU SHALL ALSO DELIVER AN ORIGINAL OF SUCH DOCUMENT, NOTICE AND OTHER WRITTEN COMMUNICATION BY OVERNIGHT MAIL TO THE ADDRESS PROVIDED ABOVE, *PROVIDED* THAT OUR HONORING OF DEMAND IN

ACCORDANCE WITH THE DEMAND PROCEDURES IS NOT CONDITIONAL ON OUR RECEIPT OF SUCH ORIGINAL.

WE MAY FROM TIME TO TIME MODIFY THE FACSIMILE NUMBER AND E-MAIL ADDRESS SET FORTH ABOVE BY WRITTEN NOTICE TO YOU.

SIGNED FOR AND ON BEHALF OF
[NAME OF BANK]

BY: _____
NAME:
TITLE:

Three handwritten signatures or initials are present at the bottom right of the page. The first is a stylized, cursive signature. The second is a large, bold letter 'R'. The third is a circular stamp or seal with some illegible text inside.

EXHIBIT A TO LETTER OF CREDIT NO.

DEMAND CERTIFICATE OF MANILA ELECTRIC COMPANY

[BANK AND ADDRESS DETAILS]

I AM A DULY AUTHORIZED OFFICER OR EMPLOYEE OF MANILA ELECTRIC COMPANY ("MERALCO"). DEMAND IS HEREBY MADE FOR PAYMENT IN THE AMOUNT OF US\$/PHP, UNDER THAT CERTAIN IRREVOCABLE LETTER OF CREDIT NUMBER ISSUED BY YOU, DATED [DATE] (THE "LETTER OF CREDIT"), ISSUED FOR THE ACCOUNT OF _____ (THE " "). IN CONNECTION WITH SUCH DEMAND, I HEREBY CERTIFY AS FOLLOWS ON BEHALF OF MERALCO:

- (A) MERALCO IS THE PURCHASER UNDER THAT CERTAIN POWER SUPPLY AGREEMENT, DATED AS OF [DATE] (THE "POWER SUPPLY AGREEMENT"), BY AND AMONG THE _____ AND MERALCO.
- (B) MERALCO IS MAKING A DRAWING UNDER THE LETTER OF CREDIT: *[SELECT ONE AND DELETE UNUSED BRACKETED TEXT AND THESE ITALICIZED INSTRUCTIONS:*

[PURSUANT TO ITS RIGHTS UNDER SECTION [INSERT RELEVANT SECTION] OF THE POWER SUPPLY AGREEMENT AND THE AMOUNT OF THIS DEMAND FOR PAYMENT IS IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE POWER SUPPLY AGREEMENT.]

[BECAUSE AS OF *[INSERT DATE]*, THE _____ HAS NOT FURNISHED MERALCO A REPLACEMENT LETTER OF CREDIT OR OTHER SECURITY SATISFACTORY TO MERALCO.

THE DRAFT ACCOMPANYING THIS DEMAND CERTIFICATE IS DRAWN IN THE AMOUNT SPECIFIED ABOVE. IF THIS DEMAND CERTIFICATE IS PRESENTED TO YOU BY [TIME] A.M. ([CITY] TIME) ON A BUSINESS DAY (AS DEFINED IN THE LETTER OF CREDIT) THEN BY [TIME] P.M. ([CITY] TIME) ON SUCH BUSINESS DAY, OR IF THIS DEMAND CERTIFICATE IS PRESENTED LATER THAN [TIME] A.M. ([CITY] TIME), THEN BY [TIME] A.M. ([CITY] TIME) ON THE FOLLOWING BUSINESS DAY, PLEASE TRANSFER THE AMOUNT SPECIFIED ABOVE TO MERALCO'S ACCOUNT AT ACCOUNT NO. BANK *[INSERT WIRE INSTRUCTION FOR ACCOUNT OF MERALCO]* FOR THE ATTENTION OF:

IN WITNESS WHEREOF, MERALCO HAS EXECUTED AND DELIVERED THIS DEMAND CERTIFICATE AS OF THE DAY OF, 20.....

MANILA ELECTRIC COMPANY

BY: _____
NAME:
TITLE:

EXHIBIT B TO LETTER OF CREDIT NO.

[BANK NAME AND ADDRESS DETAILS]

NOTICE OF TRANSFER

RE: IRREVOCABLE LETTER OF CREDIT NO.

THE UNDERSIGNED, A DULY AUTHORIZED OFFICER OF (THE "BENEFICIARY"), HEREBY ADVISES YOU THAT ALL RIGHTS OF THE UNDERSIGNED BENEFICIARY TO DRAW UNDER THE IRREVOCABLE LETTER OF CREDIT REFERRED TO ABOVE (THE "LETTER OF CREDIT") HAVE BEEN, AND ARE HEREBY IRREVOCABLY TRANSFERRED TO [NAME OF TRANSFEREE] (THE "TRANSFEREE"):

(NAME OF TRANSFEREE)

(ADDRESS OF TRANSFEREE)

BY THIS TRANSFER, ALL RIGHTS OF THE BENEFICIARY IN THE LETTER OF CREDIT ARE TRANSFERRED TO THE TRANSFEREE AND SAID TRANSFEREE SHALL HEREAFTER HAVE EXCLUSIVELY THE SOLE RIGHTS AS BENEFICIARY OF THE LETTER OF CREDIT, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO DRAW FUNDS UNDER THE LETTER OF CREDIT IN ACCORDANCE WITH ITS TERMS.

AS PROVIDED UNDER THE TERMS OF THE LETTER OF CREDIT, PLEASE ISSUE A REPLACEMENT IRREVOCABLE LETTER OF CREDIT IN THE NAME OF THE TRANSFEREE, ADDRESSED TO THE TRANSFEREE AT THE ADDRESS SET FORTH ABOVE, IN THE AMOUNT EQUAL TO THE OUTSTANDING AMOUNT OF THE LETTER OF CREDIT ON THE DATE OF THIS NOTICE, AND OTHERWISE ON THE SAME TERMS AS THE ORIGINAL LETTER OF CREDIT BUT WITH A REVISED EXHIBIT A TO THE LETTER OF CREDIT SHOWING THE NAME OF THE TRANSFEREE INSTEAD OF THE NAME OF THE BENEFICIARY.

ACCOMPANYING THIS NOTICE OF TRANSFER IS THE ORIGINAL LETTER OF CREDIT, WHICH IS BEING SURRENDERED TO YOU IN TRUST FOR THE BENEFIT OF SAID TRANSFEREE, UNTIL SUCH TIME AS YOU SHALL HAVE ISSUED A REPLACEMENT IRREVOCABLE LETTER OF CREDIT IN ACCORDANCE WITH THE TERMS OF THE LETTER OF CREDIT AND THIS NOTICE.



SINCERELY,
MANILA ELECTRIC COMPANY

BY: _____
NAME:
TITLE:



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:

Calendar Quarter is defined by the following dates: (i) December 26 to March 25, (ii) March 26 to June 25, (iii) June 26 to September 25, and (iv) September 26 to December 25.

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 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.

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 Allowance Days Taken**, and **Full Load Equivalent Forced Outage Allowance Days Taken** shall be construed similarly with respect to Scheduled Outages, and Forced Outages, respectively.

Monthly Power Bill or MPB means the payment to be made by Meralco for the Contract Capacity and Associated Energy (and Replacement Power), upon COD, and/or Commissioning Energy and Replacement Power, prior to COD, in each Billing Period.

WEP means the Ex-Ante Price (EAP) or any WESM Price which will replace the EAP as per WESM rules at Plant's Delivery Point.

B. MONTHLY POWER BILL UPON COMMERCIAL OPERATIONS DATE

The MPB upon COD shall consist of Capacity Payment, Energy Payment, and Other Payment. The Capacity Payment consists of Component A (MCP), Component B (MIFP) and Component C (MFOM) and the Energy Payment consists of Component D (MFP), and Component E (MVOM). Other Payments are Component F (RCP), Component G (LRAP), and Component H (ASCRP). Thus, the MPB upon COD ("MPB") for Contract Capacity and Associated Energy (and Replacement Power) for each Billing Period shall be equal to:

$$\text{MPB} = \text{MCP} + \text{MIFP} + \text{MFOM} + \text{MFP} + \text{MVOM} + \text{RCP} - \text{LRAP} + \text{ASCRP}$$

The MPB is exclusive of the applicable Value Added Tax.

Capacity Payments

1. Component A – Monthly Capacity Payment

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

$$\text{MCP} = (\text{DCP} * \text{CC} * 1000 * \text{EDAM}) + \text{MCPEE}$$

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:

$$\text{DCP} = \text{CYF} * \text{ACF}_0 / \text{TEDA}$$

Where:

ACF_0 = Annual Capacity Fee, (in PhP/kW-year), set forth in Schedule I of this Appendix E

CYF = Contract Year Factor calculated as:

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

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

Where:

CYD = Contract Year Days, the number of days in the relevant Contract Year.

TEDA = the Target Full Load Equivalent Days of Contract Capacity 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. By formula,

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

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

Where:

CYF = as previously defined

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

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

Where:

CYF = as previously defined

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

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

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

Where:

CYF = as previously defined

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

CC = as defined in Article 1, in MW

EDAM = the adjusted Full Load Equivalent Days of Contract Capacity Availability, (in days), achieved in the relevant Billing Period during Days in the Billing Period, calculated as:

- (1) Gross Full Load Equivalent Days of Contract Capacity Availability (GEDAM),

- (2) Plus Adjustment in Availability Days for Scheduled Outage Days, or Forced Outage Days in excess of SOA and FOA, respectively (AADE),
- (3) Less Adjustment in Availability Days of Unutilized SOA and FOA (AADU).

By formula:

$$EDA_M = GEDA_M + AADE - AADU$$

Where:

$GEDA_M$ = the Gross Full Load Equivalent Days of Contract Capacity 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 Force Majeure Days Taken, during the Billing Period.

By formula:

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

Where:

BPD = Billing Period Days, the number of Days in the Billing Period

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

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

FMT_M = the Full Load Equivalent Force Majeure Days Taken (in days) during the Billing Period, in accordance with Section 17.3.1 of this Agreement, and shall be computed in accordance with Schedule 4 of this Appendix E.

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

$$AADE = SOE_M + FOE_M$$

Where:

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

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

$SOA =$ 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 $(FOT_A \geq FOA)$ and $[(FOT_A - FOA) \geq FOT_M]$, then: $FOE_M = FOT_M$ (in days)
- ii. If $(FOT_A \geq FOA)$ and $[(FOT_A - FOA) < FOT_M]$, then: $FOE_M = FOT_A - FOA$ (in days)
- iii. If $(FOT_A < FOA)$, then: $FOE_M = 0$ (in days)

$FOA =$ 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

$AADU =$ Adjustment in Availability Days due to unutilized SOA, and FOA 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: $AADU = 0$ (in days)

Where:

$EDA_{A(M-1)}$ = the Cumulative Full Load Equivalent Days of Contract Capacity 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 SOT_M , FOT_M , and FMT_M , Full Load Equivalent Days shall be computed in accordance with Schedule 5 of this Appendix E.

MCPEE is the Monthly Capacity Payment for Excess Energy for the Billing Period, in PhP, calculated as follows:

$$MCPEE = \sum EE_h * 0.5 * (DCP / k)$$

Where:

h = the relevant Trading Interval for which the payment is being calculated

k = number of Trading Intervals per Day

EE_h = Excess Energy in accordance with Section 5.3 of Appendix G, in kWh, shall be calculated as:

If $BCQ_h > CCE$, then $EE_h = (BCQ_h - CCE)$

Otherwise, $EE_h = 0$

Where:

BCQ_h = BCQ declared during the relevant Trading Interval, in accordance with Section 6.4.1 of this Agreement, in kWh

CCE = energy corresponding to one Trading Interval of the Contract Capacity, in kWh

DCP = as previously defined

2. Component B – Monthly Interconnection Facilities Payment

Component B is the Monthly Interconnection Facilities Payment for the Billing Period calculated as follows:

$$\text{MIFP} = \text{MIFCP} + \text{MIFFOMP}$$

Where:

MIFP = the payment for Interconnection Facilities in the Billing Period, in PhP.

MIFCP = the payment for the recovery of capital cost for the Interconnection Facilities in the Billing Period, in PhP, calculated as follows:

$$\text{MIFCP} = (\text{CYF} * \text{IFCF} / \text{TEDA}) * \text{CC} * 1000 * \text{EDA}_M$$

Where:

CYF = as previously defined

IFCF = the Annual Interconnection Facilities Capacity Fee in PhP/kW-year, as set forth in Schedule I 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 for the Interconnection Facilities for the Billing Period, in PhP, calculated as follows:

$$\text{MIFFOMP} = (\text{CYF} * \text{IFFOM} / \text{TEDA}) * \text{PH CPI}_i / \text{PH CPI}_0 * \text{CC} * 1000 * \text{EDA}_M$$

Where:

CYF = as previously defined

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

TEDA = as previously defined

PH CPI_i = the average Philippine Consumer Price Index for All Income Households in the Philippines – All Items (2012 = 100) for the last three calendar months prior to the current Billing Period for which the invoice is being prepared.

PH CPI₀ = the Philippine Consumer Price Index for All Income Households in the Philippines – All Items (2012=100) as published by the Philippine Statistics Authority, as set forth in Schedule 1 to this Appendix E.

CC = as previously defined

EDA_M = as previously defined

In the event that any of the indices (a) becomes unavailable, (b) is replaced by a new benchmark rate, or (c) ceases to exist, the Parties shall agree to adopt a new applicable price index benchmark rate, as published by the Philippine Statistics Authority or an appropriate Governmental Instrumentality.

3. Component C – Monthly Fixed O&M Payment

Component C is the Monthly Fixed O&M Payment for the Billing Period calculated as follows:

$$\text{MFOM} = (\text{MFOM}_{\text{USD,Non-Esc}} + \text{MFOM}_{\text{USD,Esc}}) + (\text{MFOM}_{\text{PhP,Non-Esc}} + \text{MFOM}_{\text{PhP,Esc}})$$

Where:

MFOM = the Monthly Fixed O&M payment for the Billing Period (in PhP).

MFOM_{USD,Non-Esc} = the non-escalating USD denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PhP), calculated as:

$$\text{MFOM}_{\text{USD,Non-Esc}} = \text{DFOM}_{\text{USD,Non-Esc}} * \text{CC} * 1000 * \text{EDA}_M * \text{FX}$$

Where:

DFOM_{USD,Non-Esc} = the Daily Fixed O&M Fee – non-escalating USD denominated portion (in USD/kW-day), calculated as:

$$\text{DFOM}_{\text{USD,Non-Esc}} = \text{CYF} * \text{AFOM}_{\text{USD,Non-Esc}} / \text{TEDA}$$

Where:

CYF = as previously defined.

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

TEDA = as previously defined

CC = as previously defined

$EDA_M =$ as previously defined

$FX =$ means, in determining the MFP_{cap} , the closing rate for USD to PhP as announced by the Bangko Sentral ng Pilipinas (<https://www.bsp.gov.ph/SitePages/Statistics/ExchangeRate.aspx>), on the last Business Day of the current Billing Period. In determining the MFP_{act} , FX shall mean the actual weighted average of the foreign exchange rates applicable for US Dollar purchases used in the settlement of fuel inventory invoices for the relevant Billing Period.

$MFOM_{USD,Esc} =$ the escalating USD denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PhP), calculated as:

$$MFOM_{USD,Esc} = DFOM_{USD,Esc} * US\ CPI_i / US\ CPI_0 * CC * 1000 * EDA_M * FX$$

Where:

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

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

Where:

$CYF =$ as previously defined.

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

$TEDA =$ as previously defined

$US\ CPI_i =$ the average US Consumer Price Index City Average for All Urban Consumers – All Items (1982-84=100) for the last three calendar months prior to the current Billing Period for which the invoice is being prepared.

$US\ CPI_0 =$ the US Consumer Price Index City Average for All Urban Consumers – All Items (1982-84=100) as published by the US Bureau of Labor Statistics, as set forth in Schedule 1 to this Appendix E.

$CC =$ as previously defined

$EDA_M =$ as previously defined

$FX =$ as previously defined

$MFOM_{PhP,Non-Esc} =$ the non-escalating PhP denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PhP), calculated as:

$$MFOM_{PhP,Non-Esc} = DFOM_{PhP,Non-Esc} * CC * 1000 * EDA_M$$

Where:

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

$$DFOM_{PhP, Non-Esc} = CYF * AFOM_{PhP, Non-Esc} / TEDA$$

Where:

CYF = as previously defined.

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

$TEDA$ = as previously defined

CC = as previously defined

$EDAM$ = as previously defined

$MFOM_{PhP, Esc}$ = the escalating PhP denominated portion of the Monthly Fixed O&M Payment for the Billing Period (in PhP), calculated as:

$$MFOM_{PhP, Esc} = DFOM_{PhP, Esc} * PH\ CPI_i / PH\ CPI_0 * CC * 1000 * EDAM$$

Where:

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

$$DFOM_{PhP, Esc} = CYF * AFOM_{PhP, Esc} / TEDA$$

Where:

CYF = as previously defined.

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

$TEDA$ = as previously defined

$PH\ CPI_i$ = as previously defined

$PH\ CPI_0$ = as previously defined

CC = as previously defined

$EDAM$ = as previously defined

In the event that any of the indices (a) becomes unavailable, (b) is replaced by a new benchmark rate, or (c) ceases to exist, the Parties shall agree to adopt a new applicable price index benchmark rate, as published by the Philippine Statistics Authority and/or US Bureau of Labor Statistics or an appropriate Governmental Instrumentality.

Energy Payments

4. Component D – Monthly Fuel Payment

Component D is the Monthly Fuel Payment for the Billing Period calculated as follows:

$$\text{MFP} = \text{minimum} (\text{MFP}_{\text{cap}}, \text{MFP}_{\text{act}}) + \text{MRP}$$

Where:

MFP = the Monthly Fuel Payment for the relevant Billing Period (in PhP).

MFP_{cap} = the monthly fuel payment calculated as the sum of fuel payments for all Trading Intervals within the relevant Billing Period (in PhP), calculated as:

For Contract Year 1 to 10

$$\text{MFP}_{\text{cap}} = \sum [(\text{FP}_{\text{cap},m}) * (\text{BCQ}_h - \text{RP}_h) * \text{GNPHR}_h / 1,000,000] * \text{FX}$$

For Contract Year 11 to 20

$$\text{MFP}_{\text{cap}} = \sum [(\text{FP}_{\text{act}}) * (\text{BCQ}_h - \text{RP}_h) * \text{GNPHR}_h / 1,000,000] * \text{FX}$$

In the event that $(\text{BCQ}_h - \text{RP}_h) \leq 0$, then use BCQ_h instead of $(\text{BCQ}_h - \text{RP}_h)$.

Where:

FP_{cap,m} = the adjusted quarterly fuel price (in USD/MMBtu) for the given Calendar Quarter m in the Contract Year, calculated as:

$$\text{FP}_{\text{cap},m} = F_o * P_n / P_o$$

Where:

F_o = the simple average of the quarterly fuel price forecast for the four quarters beginning first quarter of 2021, in USD/MMBtu, as set forth in Schedule 1 of this Appendix E.

P_n = the simple average of the actual quarterly fuel prices from the preceding four Calendar Quarters, in USD/MMBtu. The basis of the actual quarterly fuel prices shall be from the nominated fuel price index of the Bidder.

P_o = the simple average of the actual quarterly fuel prices for the four quarters beginning first quarter of 2021, in USD/MMBtu.

FP_{act} = the actual weighted average price of the fuel inventory (in USD/MMBtu) for the relevant Billing Period. For clarity, any actual fuel handling cost, actual freight cost, and actual fuel excise tax shall be excluded in this component. In the event that Power Supplier has provided BCQ in accordance with Section 9.1 or Section 17.3.1 of the Agreement, and the FP_{act} for the relevant Billing Period is not available, the FP_{act} for the relevant Billing Period shall be the FP_{act} used in the most recent Final Invoice served by Power Supplier to Meralco.

h = as previously defined

BCQ_h = as previously defined

RP_h = means the hourly energy declared at the WESM as BCQ by Power Supplier for Meralco, in accordance with Appendix G, during outages of Power Supplier that exceeds the Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days, or during period prior to COD, (in kWh). In case the Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days are exceeded, Power Supplier shall provide the Metered Quantity of the Plant for the computation of Replacement Power.

$GNPHR_h$ = the net plant heat rate corresponding to the Load Factor during the relevant Trading Interval "h", which shall be in accordance with the Guaranteed Net Plant Heat Rate Schedule 2 of this Appendix E, in Btu/kWh. For the avoidance of doubt, the Load Factor, expressed in %, which shall be rounded-off to the nearest whole number %, shall be calculated using the following formula:

$$\text{Load Factor} = BCQ_h / CCE$$

Where:

BCQ_h = as previously defined

CCE = as previously defined

If the resulting Load Factor is below the lowest Load Factor in Schedule 2 of Appendix E, the applicable $GNPHR_h$ shall be the value corresponding to the lowest Load Factor in Schedule 2 of Appendix E.

If the resulting Load Factor is higher than 100%, the applicable $GNPHR_h$ shall be the value corresponding to the $GNPHR_h$ at 100% Load Factor.

$FX =$ as previously defined

$MFP_{act} =$ the monthly fuel payment calculated using the actual net plant heat rate within the relevant Billing Period (in PhP), calculated as:

$$MFP_{act} = [(FP_{act}) * (\Sigma BCQ_h - \Sigma RP_h) * HR_{act}/1,000,000] * FX$$

In the event that $(\Sigma BCQ_h - \Sigma RP_h) \leq 0$, then use ΣBCQ_h instead of $(\Sigma BCQ_h - \Sigma RP_h)$.

Where:

$FP_{act} =$ as previously defined

$BCQ_h =$ as previously defined

$RP_h =$ as previously defined

$HR_{act} =$ the actual net plant heat rate, in Btu/kWh, for the relevant Billing Period. In the event that Power Supplier has provided BCQ in accordance with Section 9.1 or Section 17.3.1 of the Agreement, and the HR_{act} for the relevant Billing Period is not available, the HR_{act} for the relevant Billing Period shall be the HR_{act} used in the most recent Final Invoice served by Power Supplier to Meralco.

$FX =$ as previously defined

For avoidance of doubt, BCQs for Meralco pursuant to Section 6 of Appendix G shall be paid in accordance therewith.

MRP is the Monthly Replacement Power Payment for the Billing Period calculated as follows:

$$MRP = \Sigma (RP_h * \text{minimum (WEP, MVPR)})$$

Where:

$MRP =$ the payment for the Replacement Power for the Billing Period, in PhP.

$RP_h =$ as previously defined

WEP = as previously defined

MVPR = the Monthly Variable Payment Rate, where:

$$MVPR = (\text{minimum } (MFP_{cap}, MFP_{act}) + MVOM) / \Sigma(BCQ_h - RP_h)$$

Where:

MFP_{cap} = as previously defined

MFP_{act} = as previously defined

MVOM = as defined in Component E below

BCQ_h = as previously defined

RP_h = as previously defined

5. Component E – Monthly Variable O&M Payment

Component E is the Monthly Variable O&M payment for the Billing Period calculated as follows:

$$MVOM = [(MVOM_{USD,Non-Esc} + MVOM_{USD,Esc}) + (MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})] * \Sigma(BCQ_h - RP_h)$$

In the event that $(BCQ_h - RP_h) \leq 0$, then use BCQ_h instead of $(BCQ_h - RP_h)$.

Where:

MVOM = the Monthly Variable O&M payment for the Billing Period (in PhP).

$MVOM_{USD,Non-Esc}$ = the non-escalating USD denominated portion of the Monthly Variable O&M Payment for the Billing Period (in PhP/kWh), calculated as:

$$MVOM_{USD,Non-Esc} = VOM_{USD,Non-Esc} * FX$$

Where:

$VOM_{USD,Non-Esc}$ = the base non-escalating USD Variable O&M Fee, in USD/kWh, as set forth in Schedule 1 to this Appendix E.

FX = as previously defined

$MVOM_{USD,Esc}$ = the escalating USD denominated portion of the Monthly Variable O&M Payment for the Billing Period (in PhP/kWh), calculated as:

$$MVOM_{USD,Esc} = VOM_{USD,Esc} * US\ CPI_t / US\ CPI_0 * FX$$

Where:

$VOM_{USD,Esc}$ = the base escalating USD Variable O&M Fee, in USD/kWh, as set forth in Schedule 1 to this Appendix E.

$US\ CPI_i$ = as previously defined

$US\ CPI_0$ = as previously defined

FX = as previously defined

$MVOM_{PhP,Non-Esc}$ = the non-escalating PhP denominated portion of the Monthly Variable O&M Payment for the Billing Period (in PhP/kWh), calculated as:

$$MVOM_{PhP,Non-Esc} = VOM_{PhP,Non-Esc}$$

Where:

$VOM_{PhP,Non-Esc}$ = the base non-escalating PhP Variable O&M Fee, in PhP/kWh, as set forth in Schedule 1 to this Appendix E.

$MVOM_{PhP,Esc}$ = the escalating PhP denominated portion of the Monthly Variable O&M Payment for the Billing Period (in PhP/kWh), calculated as:

$$MVOM_{PhP,Esc} = VOM_{PhP,Esc} * PH\ CPI_i / PH\ CPI_0$$

Where:

$VOM_{PhP,Esc}$ = the base escalating PhP Variable O&M Fee, in PhP/kWh, as set forth in Schedule 1 to this Appendix E.

$PH\ CPI_i$ = as previously defined

$PH\ CPI_0$ = as previously defined

BCQ_h = as previously defined.

RP_h = as previously defined.

In the event that any of the indices (a) becomes unavailable, (b) is replaced by a new benchmark rate, or (c) ceases to exist, the Parties shall agree to adopt a new applicable price index benchmark rate, as published by the Philippine Statistics Authority and/or US Bureau of Labor Statistics or an appropriate Governmental Instrumentality.

6. Component F – Reimbursable Cost Payment (RCP)

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

$$\text{RCP} = \text{RPTP} + \text{SDSU} + \text{SP}$$

6.1 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.

6.2 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 shutdown of the Plant for reasons requested by Meralco.

6.3 Supplemental Payments (SP)

Supplemental payments shall include the following:

- (a) Energy and Environmental Tax, if applicable;
- (b) any applicable NGCP PDS and SO Charges 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; (in the proportion of the BCQ to the total MQ declared by the plant)
- (e) fees charged by the Market Operator; and
- (f) local business taxes.

7. Component G – Line Rental Adjustment Payment (LRAP)

The Line Rental Adjustment Payment shall cover the cost of Line Rental Adjustment for the relevant Billing Period, in PhP, calculated as follows:

$$\text{If } (\Sigma \text{LR}_h) > (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n})$$

$$\text{LRAP} = (\Sigma \text{LR}_h) - (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n})$$

else,

$$\text{LRAP} = 0$$

Where:

ΣLR_h = summation of actual hourly line rental charges based on Market Operator issued billing, in PhP

ΣBCQ_h = as previously defined

$LR_{CAP,n}$ = the Annual Line Rental Cap for Contract Year n, as set forth in Schedule 1 of this Appendix E.

8. Component H – Ancillary Services Cost Recovery Payment (ASCRP)

In view of the DOE Circular No. DC2019-012-0018, the Ancillary Services Cost Recovery Payment shall cover the cost recovery of the ancillary services charges based on a proportionate allocation of ancillary services charges among the affected power industry participants and a treatment of such ancillary services charges as pass-through costs under prevailing regulations. The ancillary services charges contemplated under this Component H shall be the lower between the Ancillary Services Cost Recovery cap or the actual ancillary services charges incurred by the Power Supplier for the relevant Billing Period. In any case, the recovery of the AS Cost can be charged as a pass through cost only upon final approval or resolution by the ERC that the AS cost recovery can be passed through to the DU's customers.

$ASCRP$ = minimum ($ASCR_{actual}$, [$ASCR_{CAP,n} * (\Sigma BCQ_h - \Sigma RP_h)$])

In the event that $(\Sigma BCQ_h - \Sigma RP_h) \leq 0$, then use ΣBCQ_h instead of $(\Sigma BCQ_h - \Sigma RP_h)$.

Where:

$ASCR_{actual}$ = actual ancillary services charges imposed and billed to the Power Supplier based on the approved implementing rules and guidelines of DOE Circular No. DC2019-012-0018, in PhP, provided that if the Power Supplier's Plant is not fully contracted under this Agreement, the Parties shall agree on the methodology to allocate the actual ancillary services charges relative to the Contract Capacity and/or Associated Energy, as applicable. Power Supplier can not impose or charge Component H to Meralco unless Parties have agreed on an allocation methodology.

$ASCR_{CAP,n}$ = the Annual Ancillary Service Cost Recovery Cap for Contract Year n, in PhP/kWh, as set forth in Schedule 1 of this Appendix E.

ΣBCQ_h = as previously defined

ΣRP_h = as previously defined

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

C. MONTHLY POWER BILL PRIOR TO COMMERCIAL OPERATIONS DATE

The MPB prior to COD shall consist of Commissioning Energy Payment, Replacement Power Payment, Line Rental Adjustment Payment and Ancillary Services Cost Recovery Payment. Thus, the MPB prior to COD ("MPB") for Contract Capacity and Associated Energy (and Replacement Power) for each Billing Period shall be equal to:

$$\text{MPB} = \text{CEP} + \text{RPP} - \text{LRAP} + \text{ASCRP}$$

The MPB is exclusive of the applicable Value Added Tax.

The payment components shall be computed as follows:

1. Component I – Commissioning Energy Payment (CEP)

The CEP shall be the payment for the Commissioning Energy purchased by Meralco in accordance to Section 5 of this Agreement and shall be equivalent to the sum of the actual landed fuel cost incurred during the Commissioning period and the Monthly Variable O&M Payment (MVOM).

$$\text{CEP} = [(\text{CE}_{\text{BCQ}} / \text{CE}_{\text{GEN}}) * (\text{Fuel Cost}_{\text{ACTUAL}})] + [\text{CE}_{\text{BCQ}} * (\text{MVOM}_{\text{USD,Non-Esc}} + \text{MVOM}_{\text{USD,Esc}} + \text{MVOM}_{\text{PhP,Non-Esc}} + \text{MVOM}_{\text{PhP,Esc}})]$$

In the event that $\text{CE}_{\text{GEN}} = 0$, $(\text{CE}_{\text{BCQ}} / \text{CE}_{\text{GEN}}) = 0$.

Where:

CEP = the Commissioning Energy Payment for the relevant Billing Period (in PhP).

CE_{BCQ} = Commissioning Energy generated by Power Supplier and declared as BCQ to Meralco during the relevant Billing Period, in kWh

CE_{GEN} = Commissioning Energy generated by Power Supplier during the relevant Billing Period, in kWh

$\text{Fuel Cost}_{\text{ACTUAL}}$ = actual total landed fuel cost of Power Supplier attributable to the Commissioning Energy generated by Power Supplier during the relevant Billing Period, in PhP

$\text{MVOM}_{\text{USD,Non-Esc}}$ = as previously defined

$\text{MVOM}_{\text{USD,Esc}}$ = as previously defined

$\text{MVOM}_{\text{PhP,Non-Esc}}$ = as previously defined

$\text{MVOM}_{\text{PhP,Esc}}$ = as previously defined

2. Component J – Replacement Power Payment (RPP)

In the event that Power Supplier has provided Replacement Power after Scheduled Commercial Operations Date and prior to the Commercial Operations Date, the payment for Replacement Power shall be calculated as follows:

$$RPP = \sum ((RPR) * (BCQ_h - CE_{BCQ}))$$

Where:

RPP = the total payment for Replacement Power for the relevant Billing Period, in PhP.

RPR = the Replacement Power Rate, calculated as follows:

RPR = minimum (CEC, WEP)

Where:

CEC = Commissioning Energy Charge, computed as:

If Fuel Cost_{ACTUAL} is not available,

$$CEC = \left[\left[\sum ((FP_{cap,m} * RP_h * GNP_{HR_h} / 1,000,000) * FX) \right] / \sum RP_h \right] + [(MVOM_{USD,Non-Esc} + MVOM_{USD,Esc} + MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})]$$

Where:

$FP_{cap,m}$ = FP_{cap} , as previously defined, for the Calendar Quarter of the relevant Billing Period

RP_h = as previously defined

GNP_{HR_h} = GNP_{HR} , as previously defined, at Contract Year 1. For the avoidance of doubt, the Load Factor, shall be calculated as Load Factor = BCQ_h / CCE , where CCE is as previously defined in Component D of this Appendix.

FX = as previously defined

$MVOM_{USD,Non-Esc}$ = as previously defined

$MVOM_{USD,Esc}$ = as previously defined

$MVOM_{PhP,Non-Esc}$ = as previously defined

$MVOM_{PhP,Esc}$ = as previously defined

Else,

$$CEC = CEP/CE_{BCQ}$$

Where:

CEP = as previously defined

CE_{BCQ} = as previously defined

WEP = as previously defined

BCQ_h = as previously defined

CE_{BCQ} = as previously defined

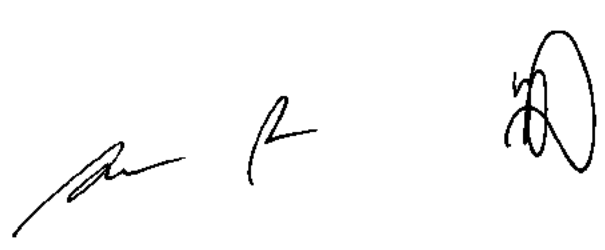
3. *LRAP = as previously defined*

For avoidance of doubt, LR_{CAP} for Contract Year 1 shall be used.

4. *ASCRP = as previously defined*

For avoidance of doubt, ASCR_{CAP} for Contract Year 1 shall be used.

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



SCHEDULE 1

TABLE 1. BASE RATES

Annual Capacity Fee	ACF ₀	PhP/kW-year	9,289.5967
Annual Interconnection Facilities Capacity Fee	IFCF	PhP/kW-year	0.0000
Annual Interconnection Facilities FOM Fee	IFFOM	PhP/kW-year	0.0000
Annual Non-escalating Fixed O&M Fee (USD)	AFOM _{USD,Non-Esc}	USD/kW-year	0.0000
Annual Escalating Fixed O&M Fee (USD)	AFOM _{USD,Esc}	USD/kW-year	0.0000
Annual Non-escalating Fixed O&M Fee (PhP)	AFOM _{PhP,Non-Esc}	PhP/kW-year	4,803.0160
Annual Escalating Fixed O&M Fee (PhP)	AFOM _{PhP,Esc}	PhP/kW-year	0.0000
Non-escalating Variable O&M Fee (USD)	VOM _{USD,Non-Esc}	USD/kWh	0.0000
Escalating Variable O&M Fee (USD)	VOM _{USD,Esc}	USD/kWh	0.0000
Non-escalating Variable O&M Fee (PhP)	VOM _{PhP,Non-Esc}	PhP/kWh	0.1818
Escalating Variable O&M Fee (PhP)	VOM _{PhP,Esc}	PhP/kWh	0.0000
Base PH CPI (2012=100)	PH CPI ₀	Dec 2020	126.2000
Base US CPI (1982-84=100)	US CPI ₀	Dec 2020	260.4740
Base Full Load Equivalent Scheduled Outage Allowance Days	BSOA	days	15.0000
Base Full Load Equivalent Forced Outage Allowance Days	BFOA	days	3.0000
VAT Rate	VAT	%	12.00%
Nominated Fuel Price Index	globalCOAL.com [GC NewCastle]		
Coal Rank	4,200 kcal/kg (GAR)		

TABLE 2. Quarterly Fuel Price Forecast

Quarter, m	Fuel Price Forecast, in USD/MMBtu
1 st Quarter 2021	2.2500
2 nd Quarter 2021	2.2500
3 rd Quarter 2021	2.2500
4 th Quarter 2021	2.2500
Average of the Quarterly Fuel Price Forecast (F ₀)	2.2500

TABLE 3. Annual Line Rental Cap

Year	Annual Line Rental Cap LR _{CAP} (PhP/kWh)
Contract Year 1	0.1000
Contract Year 2	0.1000
Contract Year 3	0.1000
Contract Year 4	0.1000
Contract Year 5	0.1000
Contract Year 6	0.0800
Contract Year 7	0.0800
Contract Year 8	0.0800
Contract Year 9	0.0800
Contract Year 10	0.0800
Contract Year 11	0.0800
Contract Year 12	0.0800
Contract Year 13	0.0800
Contract Year 14	0.0800
Contract Year 15	0.0800
Contract Year 16	0.0800
Contract Year 17	0.0800
Contract Year 18	0.0800
Contract Year 19	0.0800
Contract Year 20	0.0800

TABLE 4. Annual Ancillary Service Cost Recovery Cap

Year	Annual Ancillary Service Cost Recovery Cap ASCR_{CAP} (PhP/kWh)
Contract Year 1	0.2800
Contract Year 2	0.2800
Contract Year 3	0.2800
Contract Year 4	0.2800
Contract Year 5	0.2800
Contract Year 6	0.2800
Contract Year 7	0.2800
Contract Year 8	0.2800
Contract Year 9	0.2800
Contract Year 10	0.2800
Contract Year 11	0.2800
Contract Year 12	0.2800
Contract Year 13	0.2800
Contract Year 14	0.2800
Contract Year 15	0.2800
Contract Year 16	0.2800
Contract Year 17	0.2800
Contract Year 18	0.2800
Contract Year 19	0.2800
Contract Year 20	0.2800



SCHEDULE 2

GUARANTEED NET PLANT HEAT RATE

1. The table below is the "Guaranteed Net Plant Heat Rate" for purposes of the calculation of the Monthly Fuel Payment. This is the Guaranteed Net Plant Heat Rate table submitted by the Power Supplier in the Bidding.
2. Values are stated in net plant heat rate in Btu/kWh at HHV
3. Percent (%) Load Factor is based on Contract Capacity, from 100% by steps of one percent (1%) down to a minimum of 40% of Contract Capacity
4. "year n" refers to the nth Contract Year
5. This table sets the net plant heat rate with Major Maintenance Outages taken in Year 4, Year 8, Year 12, Year 16, and Year 20.

Load Factor %	Load MW	Contract Year 1	Contract Year 2	Contract Year 3	Contract Year 4	Contract Year 5	Contract Year 6	Contract Year 7	Contract Year 8	Contract Year 9	Contract Year 10
100%	600	9,080.4474	9,127.6657	9,173.9760	9,221.1943	9,080.4474	9,130.3899	9,174.8841	9,222.1024	9,080.4474	9,129.4818
99%	600	9,085.7577	9,133.0036	9,179.3410	9,226.5869	9,085.7577	9,135.7294	9,180.2496	9,227.4955	9,085.7577	9,134.8208
98%	600	9,091.8547	9,139.1323	9,185.5008	9,232.7784	9,091.8547	9,141.8599	9,186.4100	9,233.6876	9,091.8547	9,140.9507
97%	600	9,098.7384	9,146.0518	9,192.4554	9,239.7688	9,098.7384	9,148.7815	9,193.3653	9,240.6787	9,098.7384	9,147.8716
96%	600	9,106.4088	9,153.7621	9,200.2048	9,247.5581	9,106.4088	9,156.4940	9,201.1155	9,248.4686	9,106.4088	9,155.5834
95%	600	9,114.8659	9,162.2692	9,208.7490	9,256.1463	9,114.8659	9,164.9977	9,209.6605	9,257.0578	9,114.8659	9,164.0862
94%	600	9,124.1097	9,171.5551	9,218.0880	9,265.5334	9,124.1097	9,174.2923	9,219.0004	9,266.4458	9,124.1097	9,173.3799
93%	600	9,134.1402	9,181.6377	9,228.2218	9,275.7194	9,134.1402	9,184.3780	9,229.1353	9,276.6328	9,134.1402	9,183.4646
92%	600	9,144.9574	9,192.5112	9,239.1505	9,286.7042	9,144.9574	9,195.2547	9,240.0650	9,287.6187	9,144.9574	9,194.3402
91%	600	9,156.5614	9,204.1755	9,250.8740	9,298.4881	9,156.5614	9,206.9225	9,251.7896	9,299.4038	9,156.5614	9,206.0068
90%	600	9,168.9520	9,216.6306	9,263.3922	9,311.0708	9,168.9520	9,219.3812	9,264.3091	9,311.9877	9,168.9520	9,218.4643
89%	600	9,182.1294	9,229.8765	9,276.7053	9,324.4524	9,182.1294	9,232.6311	9,277.6235	9,325.3706	9,182.1294	9,231.7129
88%	600	9,196.0934	9,243.9131	9,290.8132	9,338.6328	9,196.0934	9,246.6719	9,291.7328	9,339.5525	9,196.0934	9,245.7523
87%	600	9,210.8442	9,258.7406	9,305.7159	9,353.6123	9,210.8442	9,261.5038	9,306.6370	9,354.5334	9,210.8442	9,260.5828
86%	600	9,226.3817	9,274.3589	9,321.4134	9,369.3906	9,226.3817	9,277.1268	9,322.3361	9,370.3133	9,226.3817	9,276.2042
85%	600	9,242.7059	9,290.7680	9,337.9058	9,385.9678	9,242.7059	9,293.5408	9,338.8300	9,386.8921	9,242.7059	9,292.6165
84%	600	9,259.8168	9,307.9678	9,355.1929	9,403.3440	9,259.8168	9,310.7458	9,356.1189	9,404.2699	9,259.8168	9,309.8198
83%	600	9,277.7144	9,325.9585	9,373.2749	9,421.5190	9,277.7144	9,328.7418	9,374.2026	9,422.4467	9,277.7144	9,327.8141
82%	600	9,296.3987	9,344.7400	9,392.1516	9,440.4929	9,296.3987	9,347.5289	9,393.0812	9,441.4225	9,296.3987	9,346.5993
81%	600	9,315.8697	9,364.3122	9,411.8232	9,460.2657	9,315.8697	9,367.1070	9,412.7547	9,461.1973	9,315.8697	9,366.1754
80%	600	9,336.1274	9,384.6753	9,432.2895	9,480.8374	9,336.1274	9,387.4761	9,433.2231	9,481.7710	9,336.1274	9,386.5425
79%	600	9,357.1719	9,405.8292	9,453.5508	9,502.2081	9,357.1719	9,408.6363	9,454.4865	9,503.1438	9,357.1719	9,407.7006
78%	600	9,379.0030	9,427.7738	9,475.6067	9,524.3775	9,379.0030	9,430.5875	9,476.5446	9,525.3154	9,379.0030	9,429.6496
77%	600	9,401.6208	9,450.5092	9,498.4575	9,547.3459	9,401.6208	9,453.3297	9,499.3977	9,548.2861	9,401.6208	9,452.3896
76%	600	9,425.0254	9,474.0355	9,522.1032	9,571.1133	9,425.0254	9,476.8630	9,523.0457	9,572.0558	9,425.0254	9,475.9205
75%	600	9,449.2167	9,498.3526	9,546.5436	9,595.6796	9,449.2167	9,501.1874	9,547.4886	9,596.6245	9,449.2167	9,500.2425
74%	600	9,474.1946	9,523.4604	9,571.7788	9,621.0446	9,474.1946	9,526.3027	9,572.7262	9,621.9920	9,474.1946	9,525.3553
73%	600	9,499.9593	9,549.3591	9,597.8089	9,647.2087	9,499.9593	9,552.2091	9,598.7589	9,648.1587	9,499.9593	9,551.2591
72%	600	9,526.5107	9,576.0486	9,624.6338	9,674.1716	9,526.5107	9,578.9065	9,625.5864	9,675.1243	9,526.5107	9,577.9539
71%	600	9,553.8488	9,603.5288	9,652.2534	9,701.9335	9,553.8488	9,606.3950	9,653.2088	9,702.8888	9,553.8488	9,605.4396
70%	600	9,581.9736	9,631.7999	9,680.6679	9,730.4942	9,581.9736	9,634.6745	9,681.6261	9,731.4524	9,581.9736	9,633.7163
69%	600	9,610.8851	9,660.8617	9,709.8772	9,759.8538	9,610.8851	9,663.7450	9,710.8383	9,760.8149	9,610.8851	9,662.7839
68%	600	9,640.5833	9,690.7143	9,739.8813	9,790.0123	9,640.5833	9,693.6065	9,740.8454	9,790.9764	9,640.5833	9,692.6424
67%	600	9,671.0683	9,721.3579	9,770.6803	9,820.9699	9,671.0683	9,724.2592	9,771.6474	9,821.9370	9,671.0683	9,723.2921
66%	600	9,702.3399	9,752.7921	9,802.2740	9,852.7262	9,702.3399	9,755.7028	9,803.2442	9,853.6964	9,702.3399	9,754.7325
65%	600	9,734.3982	9,785.0171	9,834.6625	9,885.2814	9,734.3982	9,787.9374	9,835.6359	9,886.2548	9,734.3982	9,786.9640
64%	600	9,767.2433	9,818.0330	9,867.8459	9,918.6356	9,767.2433	9,820.9631	9,868.8226	9,919.6123	9,767.2433	9,819.9864
63%	600	9,800.8750	9,851.8396	9,901.8240	9,952.7886	9,800.8750	9,854.7798	9,902.8041	9,953.7687	9,800.8750	9,853.7997
62%	600	9,835.2935	9,886.4370	9,936.5970	9,987.7405	9,835.2935	9,889.3876	9,937.5806	9,988.7241	9,835.2935	9,888.4041
61%	600	9,870.4987	9,921.8253	9,972.1648	10,023.4914	9,870.4987	9,924.7864	9,973.1519	10,024.4785	9,870.4987	9,923.7994
60%	600	9,906.4905	9,958.0043	10,008.5274	10,060.0411	9,906.4905	9,960.9762	10,009.5180	10,061.0318	9,906.4905	9,959.9855
59%	600	9,943.2691	9,994.9741	10,045.6848	10,097.3898	9,943.2691	9,997.9571	10,046.6791	10,098.3841	9,943.2691	9,996.9628
58%	600	9,980.8344	10,032.7347	10,083.6370	10,135.5373	9,980.8344	10,035.7290	10,084.6351	10,136.5354	9,980.8344	10,034.7309
57%	600	10,019.1864	10,071.2862	10,122.3840	10,174.4838	10,019.1864	10,074.2919	10,123.3889	10,175.4857	10,019.1864	10,073.2900
56%	600	10,058.3251	10,110.6284	10,161.9258	10,214.2291	10,058.3251	10,113.6459	10,162.9317	10,215.2350	10,058.3251	10,112.6401
55%	600	10,098.2506	10,150.7615	10,202.2626	10,254.7735	10,098.2506	10,153.7910	10,203.2714	10,255.7833	10,098.2506	10,152.7812
54%	600	10,138.9627	10,191.6853	10,243.3940	10,296.1166	10,138.9627	10,194.7270	10,244.4079	10,297.1305	10,138.9627	10,193.7131
53%	600	10,180.4615	10,233.3999	10,285.3203	10,338.2587	10,180.4615	10,236.4540	10,286.3383	10,339.2767	10,180.4615	10,235.4360
52%	600	10,222.7471	10,275.9054	10,328.0414	10,381.1997	10,222.7471	10,278.9722	10,329.0637	10,382.2220	10,222.7471	10,277.9499
51%	600	10,265.8193	10,319.2016	10,371.5572	10,424.9395	10,265.8193	10,322.2813	10,372.5838	10,425.9661	10,265.8193	10,321.2547
50%	600	10,309.6783	10,363.2886	10,415.8680	10,469.4783	10,309.6783	10,366.3815	10,416.8990	10,470.5093	10,309.6783	10,365.3506
49%	600	10,377.6512	10,431.6150	10,484.5410	10,538.5048	10,377.6512	10,434.7283	10,485.5788	10,539.5426	10,377.6512	10,433.6905
48%	600	10,448.6305	10,502.9634	10,556.2514	10,610.5843	10,448.6305	10,506.0980	10,557.2963	10,611.6291	10,448.6305	10,505.0531
47%	600	10,522.2198	10,576.9353	10,630.5987	10,685.3142	10,522.2198	10,580.0920	10,631.6509	10,686.3664	10,522.2198	10,579.0398
46%	600	10,598.4191	10,653.5309	10,707.5828	10,762.6946	10,598.4191	10,656.7104	10,708.6427	10,763.7344	10,598.4191	10,655.6506
45%	600	10,677.2282	10,732.7498	10,787.2037	10,842.7252	10,677.2282	10,735.9530	10,788.1714	10,843.7930	10,677.2282	10,734.8852
44%	600	10,758.6473	10,814.5923	10,869.4614	10,925.4063	10,758.6473	10,817.8199	10,870.5372	10,926.4822	10,758.6473	10,816.7440
43%	600	10,842.6763	10,899.0582	10,954.3559	11,010.7378	10,842.6763	10,902.3110	10,955.4401	11,011.8221	10,842.6763	10,901.2268
42%	600	10,929.3153	10,986.1477	11,041.8872	11,098.7197	10,929.3153	10,989.4265	11,042.9802	11,099.8126	10,929.3153	10,988.3336
41%	600	11,018.5642	11,075.8607	11,132.0554	11,189.3519	11,018.5642	11,079.1663	11,133.1573	11,190.4538	11,018.5642	11,078.0644
40%	600	11,110.4231	11,168.1973	11,224.8605	11,282.6347	11,110.4231	11,171.5304	11,225.9715	11,283.7457	11,110.4231	11,170.4194

Load Factor %	Load MW	Contract Year 11	Contract Year 12	Contract Year 13	Contract Year 14	Contract Year 15	Contract Year 16	Contract Year 17	Contract Year 18	Contract Year 19	Contract Year 20
100%	600	9,173.9760	9,222.1024	9,080.4474	9,124.9416	9,171.2519	9,218.4702	9,080.4474	9,129.4818	9,173.9760	9,220.2863
99%	600	9,179.3410	9,227.4955	9,085.7577	9,130.2779	9,176.6153	9,223.8612	9,085.7577	9,134.8208	9,179.3410	9,225.6784
98%	600	9,185.5008	9,233.6876	9,091.8547	9,136.4048	9,182.7732	9,230.0509	9,091.8547	9,140.9507	9,185.5008	9,231.8693
97%	600	9,192.4554	9,240.6787	9,098.7384	9,143.3222	9,189.7258	9,237.0992	9,098.7384	9,147.8716	9,192.4554	9,238.6590
96%	600	9,200.2048	9,248.4688	9,106.4088	9,151.0302	9,197.4729	9,244.8262	9,106.4088	9,155.5834	9,200.2048	9,246.6475
95%	600	9,208.7490	9,257.0578	9,114.8659	9,159.5287	9,206.0146	9,253.4119	9,114.8659	9,164.0862	9,208.7490	9,255.2348
94%	600	9,218.0880	9,266.4458	9,124.1097	9,168.8178	9,215.3508	9,262.7962	9,124.1097	9,173.3799	9,218.0880	9,264.6210
93%	600	9,228.2218	9,276.6328	9,134.1402	9,178.8975	9,225.4816	9,272.9791	9,134.1402	9,183.4646	9,228.2218	9,274.8060
92%	600	9,239.1505	9,287.6187	9,144.9574	9,189.7677	9,236.4070	9,283.9608	9,144.9574	9,194.3402	9,239.1505	9,285.7897
91%	600	9,250.8740	9,299.4038	9,156.5614	9,201.4286	9,248.1270	9,295.7411	9,156.5614	9,206.0068	9,250.8740	9,297.5724
90%	600	9,263.3922	9,311.9877	9,168.9520	9,213.8799	9,260.6415	9,308.9201	9,168.9520	9,218.4643	9,263.3922	9,310.1539
89%	600	9,276.7053	9,325.3706	9,182.1294	9,227.1218	9,273.9507	9,321.6978	9,182.1294	9,231.7129	9,276.7053	9,323.5342
88%	600	9,290.8132	9,339.5525	9,196.0934	9,241.1543	9,288.0543	9,335.8740	9,196.0934	9,245.7523	9,290.8132	9,337.7132
87%	600	9,305.7159	9,354.5334	9,210.8442	9,255.9773	9,302.9526	9,350.8490	9,210.8442	9,260.5828	9,305.7159	9,352.6912
86%	600	9,321.4134	9,370.3133	9,226.3817	9,271.5910	9,318.6455	9,366.6227	9,226.3817	9,276.2042	9,321.4134	9,368.4680
85%	600	9,337.9058	9,386.8921	9,242.7059	9,287.9952	9,335.1330	9,383.1950	9,242.7059	9,292.6165	9,337.9058	9,385.0436
84%	600	9,355.1929	9,404.2699	9,259.8168	9,305.1899	9,352.4150	9,400.5660	9,259.8168	9,309.8198	9,355.1929	9,402.4180
83%	600	9,373.2749	9,422.4467	9,277.7144	9,323.1752	9,370.4915	9,418.7357	9,277.7144	9,327.8141	9,373.2749	9,420.5912
82%	600	9,392.1516	9,441.4225	9,296.3987	9,341.9511	9,389.3627	9,437.7040	9,296.3987	9,346.5993	9,392.1516	9,439.5632
81%	600	9,411.8232	9,461.1973	9,315.8697	9,361.5175	9,409.0284	9,457.4709	9,315.8697	9,366.1754	9,411.8232	9,459.9341
80%	600	9,432.2895	9,481.7710	9,336.1274	9,381.8744	9,429.4887	9,478.0365	9,336.1274	9,386.5425	9,432.2895	9,479.9038
79%	600	9,453.5508	9,503.1438	9,357.1719	9,403.0220	9,450.7436	9,499.4009	9,357.1719	9,407.7006	9,453.5508	9,501.2723
78%	600	9,475.6067	9,525.3154	9,379.0030	9,424.9601	9,472.7930	9,521.5638	9,379.0030	9,429.6496	9,475.6067	9,523.4396
77%	600	9,498.4575	9,548.2861	9,401.6208	9,447.6887	9,495.6370	9,544.5254	9,401.6208	9,452.3896	9,498.4575	9,546.4058
76%	600	9,522.1032	9,572.0558	9,425.0254	9,471.2080	9,519.2757	9,568.2858	9,425.0254	9,475.9205	9,522.1032	9,570.1708
75%	600	9,546.5436	9,596.6245	9,449.2167	9,495.5179	9,543.7089	9,592.8448	9,449.2167	9,500.2425	9,546.5436	9,594.7946
74%	600	9,571.7788	9,621.9920	9,474.1946	9,520.6182	9,568.9365	9,618.2024	9,474.1946	9,525.3553	9,571.7788	9,620.0972
73%	600	9,597.8089	9,648.1587	9,499.9593	9,546.5091	9,594.9589	9,644.3587	9,499.9593	9,551.2591	9,597.8089	9,646.2587
72%	600	9,624.6338	9,675.1243	9,526.5107	9,573.1906	9,621.7758	9,671.3137	9,526.5107	9,577.9539	9,624.6338	9,673.2190
71%	600	9,652.2534	9,702.8888	9,553.8488	9,600.6627	9,649.3873	9,699.0679	9,553.8488	9,605.4396	9,652.2534	9,700.9781
70%	600	9,680.6679	9,731.4524	9,581.9736	9,628.9253	9,677.7933	9,727.6196	9,581.9736	9,633.7163	9,680.6679	9,729.5360
69%	600	9,709.8772	9,760.8149	9,610.8851	9,657.9784	9,706.9940	9,756.9706	9,610.8851	9,662.7839	9,709.8772	9,758.8927
68%	600	9,739.8813	9,790.9764	9,640.5893	9,687.8222	9,736.9891	9,787.1202	9,640.5893	9,692.6424	9,739.8813	9,789.0483
67%	600	9,770.6803	9,821.9970	9,671.0683	9,718.4565	9,767.7790	9,818.0685	9,671.0683	9,723.2921	9,770.6803	9,820.0028
66%	600	9,802.2740	9,853.6964	9,702.3399	9,749.8814	9,799.3633	9,849.8155	9,702.3399	9,754.7825	9,802.2740	9,851.7559
65%	600	9,834.6625	9,886.2548	9,734.3982	9,781.0968	9,831.7422	9,882.3611	9,734.3982	9,786.9840	9,834.6625	9,884.3079
64%	600	9,867.8459	9,919.6123	9,767.2433	9,815.1028	9,864.9157	9,915.7054	9,767.2433	9,819.9864	9,867.8459	9,917.6588
63%	600	9,901.8240	9,953.7687	9,800.8750	9,848.8993	9,898.8838	9,949.8483	9,800.8750	9,853.7997	9,901.8240	9,951.8085
62%	600	9,936.5970	9,988.7241	9,835.2935	9,883.4864	9,933.6464	9,984.7900	9,835.2935	9,888.4041	9,936.5970	9,986.7570
61%	600	9,972.1648	10,024.4785	9,870.4987	9,918.8641	9,969.2037	10,020.5303	9,870.4987	9,923.7994	9,972.1648	10,022.5044
60%	600	10,008.5274	10,061.0318	9,906.4905	9,955.0323	10,005.5554	10,057.0692	9,906.4905	9,959.9855	10,008.5274	10,059.0505
59%	600	10,045.6848	10,098.3841	9,943.2691	9,991.9911	10,042.7018	10,094.4068	9,943.2691	9,996.9628	10,045.6848	10,096.3954
58%	600	10,083.6370	10,136.5354	9,980.8344	10,029.7405	10,080.6427	10,132.5431	9,980.8344	10,034.7309	10,083.6370	10,134.5392
57%	600	10,122.3840	10,175.4857	10,019.1864	10,068.2804	10,119.3783	10,171.4780	10,019.1864	10,073.2900	10,122.3840	10,173.4819
56%	600	10,161.9258	10,215.2350	10,058.3251	10,107.6109	10,158.9084	10,211.2116	10,058.3251	10,112.6401	10,161.9258	10,213.2233
55%	600	10,202.2626	10,255.7833	10,098.2506	10,147.7320	10,199.2391	10,251.7440	10,098.2506	10,152.7812	10,202.2626	10,253.7637
54%	600	10,243.3940	10,297.1305	10,138.9527	10,188.6436	10,240.3523	10,293.0749	10,138.9527	10,193.7131	10,243.3940	10,295.1027
53%	600	10,285.3203	10,339.2767	10,180.4615	10,230.3458	10,282.2661	10,335.2045	10,180.4615	10,235.4360	10,285.3203	10,337.2406
52%	600	10,328.0414	10,382.2220	10,222.7471	10,272.8386	10,324.9746	10,378.1329	10,222.7471	10,277.9499	10,328.0414	10,380.1774
51%	600	10,371.5572	10,425.9661	10,265.8193	10,316.1218	10,368.4775	10,421.8598	10,265.8193	10,321.2547	10,371.5572	10,423.9129
50%	600	10,415.8680	10,470.5093	10,309.6783	10,360.1957	10,412.7751	10,466.3854	10,309.6783	10,365.3506	10,415.8680	10,468.4473
49%	600	10,464.5410	10,519.5426	10,357.6512	10,408.5017	10,461.4277	10,515.3915	10,357.6512	10,413.6905	10,464.5410	10,517.4670
48%	600	10,516.2514	10,571.6291	10,408.6308	10,459.8288	10,513.1168	10,567.4497	10,408.6308	10,463.0531	10,516.2514	10,569.5394
47%	600	10,570.5987	10,626.3664	10,462.2198	10,513.7787	10,567.4420	10,621.1575	10,462.2198	10,517.0398	10,570.5987	10,624.2620
46%	600	10,707.5828	10,763.7544	10,598.4191	10,650.3514	10,704.4033	10,758.5151	10,598.4191	10,655.6506	10,707.5828	10,761.6348
45%	600	10,787.2037	10,843.7930	10,677.2282	10,729.5466	10,784.0005	10,839.5221	10,677.2282	10,734.8852	10,787.2037	10,841.6575
44%	600	10,869.4614	10,926.4822	10,758.6473	10,811.3647	10,866.2338	10,922.1787	10,758.6473	10,816.7440	10,869.4614	10,924.3305
43%	600	10,954.3559	11,011.8221	10,842.6763	10,895.8054	10,951.1031	11,007.4850	10,842.6763	10,901.2268	10,954.3559	11,009.6535
42%	600	11,041.8872	11,099.8126	10,929.3153	10,982.8689	11,038.6085	11,095.4409	10,929.3153	10,988.3336	11,041.8872	11,097.6268
41%	600	11,132.0554	11,190.4598	11,018.5642	11,072.5552	11,128.7498	11,186.0464	11,018.5642	11,078.0644	11,132.0554	11,188.2501
40%	600	11,224.8605	11,283.7457	11,110.4231	11,164.8642	11,221.5273	11,279.3015	11,110.4231	11,170.4194	11,224.8605	11,281.5236

SCHEDULE 3 SAMPLE CALCULATIONS

Monthly Power Bill upon Commercial Operations Date

Agreed Values

Contract Capacity	CC	MW	600.00
Annual Capacity Fee	ACF ₀	PhP/kW-year	9,289.5967
Annual Interconnection Facilities Capacity Fee	IFCF	PhP/kW-year	0.0000
Annual Interconnection Facilities FOM Fee	IFFOM	PhP/kW-year	0.0000
Annual Non-escalating Fixed O&M Fee (USD)	AFOMUSD,Non-Esc	USD/kW-year	0.0000
Annual Escalating Fixed O&M Fee (USD)	AFOMUSD,Esc	USD/kW-year	0.0000
Annual Non-escalating Fixed O&M Fee (PhP)	AFOMPhP,Non-Esc	PhP/kW-year	4,803.0160
Annual Escalating Fixed O&M Fee (PhP)	AFOMPhP,Esc	PhP/kW-year	0.0000
Non-escalating Variable O&M Fee (USD)	VOMUSD,Non-Esc	USD/kWh	0.0000
Escalating Variable O&M Fee (USD)	VOMUSD,Esc	USD/kWh	0.0000
Non-escalating Variable O&M Fee (PhP)	VOMPhP,Non-Esc	PhP/kWh	0.1818
Escalating Variable O&M Fee (PhP)	VOMPhP,Esc	PhP/kWh	0.0000
Base PH CPI (2012=100)	PH CPI ₀	Dec 2020	126.200
Base US CPI (1982-84=100)	US CPI ₀	Dec 2020	260.474
Base Full Load Equivalent Scheduled Outage Allowance Days	BSOA	Days	15
Base Full Load Equivalent Forced Outage Allowance Days	BFOA	Days	3
Quarterly Fuel Price Forecast (1Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (2Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (3Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (4Q 2021)		USD/MMBtu	2.2500
Average of the Quarterly Fuel Price Forecast	F ₀	USD/MMBtu	2.2500
Line Rental Cap for the Contract Year	LR _{CAP,n}	PhP/kWh	0.1000
Ancillary Services Cost Recovery Cap for the Contract Year	ASCR _{CAP,n}	PhP/kWh	0.2800

Assumed Values

Contract Year		April 26, 2025 to April 25, 2026	
Contract Year Days	CYD		365
Contract Effectivity		April 26, 2025	
Contract Year number	n		1
no. of Trading Intervals per Day	k		24
Billing Period		May 26, 2025 - June 25, 2025	
Billing Period Days	BPD	Days	31
Full Load Equivalent Scheduled Outage Days Taken	SOT _M	Days	0.00
Full Load Equivalent Forced Outage Days Taken	FOT _M	Days	0.00
Full Load Equivalent Force Majeure Days Taken	FMT _M	Days	0.00
EDA _M		Days	31.00
Foreign Exchange Rate	FX	PhP/USD	51.352
Current PH CPI	PH CPI _i		145.378
Current US CPI	US CPI _i		280.841
Actual Quarterly Fuel Price (1Q 2021)		USD/MMBtu	2.5845
Actual Quarterly Fuel Price (2Q 2021)		USD/MMBtu	2.2890
Actual Quarterly Fuel Price (3Q 2021)		USD/MMBtu	2.4095
Actual Quarterly Fuel Price (4Q 2021)		USD/MMBtu	2.4985
Average of the Actual Quarterly Fuel Price for 1Q 2021 to 4Q 2021	P ₀	USD/MMBtu	2.4454
Actual Fuel Price for 2Q of 2024		USD/MMBtu	2.6468
Actual Fuel Price for 3Q of 2024		USD/MMBtu	2.7295
Actual Fuel Price for 4Q of 2024		USD/MMBtu	2.6780
Actual Fuel Price for 1Q of 2025		USD/MMBtu	2.8220
Average of the Actual Quarterly Fuel Price for preceeding 4 Calendar Quarters	P _n	USD/MMBtu	2.7191
Actual Fuel Price	FP _{act}	USD/MMBtu	2.7635
Actual Net Plant Heat Rate	HR _{act}	Btu/kWh	9,350.1250

$\sum BCQ_h$	kWh	350,145,000
$\sum RP_h$	kWh	0
$\sum IB_h$	kWh	11,780,000
$\sum EE_h$	kWh	6,200,000
Real Property Tax Payment (RPTP)	PhP	20,000,000.00
Shutdown and Startup Payment (SDSU)	PhP	0.00
Supplemental Payments (SP)	PhP	10,000,000.00
$\sum LR_h$	PhP	42,017,400.00
ASCR _{Actual}	PhP	73,530,450.00

Component A - Monthly Capacity Payment

$$MCP = (DCP * CC * 1000 * EDA_M) + MCPEE$$

1. Calculation of Capacity Payment for each full load equivalent day of Contract Capacity availability

$$TEDA = CYF * 365 - (SOA + FOA)$$

$$CYF = CYD / 365$$

$$= 365 / 365$$

$$= 1$$

$$SOA = CYF * BSOA$$

$$= 1 * 15$$

$$= 15 \text{ days}$$

$$FOA = CYF * BFOA$$

$$= 1 * 3$$

$$= 3 \text{ days}$$

$$TEDA = 1 * 365 - (15 + 3)$$

$$= 347 \text{ days}$$

$$DCP = CYF * ACF_0 / TEDA$$

$$= 1 * 9,289.5967 / 347$$

$$= 26.77117205 \text{ PhP/kW-day}$$

2. Contract Capacity (MW)

$$CC = 600 \text{ MW}$$

3. Calculation of Full Load Equivalent Days Contract Capacity Availability (EDA_M) - Refer to Schedule 5

$$EDA_M$$

$$= 31.00 \text{ days}$$

4. Calculation of Monthly Capacity Payment for Excess Energy

$$MCPEE = \sum EE_h * 0.5 * (DCP / k)$$

$$= 6,200,000.00 * 0.5 * (26.77117205 / 24)$$

$$= \text{PhP } 3,457,943.06$$

$$MCP = (DCP * CC * 1000 * EDA_M) + MCPEE$$

$$= (26.77117205 * 600 * 1,000 * 31.00) + 3,457,943.06$$

$$= \text{PhP } 501,401,743.11$$

Component B – Monthly Interconnection Facilities Payment

$$\text{MIFP} = \text{MIFCP} + \text{MIFFOMP}$$

1. Calculation of payment for the recovery of capital cost for Interconnection Facilities

$$\begin{aligned}\text{MIFCP} &= (\text{CYF} * \text{IFCF} / \text{TEDA}) * \text{CC} * 1,000 * \text{EDAM} \\ &= (1 * 0.0000 / 347.00) * 600 * 1,000 * 31.00 \\ &= \text{PhP } 0.00\end{aligned}$$

2. Calculation of payment for recovery of Fixed O&M cost for the Interconnection Facilities

$$\begin{aligned}\text{MIFFOMP} &= (\text{CYF} * \text{IFFOM} / \text{TEDA}) * \text{PH CPI}_t / \text{PH CPI}_0 * \text{CC} * 1,000 * \text{EDAM} \\ &= (1 * 0.0000 / 347.00) * 145.378 / 126.200 * 600 * 1,000 * 31.00 \\ &= \text{PhP } 0.00\end{aligned}$$

$$\begin{aligned}\text{MIFP} &= \text{MIFCP} + \text{MIFFOMP} \\ &= 0.00 + 0.00 \\ &= \text{PhP } 0.00\end{aligned}$$

Component C - Monthly Fixed O&M Payment

$$\begin{aligned}\text{MFOM} &= (\text{MFOM}_{\text{USD,Non-Esc}} + \text{MFOM}_{\text{USD,Esc}}) + \\ &(\text{MFOM}_{\text{PhP,Non-Esc}} + \text{MFOM}_{\text{PhP,Esc}})\end{aligned}$$

1. Calculation of FOM payment - non-escalating USD denominated portion

$$\begin{aligned}\text{MFOM}_{\text{USD,Non-Esc}} &= \text{DFOM}_{\text{USD,Non-Esc}} * \text{CC} * 1,000 * \text{EDAM} * \text{FX} \\ \text{DFOM}_{\text{USD,Non-Esc}} &= \text{CYF} * \text{AFOM}_{\text{USD,Non-Esc}} / \text{TEDA} \\ &= 1 * 0.0000 / 347 \\ &= 0.00000000 \text{ USD/kW-day} \\ \text{MFOM}_{\text{USD,Non-Esc}} &= \text{DFOM}_{\text{USD,Non-Esc}} * \text{CC} * 1,000 * \text{EDAM} * \text{FX} \\ &= 0.00000000 * 600 * 1,000 * 31.00 * 51.352 \\ &= \text{PhP } 0.00\end{aligned}$$

2. Calculation of FOM payment - escalating USD denominated portion

$$\begin{aligned}\text{MFOM}_{\text{USD,Esc}} &= \text{DFOM}_{\text{USD,Esc}} * \text{US CPI}_t / \text{US CPI}_0 * \text{CC} * 1,000 * \text{EDAM} * \text{FX} \\ \text{DFOM}_{\text{USD,Esc}} &= \text{CYF} * \text{AFOM}_{\text{USD,Esc}} / \text{TEDA} \\ &= 1 * 0.0000 / 347 \\ &= 0.00000000 \text{ USD/kW-day} \\ \text{MFOM}_{\text{USD,Esc}} &= \text{DFOM}_{\text{USD,Esc}} * \text{US CPI}_t / \text{US CPI}_0 * \text{CC} * 1,000 * \text{EDAM} * \text{FX} \\ &= 0.00000000 * (280.841 / 260.474) * 600 * 1,000 * 31.00 * 51.352 \\ &= \text{PhP } 0.00\end{aligned}$$

3. Calculation of FOM payment - non-escalating PhP denominated portion

$$\begin{aligned}\text{MFOM}_{\text{PhP,Non-Esc}} &= \text{DFOM}_{\text{PhP,Non-Esc}} * \text{CC} * 1,000 * \text{EDAM} \\ \text{DFOM}_{\text{PhP,Non-Esc}} &= \text{CYF} * \text{AFOM}_{\text{PhP,Non-Esc}} / \text{TEDA} \\ &= 1 * 4,803.0160 / 347 \\ &= 13.84154467 \text{ PhP/kW-day} \\ \text{MFOM}_{\text{PhP,Non-Esc}} &= \text{DFOM}_{\text{PhP,Non-Esc}} * \text{CC} * 1,000 * \text{EDAM} \\ &= 13.84154467 * 600 * 1,000 * 31.00 \\ &= \text{PhP } 257,452,730.84\end{aligned}$$

4. Calculation of FOM payment - escalating PhP denominated portion

$$MFOM_{PhP,Esc} = DFOM_{PhP,Esc} * PH_{CPIi}/PH_{CPI0} * CC * 1,000 * EDAM$$

$$DFOM_{PhP,Esc} = CYF * AFOM_{PhP,Esc} / TEDA$$

$$= 1 * 0.0000 / 347$$

$$= 0.00000000 \text{ USD/kW-day}$$

$$MFOM_{PhP,Esc} = DFOM_{PhP,Esc} * PH_{CPIi}/PH_{CPI0} * CC * 1,000 * EDAM$$

$$= 0.00000000 * (145.378 / 126.200) * 600 * 1,000 * 31.00$$

$$= \text{PhP } 0.00$$

$$MFOM = (MFOM_{USD,Non-Esc} + MFOM_{USD,Esc}) + (MFOM_{PhP,Non-Esc} + MFOM_{PhP,Esc})$$

$$= (0.00 + 0.00) + (257,452,730.84 + 0.00)$$

$$= \text{PhP } 257,452,730.84$$

Component D - Monthly Fuel Payment

$$MFP = \text{minimum } (MFP_{cap}, MFP_{act}) + MRP$$

1. Calculation of FP_{cap}

$$FP_{cap,m} = F_0 * P_n/P_0$$

$$= 2.2500 * (2.7191 / 2.4454)$$

$$= 2.50183254 \text{ USD/MMBtu}$$

2. Typical Daily Calculation

Hr	FP _{cap}	dry-head capacity availability	dry-head energy nomination	MQ	BCQ _h	RP _h	IE _h	EE _h	Load factor	GNPHR _h	FX	MFP _{cap}
	USD/MMBtu	kWh	kWh	kWh	kWh	kWh	kWh	kWh	%	BoekWh	PhP/USD	PhP
1	2.50183254	600,000	225,000	450,000	225,000	0	0	0	40%	11,110.42	51.35	321,165.37
2	2.50183254	600,000	240,000	450,000	270,000	0	30,000	0	45%	10,677.23	51.35	370,371.78
3	2.50183254	600,000	300,000	450,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
4	2.50183254	600,000	300,000	450,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
5	2.50183254	600,000	300,000	450,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
6	2.50183254	600,000	300,000	450,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
7	2.50183254	600,000	400,000	450,000	450,000	0	50,000	0	75%	9,449.22	51.35	546,290.84
8	2.50183254	600,000	400,000	450,000	450,000	0	50,000	0	75%	9,449.22	51.35	546,290.84
9	2.50183254	600,000	400,000	450,000	450,000	0	50,000	0	75%	9,449.22	51.35	546,290.84
10	2.50183254	600,000	450,000	600,000	550,000	0	100,000	0	92%	9,144.96	51.35	646,189.62
11	2.50183254	600,000	500,000	650,000	650,000	0	100,000	50,000	100%	9,080.45	51.35	758,291.53
12	2.50183254	600,000	600,000	650,000	650,000	0	0	50,000	100%	9,080.45	51.35	758,291.53
13	2.50183254	600,000	600,000	650,000	650,000	0	0	50,000	100%	9,080.45	51.35	758,291.53
14	2.50183254	600,000	600,000	650,000	650,000	0	0	50,000	100%	9,080.45	51.35	758,291.53
15	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
16	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
17	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
18	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
19	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
20	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
21	2.50183254	600,000	600,000	600,000	600,000	0	0	0	100%	9,080.45	51.35	699,961.41
22	2.50183254	600,000	300,000	450,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
23	2.50183254	600,000	300,000	300,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
24	2.50183254	600,000	300,000	300,000	300,000	0	0	0	50%	10,309.68	51.35	397,358.01
Total		14,400,000	10,715,000	12,500,000	11,295,000	0	330,000	200,000				13,691,001.35

* based on GNPHR table as set forth in Schedule 2 of this Appendix E

3. Calculation of monthly energy for the Billing Period

$$\sum BCQ_h = 11,295,000.00 * 31$$

$$= 350,145,000.00 \text{ kWh}$$

$$\sum RP_h = 0.00 * 31$$

$$= 0.00 \text{ kWh}$$

$$\sum IE_h = 380,000.00 * 31$$

$$= 11,780,000.00 \text{ kWh}$$

$$\sum EE_h = 200,000.00 * 31$$

$$= 6,200,000.00 \text{ kWh}$$

$$\sum BCQ_h - \sum RP_h$$

$$= 350,145,000.00 \text{ kWh}$$

4. Calculation of Monthly Fuel Payment using fuel price cap (for the relevant Billing Period)

$$\begin{aligned} \text{MFP}_{\text{cap}} &= \sum [(FP_{\text{cap,m}}) * (BCQ_h - RP_h) * \text{GNPHR}_h / 1,000,000)] * \text{FX} \\ &= 13,691,001.33 * 31 \text{ (calculated based on the FPcap and typical daily calculation above)} \\ &= \text{PhP } 424,421,041.19 \end{aligned}$$

5. Calculation of actual Monthly Fuel Payment

$$\begin{aligned} \text{MFP}_{\text{act}} &= [(FP_{\text{act}}) * (\sum BCQ_h - \sum RP_h) * \text{HR}_{\text{act}} / 1,000,000)] * \text{FX} \\ &= [(2.7635) * (350,145,000.00) * 9,350.1250 / 1,000,000)] * 51.352 \\ &= \text{PhP } 464,603,179.54 \end{aligned}$$

6. Calculation of fuel payment for delivered energy excluding any Replacement Power

$$\begin{aligned} \text{minimum (MFP}_{\text{cap}}, \text{MFP}_{\text{act}}) &= \text{minimum (PhP } 424,421,041.19, \text{ PhP } 464,603,180) \\ &= \text{PhP } 424,421,041.19 \end{aligned}$$

7. Calculation of variable cost for Replacement Power

$$\begin{aligned} \text{MRP} &= \sum ((RP_h) * \text{minimum (WEP, MVPR)}) \\ \text{MVPR} &= (\text{minimum (MFP}_{\text{cap}}, \text{MFP}_{\text{act}}) + \text{MVOM}) / \sum (BCQ_h - RP_h) \\ &= (424,421,041.19 + 63,656,361.00) / (350,145,000.00) \\ &= 1.3939 \text{ PhP/kWh} \end{aligned}$$

* For ease of calculation of minimum (WEP, MVPR), WEP is assumed as always higher than MPR

$$\begin{aligned} \text{minimum (WEP, MVPR)} &= 1.3939 \text{ PhP/kWh} \\ \text{MRP} &= ((0.00) * 1.3939) \\ &= \text{PhP } 0.00 \end{aligned}$$

*simplified; actual computation should be done on a per Trading Interval basis

8. Calculation of Monthly Fuel Payment

$$\begin{aligned} \text{MFP} &= \text{minimum (MFP}_{\text{cap}}, \text{MFP}_{\text{act}}) + \text{MRP} \\ &= \text{PhP } 424,421,041.19 + \text{PhP } 0 \\ &= \text{PhP } 424,421,041.19 \end{aligned}$$

Component E - Monthly Variable O&M Payment

$$\begin{aligned} \text{MVOM} &= [(\text{MVOM}_{\text{USD,Non-Esc}} + \text{MVOM}_{\text{USD,Esc}}) + \\ &(\text{MVOM}_{\text{PhP,Non-Esc}} + \text{MVOM}_{\text{PhP,Esc}})] * \sum (BCQ_h - RP_h) \end{aligned}$$

1. Calculation of VOM payment - non-escalating USD denominated portion

$$\begin{aligned} \text{MVOM}_{\text{USD,Non-Esc}} &= \text{VOM}_{\text{USD,Non-Esc}} * \text{FX} \\ &= 0.0000 * 51.352 \\ &= 0.0000 \text{ PhP/kWh} \end{aligned}$$

2. Calculation of VOM payment - escalating USD denominated portion

$$\begin{aligned} \text{MVOM}_{\text{USD,Esc}} &= \text{VOM}_{\text{USD,Esc}} * \text{US CPI}_t / \text{US CPI}_0 * \text{FX} \\ &= 0.0000 * (280.841 / 260.474) * 51.352 \\ &= 0.0000 \text{ PhP/kWh} \end{aligned}$$

3. Calculation of VOM payment - non-escalating PhP denominated portion

$$\begin{aligned} \text{MVOM}_{\text{PhP,Non-Esc}} &= \text{VOM}_{\text{PhP,Non-Esc}} \\ &= 0.1818 \text{ PhP/kWh} \end{aligned}$$

4. Calculation of VOM payment - escalating PhP denominated portion

$$\begin{aligned} MVOM_{PhP,Esc} &= VOM_{PhP,Esc} * PH_{CPIh}/PH_{CPI0} \\ &= 0.0000 * (145.378 / 126.200) \\ &= 0.0000 \text{ PhP/kWh} \end{aligned}$$

$$\begin{aligned} MVOM &= [(MVOM_{USD,Non-Esc} + MVOM_{USD,Esc}) + (MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})] * \Sigma(BCQ_h - RP_h) \\ &= [(0.0000 + 0.0000) + (0.1818 + 0.0000)] * 350,145,000.00 \\ &= \text{PhP } 63,656,361.00 \end{aligned}$$

Component F – Reimbursable Cost Payment (RCP)

$$RCP = RPTP + SDSU + SP$$

1. Calculation of Reimbursable Cost Payment

$$\begin{aligned} RCP &= RPTP + SDSU + SP \\ &= 20,000,000.00 + 0.00 + 10,000,000.00 \\ &= \text{PhP } 30,000,000.00 \end{aligned}$$

Component G - Line Rental Adjustment Payment (LRAP)

$$LRAP = (\Sigma LR_h) - (\Sigma BCQ_h * LR_{CAP,n})$$

1. Calculation of LRAP

$$\begin{aligned} \Sigma LR_h &= \text{PhP } 42,017,400.00 \\ (\Sigma BCQ_h * LR_{CAP,n}) &= (350,145,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 35,014,500.00 \\ \text{If } (\Sigma LR_h) &> (\Sigma BCQ_h * LR_{CAP,n}), \\ LRAP &= (\Sigma LR_h) - (\Sigma BCQ_h * LR_{CAP,n}) \\ &= 42,017,400.00 \text{ PhP} - (350,145,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 7,002,900.00 \end{aligned}$$

Component H - Ancillary Services Cost Recovery Payment (ASCRP)

$$ASCRP = \text{minimum} (ASCR_{\text{actual}}, [ASCR_{CAP,n} * (\Sigma BCQ_h - \Sigma RP_h)])$$

**assuming there is already a final approval/resolution by the ERC that the AS cost recovery can be passed through to the DU's customers*

1. Calculation of ASCRP

$$\begin{aligned} ASCR_{\text{actual}} &= \text{PhP } 73,530,450.00 \\ (ASCR_{CAP,n} * (\Sigma BCQ_h - \Sigma RP_h)) &= (0.2800 \text{ PhP/kWh} * (350,145,000.00 \text{ kWh} - 0.00 \text{ kWh})) \\ &= \text{PhP } 98,040,600.00 \\ &= \text{minimum} (ASCR_{\text{actual}}, [ASCR_{CAP,n} * (\Sigma BCQ_h - \Sigma RP_h)]) \\ &= \text{minimum} (73,530,450.00 \text{ PhP}, 98,040,600 \text{ PhP}) \\ &= \text{PhP } 73,530,450.00 \end{aligned}$$

Monthly Power Bill (MPB)

$$\begin{aligned} MPB &= MCP + MIFP + MFOM + MFP + MVOM + RCP - LRAP + ASCRP \\ &= 501,401,743.11 + 0.00 + 257,452,730.84 + 424,421,041.19 + 63,656,361.00 + 30,000,000.00 - 7,002,900.00 + 73,530,450.00 \\ MPB &= \text{PhP } 1,343,459,426.14 \end{aligned}$$

Illustration of Energy Accounting

Case A: Within Outage Allowance

Hr	Contract Capacity	day-ahead capacity availability	day-ahead energy nomination	outage taken	MQ	revised day-ahead capacity availability	revised day-ahead energy nomination	revised outage taken	RP _s	IB _s (Optional)	EB _s (Optional)	BCQ _s
	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh
1	600,000	600,000	300,000	0	300,000	600,000	300,000	0	0	0	0	300,000
2	600,000	600,000	300,000	0	300,000	600,000	300,000	0	0	0	0	300,000
3	600,000	600,000	300,000	0	300,000	600,000	300,000	0	0	0	0	300,000
4	600,000	600,000	300,000	0	400,000	600,000	300,000	0	0	100,000	0	400,000
5	600,000	600,000	300,000	0	400,000	600,000	300,000	0	0	100,000	0	400,000
6	600,000	600,000	300,000	0	400,000	600,000	300,000	0	0	100,000	0	400,000
7	600,000	600,000	400,000	0	500,000	600,000	400,000	0	0	100,000	0	500,000
8	600,000	600,000	400,000	0	500,000	600,000	400,000	0	0	100,000	0	500,000
9	600,000	600,000	400,000	0	500,000	600,000	400,000	0	0	100,000	0	500,000
10	600,000	600,000	450,000	0	600,000	600,000	450,000	0	0	150,000	0	600,000
11	600,000	600,000	500,000	0	650,000	600,000	500,000	0	0	100,000	50,000	650,000
12	600,000	600,000	600,000	0	650,000	600,000	600,000	0	0	0	50,000	650,000
13	600,000	400,000	400,000	200,000	600,000	600,000	400,000	0	0	200,000	50,000	650,000
14	600,000	400,000	400,000	200,000	600,000	600,000	400,000	0	0	200,000	0	600,000
15	600,000	400,000	400,000	200,000	500,000	500,000	400,000	100,000	0	100,000	0	500,000
16	600,000	400,000	400,000	200,000	500,000	500,000	400,000	100,000	0	100,000	0	500,000
17	600,000	400,000	400,000	200,000	500,000	500,000	400,000	100,000	0	100,000	0	500,000
18	600,000	400,000	400,000	200,000	400,000	400,000	400,000	200,000	0	0	0	400,000
19	600,000	400,000	400,000	200,000	400,000	400,000	400,000	200,000	0	0	0	400,000
20	600,000	400,000	400,000	200,000	400,000	400,000	400,000	200,000	0	0	0	400,000
21	600,000	400,000	400,000	200,000	400,000	400,000	400,000	200,000	0	0	0	400,000
22	600,000	400,000	300,000	200,000	400,000	400,000	300,000	200,000	0	100,000	0	400,000
23	600,000	400,000	300,000	200,000	300,000	400,000	300,000	200,000	0	0	0	300,000
24	600,000	400,000	300,000	200,000	300,000	400,000	300,000	200,000	0	0	0	300,000

Case B: Exceeds Outage Allowance

Hr	Contract Capacity	day-ahead capacity availability	day-ahead energy nomination	outage taken	MQ	revised day-ahead capacity availability	revised day-ahead energy nomination	revised outage taken*	RP _s (Optional)	IB _s (Optional)	EB _s (Optional)	BCQ _s	BCQ _s (with RP)
	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh
1	600,000	600,000	300,000	0	300,000	300,000	300,000	300,000	300,000	0	0	300,000	600,000
2	600,000	600,000	300,000	0	300,000	300,000	300,000	300,000	300,000	0	0	300,000	600,000
3	600,000	600,000	300,000	0	300,000	300,000	300,000	300,000	300,000	0	0	300,000	600,000
4	600,000	600,000	300,000	0	400,000	400,000	300,000	200,000	200,000	100,000	0	400,000	600,000
5	600,000	600,000	300,000	0	400,000	400,000	300,000	200,000	200,000	100,000	0	400,000	600,000
6	600,000	600,000	300,000	0	400,000	400,000	300,000	200,000	200,000	100,000	0	400,000	600,000
7	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
8	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
9	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
10	600,000	600,000	450,000	0	600,000	600,000	450,000	0	0	150,000	0	600,000	600,000
11	600,000	600,000	500,000	0	650,000	600,000	500,000	0	0	100,000	50,000	650,000	650,000
12	600,000	600,000	600,000	0	650,000	600,000	600,000	0	0	0	50,000	650,000	650,000
13	600,000	600,000	400,000	0	650,000	600,000	400,000	0	0	200,000	50,000	650,000	650,000
14	600,000	600,000	400,000	0	600,000	600,000	400,000	0	0	200,000	0	600,000	600,000
15	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
16	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
17	600,000	600,000	400,000	0	500,000	500,000	400,000	100,000	100,000	100,000	0	500,000	600,000
18	600,000	600,000	400,000	0	400,000	400,000	400,000	200,000	200,000	0	0	400,000	600,000
19	600,000	600,000	400,000	0	400,000	400,000	400,000	200,000	200,000	0	0	400,000	600,000
20	600,000	600,000	400,000	0	400,000	400,000	400,000	200,000	200,000	0	0	400,000	600,000
21	600,000	600,000	400,000	0	400,000	400,000	400,000	200,000	200,000	0	0	400,000	600,000
22	600,000	600,000	300,000	0	400,000	400,000	300,000	200,000	200,000	100,000	0	400,000	600,000
23	600,000	600,000	300,000	0	300,000	300,000	300,000	300,000	300,000	0	0	300,000	600,000
24	600,000	600,000	300,000	0	300,000	300,000	300,000	300,000	300,000	0	0	300,000	600,000

*If RP_s is taken

Monthly Power Bill prior to Commercial Operations Date

A. Commissioning prior to Scheduled Commercial Operations Date

Agreed Values

Contract Capacity	CC	MW	600.00
Non-escalating Variable O&M Fee (USD)	VOMUSD,Non-Esc	USD/kWh	0.0000
Escalating Variable O&M Fee (USD)	VOMUSD,Esc	USD/kWh	0.0000
Non-escalating Variable O&M Fee (PhP)	VOMPhP,Non-Esc	PhP/kWh	0.1818
Escalating Variable O&M Fee (PhP)	VOMPhP,Esc	PhP/kWh	0.0000
Base PH CPI (2012=100)	PH CPI ₀	Dec 2020	126.200
Base US CPI (1982-84=100)	US CPI ₀	Dec 2020	260.474
Quarterly Fuel Price Forecast (1Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (2Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (3Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (4Q 2021)		USD/MMBtu	2.2500
Average of the Quarterly Fuel Price Forecast	F ₀	USD/MMBtu	2.2500
Line Rental Cap for the Contract Year	LR _{CAP,I}	PhP/kWh	0.1000
Ancillary Services Cost Recovery Cap for the Contract Year	ASCR _{CAP,I}	PhP/kWh	0.2800

Assumed Values

Billing Period		October 26, 2024 - November 25, 2024
Billing Period Days	BPD	Days 31
no. of Trading Intervals per Day	k	24
Foreign Exchange Rate	FX	PhP/USD 50.510
Current PH CPI	PH CPI _i	140.326
Current US CPI	US CPI _i	275.605
Actual Fuel Cost	FuelCostACTUAL	PhP 278,761,907.72
ΣBCQ _h		kWh 187,488,000
ΣRPh		kWh 0
CE _{BCQ}		kWh 187,488,000
CE _{GEN}		kWh 312,480,000
ΣLR _h		PhP 22,498,560.00
ASCR _{Actual}		PhP 39,372,480.00

Component I - Commissioning Energy Payment

CEP = [(CE_{BCQ}/CE_{GEN}) * (FuelCost_{ACTUAL})] + [CE_{BCQ} * (MVOM_{USD,Non-Esc} + MVOM_{USD,Esc} + MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})]

1. Calculation of fuel cost of Commissioning Energy
(CE_{BCQ}/CE_{GEN}) * (FuelCost_{ACTUAL})
= (187,488,000.00 / 312,480,000.00) * 278,761,907.72
= PhP 167,257,144.63
2. Calculation of VOM payment - non-escalating USD denominated portion
MVOM_{USD,Non-Esc} = VOM_{USD,Non-Esc} * FX
= 0.0000 * 50.510
= 0.0000 PhP/kWh
3. Calculation of VOM payment - escalating USD denominated portion
MVOM_{USD,Esc} = VOM_{USD,Esc} * US CPI_i/US CPI₀ * FX
= 0.0000 * (275.605 / 260.474) * 50.510
= 0.0000 PhP/kWh
4. Calculation of VOM payment - non-escalating PhP denominated portion
MVOM_{PhP,Non-Esc} = VOM_{PhP,Non-Esc}
= 0.1818 PhP/kWh



5. Calculation of VOM payment - escalating PhP denominated portion

$$\begin{aligned} \text{MVOM}_{\text{PhP,Esc}} &= \text{VOM}_{\text{PhP,Esc}} * \text{PH CPi/PH CPi}_0 \\ &= 0.0000 * (140.326 / 126.200) \\ &= 0.0000 \text{ PhP/kWh} \end{aligned}$$

$$\begin{aligned} \text{CEP} &= [(\text{CE}_{\text{BCQ}}/\text{CE}_{\text{GEN}}) * (\text{FuelCost}_{\text{ACTUAL}})] + [\text{CE}_{\text{BCQ}} * (\text{MVOM}_{\text{USD,Non-Esc}} + \text{MVOM}_{\text{USD,Esc}} + \text{MVOM}_{\text{PhP,Non-Esc}} + \text{MVOM}_{\text{PhP,Esc}})] \\ &= [(187,488,000.00 / 312,480,000.00) * 278,761,907.72] + [187,488,000.00 * (0.0000 + 0.0000 + 0.1818 + 0.0000)] \\ &= \text{PhP } 201,342,463.63 \end{aligned}$$

Component J - Replacement Power Payment

$$\text{RPP} = 0$$

1. Calculation of RPP for Billing Period prior to SCOD

$$\text{RPh} = 0 \text{ kWh}$$

$$\text{RPP} = \text{PhP } 0.00$$

Component G - Line Rental Adjustment Payment (LRAP)

$$\text{LRAP} = (\Sigma \text{LR}_h) - (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n})$$

1. Calculation of LRAP

$$\Sigma \text{LR}_h = \text{PhP } 22,498,560.00$$

$$\begin{aligned} (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n}) &= (187,488,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 18,748,800.00 \end{aligned}$$

$$\text{If } (\Sigma \text{LR}_h) > (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n}),$$

$$\begin{aligned} \text{LRAP} &= (\Sigma \text{LR}_h) - (\Sigma \text{BCQ}_h * \text{LR}_{\text{CAP},n}) \\ &= 22,498,560.00 \text{ PhP} - (187,488,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 3,749,760.00 \end{aligned}$$

Component H - Ancillary Services Cost Recovery Payment (ASCRP)

$$\text{ASCRP} = \text{minimum} (\text{ASCR}_{\text{actual}}, [\text{ASCR}_{\text{CAP},n} * (\Sigma \text{BCQ}_h - \Sigma \text{RPh})])$$

**assuming there is already a final approval/resolution by the ERC that the AS cost recovery can be passed through to the DU's customers*

1. Calculation of ASCRP

$$\text{ASCR}_{\text{actual}} = \text{PhP } 39,372,480.00$$

$$\begin{aligned} (\text{ASCR}_{\text{CAP},n} * (\Sigma \text{BCQ}_h - \Sigma \text{RPh})) &= (0.2800 \text{ PhP/kWh} * (187,488,000.00 \text{ kWh} - 0.00 \text{ kWh})) \\ &= \text{PhP } 52,496,640.00 \end{aligned}$$

$$\begin{aligned} &= \text{minimum} (\text{ASCR}_{\text{actual}}, [\text{ASCR}_{\text{CAP},n} * (\Sigma \text{BCQ}_h - \Sigma \text{RPh})]) \\ &= \text{minimum} (39,372,480.00 \text{ PhP}, 52,496,640 \text{ PhP}) \\ &= \text{PhP } 39,372,480.00 \end{aligned}$$

Monthly Power Bill (MPB)

$$\text{MPB} = \text{CEP} + \text{RPP} - \text{LRAP} + \text{ASCRP}$$

$$= 201,342,463.03 + 0.00 - 3,749,760.00 + 39,372,480.00$$

$$\text{MPB} = \text{PhP } 236,965,183.03$$

B. Replacement Power after Scheduled Commercial Operations Date and prior to the Commercial Operations Date; Plant is not yet Commissioning

Agreed Values

Contract Capacity	CC	MW	600.00
Non-escalating Variable O&M Fee (USD)	VOM _{USD,Non-Esc}	USD/kWh	0.0000
Escalating Variable O&M Fee (USD)	VOM _{USD,Esc}	USD/kWh	0.0000
Non-escalating Variable O&M Fee (PhP)	VOM _{PhP,Non-Esc}	PhP/kWh	0.1818
Escalating Variable O&M Fee (PhP)	VOM _{PhP,Esc}	PhP/kWh	0.0000
Base PH CPI (2012=100)	PH CPI ₀	Dec 2020	126.200
Base US CPI (1982-84=100)	US CPI ₀	Dec 2020	260.474
Quarterly Fuel Price Forecast (1Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (2Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (3Q 2021)		USD/MMBtu	2.2500
Quarterly Fuel Price Forecast (4Q 2021)		USD/MMBtu	2.2500
Average of the Quarterly Fuel Price Forecast	F ₀	USD/MMBtu	2.2500
Line Rental Cap for the Contract Year	LR _{CAP,I}	PhP/kWh	0.1000
Ancillary Services Cost Recovery Cap for the Contract Year	ASCR _{CAP,I}	PhP/kWh	0.2800

Assumed Values

Billing Period		July 26, 2025 - August 25, 2025	
Billing Period Days	BPD	Days	31
no. of Trading Intervals per Day	k		24
Foreign Exchange Rate	FX	PhP/USD	52.209
Current PH CPI	PH CPI _i		150.611
Current US CPI	US CPI _i		286.177
Actual Quarterly Fuel Price (1Q 2021)		USD/MMBtu	2.5845
Actual Quarterly Fuel Price (2Q 2021)		USD/MMBtu	2.2890
Actual Quarterly Fuel Price (3Q 2021)		USD/MMBtu	2.4095
Actual Quarterly Fuel Price (4Q 2021)		USD/MMBtu	2.4985
Average of the Actual Quarterly Fuel Price for 1Q 2021 to 4Q 2021	F ₀	USD/MMBtu	2.4454
Actual Fuel Price for 3Q of 2024		USD/MMBtu	2.7295
Actual Fuel Price for 4Q of 2024		USD/MMBtu	2.6780
Actual Fuel Price for 1Q of 2025		USD/MMBtu	2.8220
Actual Fuel Price for 2Q of 2025		USD/MMBtu	2.9000
Average of the actual quarterly Fuel Price for preceeding 4 Calendar Quarters	F _n	USD/MMBtu	2.7824
Actual Fuel Cost	FuelCost _{ACTUAL}	PhP	278,761,907.72
ΣBCQ _n		kWh	336,350,000
ΣRP _n		kWh	336,350,000
CE _{BCQ}		kWh	0
CE _{GEN}		kWh	0
ΣLR _n		PhP	40,362,000.00
ASCR _{Actual}		PhP	0.00

Component I - Commissioning Energy Payment

$$CEP = [(CE_{BCQ}/CE_{GEN}) * (FuelCost_{ACTUAL})] + [CE_{BCQ} * (MVOM_{USD,Non-Esc} + MVOM_{USD,Esc} + MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})]$$

1. Calculation of fuel cost of Commissioning Energy

$$\begin{aligned} & (CE_{BCQ}/CE_{GEN}) * (FuelCost_{ACTUAL}) \\ &= (0.00) * 278,761,907.72 \\ &= PhP 0.00 \end{aligned}$$

2. Calculation of VOM payment - non-escalating USD denominated portion

$$\begin{aligned} MVOM_{USD,Non-Esc} &= VOM_{USD,Non-Esc} * FX \\ &= 0.0000 * 52.209 \\ &= 0.0000 PhP/kWh \end{aligned}$$

3. Calculation of VOM payment - escalating USD denominated portion

$$\begin{aligned} MVOM_{USD,Esc} &= VOM_{USD,Esc} * US\ CPl/US\ CPl_0 * FX \\ &= 0.0000 * (286.177 / 260.474) * 52.209 \\ &= 0.0000\ PhP/kWh \end{aligned}$$

4. Calculation of VOM payment - non-escalating PhP denominated portion

$$\begin{aligned} MVOM_{PhP,Non-Esc} &= VOM_{PhP,Non-Esc} \\ &= 0.1818\ PhP/kWh \end{aligned}$$

5. Calculation of VOM payment - escalating PhP denominated portion

$$\begin{aligned} MVOM_{PhP,Esc} &= VOM_{PhP,Esc} * PH\ CPl/PH\ CPl_0 \\ &= 0.0000 * (150.611 / 126.200) \\ &= 0.0000\ PhP/kWh \end{aligned}$$

$$\begin{aligned} CEP &= [(CE_{BCQ}/CE_{GEN}) * (Fuel\ Cost_{ACTUAL})] + [CE_{BCQ} * (MVOM_{USD,Non-Esc} + MVOM_{USD,Esc} + MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})] \\ &= [(0.00) * 278,761,907.72] + [0.00 * (0.0000 + 0.0000 + 0.1818 + 0.0000)] \\ CEP &= PhP\ 0.00 \end{aligned}$$

Component J - Replacement Power Payment

$$RPP = \Sigma((RPR) * (BCQ_h - CE_{BCQ}))$$

1. Calculation of Fp_{cap}

$$\begin{aligned} Fp_{cap} &= F_0 * P_n/P_0 \\ &= 2.2500 * (2.7824 / 2.4454) \\ &= 2.56007514\ USD/MMBtu \end{aligned}$$

2. Typical Daily Calculation

Hr	Fp _{cap}	dry-ahead capacity availability	dry-ahead energy nomination	CE _{BCQ} = CE _{GEN}	BCQ _h	RPR	Load factor	GNPHR _h	FX	Fuel part of CEC
	USD/MMBtu	kWh	kWh	kWh	kWh	kWh	%	Btu/kWh	PhP/USD	PhP
1	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
2	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
3	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
4	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
5	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
6	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
7	2.56007514	600,000	400,000	0	400,000	400,000	67%	9,671.07	52.21	517,049.98
8	2.56007514	600,000	400,000	0	400,000	400,000	67%	9,671.07	52.21	517,049.98
9	2.56007514	600,000	400,000	0	400,000	400,000	67%	9,671.07	52.21	517,049.98
10	2.56007514	600,000	450,000	0	450,000	450,000	75%	9,449.22	52.21	568,337.63
11	2.56007514	600,000	500,000	0	500,000	500,000	83%	9,277.71	52.21	620,024.84
12	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
13	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
14	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
15	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
16	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
17	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
18	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
19	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
20	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
21	2.56007514	600,000	600,000	0	600,000	600,000	100%	9,080.45	52.21	728,209.91
22	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
23	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
24	2.56007514	600,000	300,000	0	300,000	300,000	50%	10,309.68	52.21	413,394.27
Total		14,400,000	10,850,000	0	10,850,000	10,850,000				13,742,159.99

* based on GNPHR table as set forth in Schedule 2 of this Appendix E

3. Calculation of monthly energy for the Billing Period

$$\begin{aligned} \Sigma BCQ_h &= 10,850,000.00 * 31 \\ &= 336,350,000.00\ kWh \\ \Sigma CE_{BCQ} &= 0.00 * 31 \\ &= 0.00\ kWh \\ \Sigma RPh &= 10,850,000.00 * 31 \\ &= 336,350,000.00\ kWh \end{aligned}$$

4. Calculation of fuel payment using fuel price cap (for the relevant Billing Period)

$$\begin{aligned} \sum [(FP_{cap,n} * RP_h * GNP_{HR,h} / 1,000,000) * FX] / \sum RP_h \\ = 13,742,159.99 * 31 \text{ (calculated based on the FPCap and typical daily calculation above)} \\ = \text{PhP } 426,006,959.60 \\ = 426,006,959.60 / 336,350,000.00 \\ = 1.266559 \text{ PhP/kWh} \end{aligned}$$

5. Calculation of Replacement Power Rate

$$\begin{aligned} RPR &= \text{minimum (CEC, WEP)} \\ CEC &= [(\sum [(FP_{cap,n} * RP_h * GNP_{HR,h} / 1,000,000) * FX]) / \sum RP_h] + [(MVOM_{USD,Non-Esc} + MVOM_{USD,Esc} + \\ &MVOM_{PhP,Non-Esc} + MVOM_{PhP,Esc})] \\ CEC &= 1.266559 \text{ PhP/kWh} + 0.0000 \text{ PhP/kWh} + 0.0000 \text{ PhP/kWh} + 0.1818 \text{ PhP/kWh} + 0.0000 \text{ PhP/kWh} \\ CEC &= 1.448359 \text{ PhP/kWh} \\ * \text{ For ease of calculation of RPR, WEP is assumed as always higher than CEC; simplified, actual comparison should be} \\ &\text{done on a per Trading Interval basis} \end{aligned}$$

6. Calculation of Replacement Power Payment

$$\begin{aligned} RPP &= \sum [(RPR) * (BCQ_h - CEBQ)] \\ RPP &= (1.448359 * (336,350,000.00 - 0.00)) \\ &= 487,155,389.60 \text{ PhP/kWh} \\ &= \text{PhP } 487,155,389.60 \end{aligned}$$

Component G - Line Rental Adjustment Payment (LRAP)

$$LRAP = (\sum LR_h) - (\sum BCQ_h * LR_{CAP,n})$$

1. Calculation of LRAP

$$\begin{aligned} \sum LR_h &= \text{PhP } 40,362,000.00 \\ (\sum BCQ_h * LR_{CAP,n}) &= (336,350,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 33,635,000.00 \\ \text{If } (\sum LR_h) &> (\sum BCQ_h * LR_{CAP,n}), \\ LRAP &= (\sum LR_h) - (\sum BCQ_h * LR_{CAP,n}) \\ &= 40,362,000.00 \text{ PhP} - (336,350,000 \text{ kWh} * 0.1000 \text{ PhP/kWh}) \\ &= \text{PhP } 6,727,000.00 \end{aligned}$$

Component H - Ancillary Services Cost Recovery Payment (ASCRP)

$$ASCRP = \text{minimum (ASCR}_{\text{actual}}, [\text{ASCR}_{\text{CAP,n}} * (\sum BCQ_h - \sum RPh)])$$

*assuming there is already a final approval/resolution by the ERC that the AS cost recovery can be passed through to the DU's customers

1. Calculation of ASCRP

$$\begin{aligned} ASCR_{\text{actual}} &= \text{PhP } 0.00 \\ (\text{ASCR}_{\text{CAP,n}} * (\sum BCQ_h - \sum RPh)) &= (0.2800 \text{ PhP/kWh} * (336,350,000.00 \text{ kWh} - 336,350,000.00 \text{ kWh})) \\ **\text{In the event that } (\sum BCQ_h - \sum RPh) &\leq 0, \text{ then use } \sum BCQ_h \text{ instead of } (\sum BCQ_h - \sum RPh). \\ (\text{ASCR}_{\text{CAP,n}} * (\sum BCQ_h)) &= (0.2800 \text{ PhP/kWh} * (336,350,000.00 \text{ kWh})) \\ &= \text{PhP } 94,178,000.00 \\ &= \text{minimum (ASCR}_{\text{actual}}, [\text{ASCR}_{\text{CAP,n}} * (\sum BCQ_h - \sum RPh)]) \\ &= \text{minimum (0.00 PhP, 94,178,000 PhP)} \\ &= \text{PhP } 0.00 \end{aligned}$$

Monthly Power Bill (MPB)

$$\begin{aligned} MPB &= CEP + RPP - LRAP + ASCRP \\ &= 0.00 + 487,155,389.60 - 6,727,000.00 + 0.00 \\ MPB &= \text{PhP } 480,428,389.60 \end{aligned}$$

SCHEDULE 4

CALCULATION OF FULL LOAD EQUIVALENT OUTAGE DAYS

1. Full Load Equivalent Scheduled Outage Days Taken

The Full Load Equivalent Scheduled Outage Days (SOT) Taken for each Billing Period shall be calculated based on the following formula:

$$SOT_M = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CC - ACSO_{ij})}{(CC * Int)}$$

Where:

SOT_M = Full Load Equivalent Scheduled Outage Days Taken for the Billing Period

CC = as provided in Appendix E

$ACSO$ = available capacity for interval i and Day j resulting from Scheduled Outage as declared in the day-ahead capacity availability of the Power Supplier

Int = number of Trading Intervals per Day

BPD = as determined in Appendix E

2. Full Load Equivalent Forced Outage Days Taken

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

$$FOT_M = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CC - ACFO_{ij})}{(CC * Int)}$$

Where:

FOT_M = Full Load Equivalent Forced Outage Days Taken for the Billing Period

CC = as previously defined

$ACFO$ = available capacity for interval i and Day j resulting from Forced Outage as declared in the day-ahead capacity availability of the Power Supplier

Int = as previously defined

BPD = as previously defined

3. Full Load Equivalent Force Majeure Days Taken

The Full Load Equivalent Force Majeure Days (FMT) Taken for each Billing Period shall be calculated based on the following formula:

$$FMT_M = \sum_{j=1}^{BPD} \frac{\sum_{i=1}^{Int} (CC - ACFM_{ij})}{(CC * Int)}$$

Where:

FMT_M = Full Load Equivalent Force Majeure Days Taken for the Billing Period

CC = as previously defined

ACFM = available capacity for interval i and Day j that can be delivered by Power Supplier, and/or that can be accepted or purchased by Meralco during an Event of Force Majeure. In case Power Supplier's and Meralco's FM claims of Event of Force Majeure coincide, the higher FMT_M will prevail

Int = as previously defined

BPD = as previously defined

SCHEDULE 5

SAMPLE CALCULATIONS OF TEDA AND EDAM

A. Calculation of TEDA

Agreed Values

Base Full Load Equivalent Scheduled Outage Allowance	BSOA	15	Days
Base Full Load Equivalent Forced Outage Allowance	BFOA	3	Days

Assumed Values

Contract Year	20YY (non-leap year)
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CASE 1: Commercial Operations Date at April 26, 20YY

Other Assumed Values

Contract Year Days for Year 20YY	CYD	365	Days
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1. Calculation of TEDA

$$\begin{aligned}
 \text{TEDA} &= \text{CYF} * 366 - (\text{SOA} + \text{FOA}) \\
 &= (1.00 * 365) - 15.00 - 3.00 \\
 &= \mathbf{347.00 \text{ Days}}
 \end{aligned}$$

Where:

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

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

$$\begin{aligned}
 \text{FOA} &= \text{CYF} * \text{BFOA} \\
 &= 1.00 * 3 \\
 &= 3.00 \text{ Days}
 \end{aligned}$$

B. Calculation of EDAM

Assumed Values

Contract Year	20YY		
Contract Year Days	CYD	365.00	Days
Commercial Operations Date	April 26, 20YY		
Billing Period	August 26, 20YY+1 to September 25,		
Contract Year Factor	CYF	1.00	
Target Equivalent Days Availability	TEDA	347.00	Days
Billing Period Days	BPD	31.00	Days
Scheduled Outage Allowance Days	SOA	15.00	Days
Forced Outage Allowance Days	FOA	3.00	Days

CASE 1: NO OUTAGE

Other Assumed Values

Previous Months	EDA _M	SOT _M	FOT _M	FMT _M
May	30	0	0	0
June	31	0	0	0
July	30	0	0	0
August	31	0	0	0
Current Month: September		0	0	0
TOTAL	EDA _{A(M-1)}	SOT _A	FOT _A	FMT _A
	122	0	0	0

EDA_M = GEDA_M + AADE - AADU

1. Calculation of GEDA_M

GEDA_M = BPD - SOT_M - FOT_M - FMT_M
= 31 - 0 - 0 - 0
= 31.00 Days

2. Calculation of AADE

AADE = SOE_M + FOE_M
= 0.00 + 0.00
= 0.00 Days

SOE_M = Maximum [Minimum (SOT_A - SOA, SOT_M), 0]
= Maximum [Minimum (0 - 15, 0), 0]
= Maximum [Minimum (-15, 0), 0]
= 0.00 Days

FOE_M = Maximum [Minimum (FOT_A - FOA, FOT_M), 0]
= Maximum [Minimum (0 - 3, 0), 0]
= Maximum [Minimum (-3, 0), 0]
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A), 0]
= Maximum [(122 + 31) - (347 - 0), 0]
= Maximum [-194, 0]
= 0.00 Days

EDA_M = GEDA_M + AADE - AADU

= 31 + 0 - 0
= 31.00 Days



CASE 2: OUTAGES WITHIN THE ALLOWANCE

Other Assumed Values

Previous Months	EDAM	SOTM	FOTM	FMTM
May	30	0	0	0
June	31	0	0	0
July	30	0	0	0
August	31	0	0	0
Current Month: September		5	0	0
TOTAL	EDAM(M-1)	SOTA	FOTA	FMTA
	122	5	0	0

EDAM = GEDAM + AADE – AADU

1. Calculation of GEDAM

GEDAM = BPD – SOTM – FOTM – FMTM
= 31 – 5 – 0 – 0
= 26.00 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 – 15, 5), 0]
= Maximum [Minimum (-10, 5), 0]
= 0.00 Days

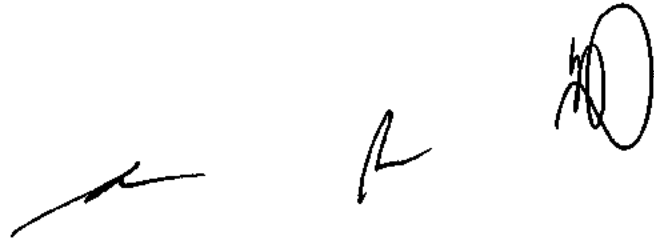
FOEM = Maximum [Minimum (FOTA – FOA, FOTM), 0]
= Maximum [Minimum (0 – 3, 0), 0]
= Maximum [Minimum (-3, 0), 0]
= 0.00 Days

3. Calculation of AADU

AADU = Maximum [(EDAM(M-1) + GEDAM) – (TEDA – FMTA), 0]
= Maximum [(122 + 26) – (347 – 0), 0]
= Maximum [-199, 0]
= 0.00 Days

EDAM = GEDAM + AADE – AADU

= 26 + 0 – 0
= 26.00 Days



CASE 3: OUTAGES BEYOND THE ALLOWANCE
Other Assumed Values

Previous Months	EDAM	SOTM	FOTM	FMTM
May	30	0	0	0
June	31	0	0	0
July	30	0	0	0
August	22	9	0	0
Current Month: September		12	5	0
TOTAL	EDAA(M-1)	SOTA	FOTA	FMTA
	113	21	5	0

EDAM = GEDAM + AADE – AADU

1. Calculation of GEDAM
GEDAM = BPD – SOTM – FOTM – FMTM
= 31 – 12 – 5 – 0
= 14.00 Days

2. Calculation of AADE
AADE = SOEM + FOEM
= 6.00 + 2.00
= 8.00 Days

SOEM = Maximum [Minimum (SOTA – SOA, SOTM), 0]
= Maximum [Minimum (21 – 15, 12), 0]
= Maximum [Minimum (6, 12), 0]
= 6.00 Days

FOEM = Maximum [Minimum (FOTA – FOA, FOTM), 0]
= Maximum [Minimum (5 – 3, 5), 0]
= Maximum [Minimum (2, 5), 0]
= 2.00 Days

3. Calculation of AADU
AADU = Maximum [(EDAA(M-1)+ GEDAM) – (TEDA – FMTA), 0]
= Maximum [(113 + 14) – (347 – 0), 0]
= Maximum [-220, 0]
= 0.00 Days

EDAM = GEDAM + AADE – AADU
= 14 + 8 – 0
= 22.00 Days

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CASE 4: OUTAGES DUE TO FORCE MAJEURE

Other Assumed Values

Previous Months	EDA _M	SOT _M	FOT _M	FMT _M
May	30	0	0	0
June	31	0	0	0
July	30	0	0	0
August	31	0	0	0
Current Month: September		0	0	5
TOTAL	EDA_{A(M-1)}	SOT_A	FOT_A	FMT_A
	122	0	0	5

$$EDA_M = GEDA_M + AADE - AADU$$

1. Calculation of GEDA_M

$$\begin{aligned} GEDA_M &= BPD - SOT_M - FOT_M - FMT_M \\ &= 31 - 0 - 0 - 5 \\ &= 26.00 \text{ Days} \end{aligned}$$

2. Calculation of AADE

$$\begin{aligned} AADE &= SOE_M + FOE_M \\ &= 0.00 + 0.00 \\ &= 0.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} SOE_M &= \text{Maximum} [\text{Minimum} (SOT_A - SOA, SOT_M), 0] \\ &= \text{Maximum} [\text{Minimum} (0 - 15, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-15, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} FOE_M &= \text{Maximum} [\text{Minimum} (FOT_A - FOA, FOT_M), 0] \\ &= \text{Maximum} [\text{Minimum} (0 - 3, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-3, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

3. Calculation of AADU

$$\begin{aligned} AADU &= \text{Maximum} [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A), 0] \\ &= \text{Maximum} [(122 + 26) - (347 - 5), 0] \\ &= \text{Maximum} [-194, 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

$$EDA_M = GEDA_M + AADE - AADU$$

$$\begin{aligned} &= 26 + 0 - 0 \\ &= 26.00 \text{ Days} \end{aligned}$$

CASE 5: UNUTILIZED OUTAGES ALLOWANCE TOWARDS THE END OF CONTRACT YEAR

Other Assumed Values

Previous Months	EDA _M	SOT _M	FOT _M	FMT _M
May	20	10	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
December	30	0	0	0
January	31	0	0	0
February	31	0	0	0
March	28	0	0	0
Current Month: April		0	0	0
TOTAL	EDA_{A(M-1)}	SOT_A	FOT_A	FMT_A
	324	10	0	0

$$EDA_M = GEDA_M + AADE - AADU$$

1. Calculation of GEDA_M

$$\begin{aligned} GEDA_M &= BPD - SOT_M - FOT_M - FMT_M \\ &= 31 - 0 - 0 - 0 \\ &= 31.00 \text{ Days} \end{aligned}$$

2. Calculation of AADE

$$\begin{aligned} AADE &= SOE_M + FOE_M \\ &= 0.00 + 0.00 \\ &= 0.00 \text{ Days} \end{aligned}$$

$$\begin{aligned} SOE_M &= \text{Maximum} [\text{Minimum} (SOT_A - SOA, SOT_M), 0] \\ &= \text{Maximum} [\text{Minimum} (10 - 15, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-5, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

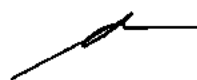
$$\begin{aligned} FOE_M &= \text{Maximum} [\text{Minimum} (FOT_A - FOA, FOT_M), 0] \\ &= \text{Maximum} [\text{Minimum} (0 - 3, 0), 0] \\ &= \text{Maximum} [\text{Minimum} (-3, 0), 0] \\ &= 0.00 \text{ Days} \end{aligned}$$

3. Calculation of AADU

$$\begin{aligned} AADU &= \text{Maximum} [(EDA_{A(M-1)} + GEDA_M) - (TEDA - FMT_A), 0] \\ &= \text{Maximum} [(324 + 31) - (347 - 0), 0] \\ &= \text{Maximum} [8, 0] \\ &= 8.00 \text{ Days} \end{aligned}$$

$$EDA_M = GEDA_M + AADE - AADU$$

$$\begin{aligned} &= 31 + 0 - 8 \\ &= 23.00 \text{ Days} \end{aligned}$$





Appendix F

LIST OF ALLOWED BANKS

No.	Institution
1.	ANZ Banking Group Ltd.
2.	Asia United Bank Corporation
3.	Asian Development Bank
4.	Bank of America, N.A.
5.	Bank of Commerce
6.	Bank of the Philippine Islands
7.	BDO Unibank, Inc.
8.	China Banking Corporation
9.	Citibank, N.A.
10.	Deutsche Bank AG
11.	Development Bank of the Philippines
12.	East West Banking Corporation
13.	ING Bank N.V.
14.	JP Morgan Chase Bank, N.A.
15.	Land Bank of the Philippines
16.	Maybank Philippines, Inc.
17.	Metropolitan Bank & Trust Company
18.	Mizuho Bank, Ltd. - Manila Branch
19.	Philippine National Bank
20.	Rizal Commercial Banking Corporation
21.	Robinsons Bank Corporation
22.	Security Bank Corporation
23.	Standard Chartered Bank
24.	Sumitomo Mitsui Banking Corporation
25.	The Bank of Tokyo – Mitsubishi UFJ, Ltd.
26.	The Hongkong & Shanghai Banking Corporation
27.	Union Bank of the Philippines
28.	United Coconut Planters Bank
29.	World Bank/International Finance Corporation

Appendix G

OPERATING PROCEDURES

1 DEFINITIONS

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

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.

2 GENERAL

The purpose of this Appendix is to prescribe the procedures for coordinating (a) the nomination and WESM declaration of BCQs, and (b) monitoring of Scheduled and Forced 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 ninety (90) Days prior to onset of provision of Commissioning Energy, the Parties shall establish the Coordinating Committee as contemplated by this Agreement. During the time prior to onset of provision of Commissioning Energy, 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 onset of provision of Commissioning Energy.
- 3.1.2 The Coordinating Committee shall consist of six (6) members, three (3) members appointed by Meralco and three (3) members appointed by Power Supplier.
- 3.1.3 Either Party, upon written notice to the other, may from time to time remove or replace any Coordinating Committee member appointed by it. Any vacancies that occur within the membership of the Coordinating Committee shall be immediately filled by the appropriate Party.
- 3.1.4 Meralco and Power Supplier shall each pay the expenses of its respective Coordinating Committee members.
- 3.1.5 All other expenses incurred by the Coordinating Committee and approved by the Parties shall be shared equally by Power Supplier and Meralco, or as determined by the Coordinating Committee.

3.2 Duties of the Coordinating Committee

The duties of the Coordinating Committee shall include the following:

- 3.2.1 In case of discrepancies on the Provisional Invoice, reconciliation of nomination and delivery of BCQs prior to issuance of a Final Invoice and payment;
- 3.2.2 Coordination of maintenance schedules;
- 3.2.3 Coordination of short range and long range forecasts of load and capabilities; and
- 3.2.4 Consideration of such other Plant operational matters as may be referred to the Coordinating Committee by the mutual agreement of Power Supplier and Meralco.
- 3.2.5 Creation of an operating protocol, which shall be completed and agreed upon by the Parties no later than sixty (60) days prior to Commercial Operations Date.

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 of the Agreement.

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) email or other agreed electronic communication and (c) cellular phone. Each Party shall notify the other Party in writing of its point of contact fifteen (15) Days after the Execution Date and prior to changing any previously established point(s) of contact. The Parties shall maintain communications in accordance with Prudent Operating Practices and, as necessary, shall (without prejudice to the other provisions of this Agreement) inform the other Party with respect to the operating conditions and requirements of their respective facilities that may affect the other Party's operating requirements.

Communication Channels

Power Supplier

Contact Person:	Jose Ferlino P. Raymundo / Genny Rose S. Abrenica
Designation:	Energy Sourcing & Trading Manager / Energy Sourcing Manager
Address:	19th Floor San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City
Telephone:	+632-87024616 / +632-87024613
Email:	jraymundo@smcgph.sanmiguel.com.ph / gabrenica@smcgph.sanmiguel.com.ph

Meralco

Contact Person:	Primo P. Alonzo Jr.	Ryan S. Morales
Designation:	Head, Energy Management	Head Energy Sourcing Office
Address:	Meralco Center, Ortigas Avenue, Pasig City	Meralco Center, Ortigas Avenue, Pasig City
Telephone:	1622-6457	1622-6222
Email:	ppalonzo@meralco.com.ph	rsmorales@meralco.com.ph

4 Annual and Monthly Capacity Availability and Energy Nomination Schedules

In accordance with Section 6.3.1 of this Agreement, Power Supplier shall furnish Meralco with year-ahead capacity availability schedules and month-ahead capacity availability schedules and Meralco shall furnish Power Supplier with non-binding year-ahead energy nomination schedules, and month-ahead energy 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 Capacity Availability and Energy Nomination Schedules

When establishing the year-ahead schedules, 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 at least one hundred and twenty (120) Days prior to the start of the next Contract Year. Meralco shall furnish Power Supplier with the year-ahead energy nomination schedule at least ninety (90) Days prior to the start of the next Contract Year. The year-ahead capacity availability schedule shall indicate the hourly estimate of capacity availability (in kW) of the Plant in accordance with the contracted capacity of the Contract Year (i.e., 8,760 hours for non-leap years, 8,784 hours for leap years) and the schedule of planned maintenance outages calendared for the Contract Year as approved by the System Operator. When establishing the year-ahead energy nomination schedule, Meralco shall provide monthly estimate of energy nomination to Power Supplier for each month of the Contract Year. The year-ahead energy nomination schedule shall be based upon Meralco's good faith estimates of its 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 and day-ahead nominations) to reflect the actual variation in customer demand.
- (b) Upon receipt of the year-ahead energy nomination schedule submitted by Meralco, Power Supplier shall confirm by e-mail of such nomination schedule.
 - (c) In case of the first Contract Year, Power Supplier shall furnish Meralco with its non-binding year-ahead capacity availability schedule not later than fifteen (15) Days prior to the Commercial Operations Date. Within five (5) Days from receipt of such non-binding year-ahead capacity availability schedule for the first Contract Year, Meralco shall furnish Power Supplier with its non-binding year ahead energy nomination schedule for the first Contract Year.

4.2 Month-Ahead Capacity Availability and Energy Nomination Schedules

When establishing the month-ahead 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.
- (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 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 year-ahead capacity availability schedule for the Contract Year.
- (c) Upon receipt of the month-ahead capacity availability schedule submitted by Power Supplier, Meralco shall send confirmation of receipt of such schedule by e-mail.
- (d) Meralco shall furnish Power Supplier with the month-ahead energy nomination schedule.
- (e) The month-ahead energy nomination schedule shall contain the hourly nominations of Meralco for each hour of the relevant Billing Period taking into account any Scheduled Outages of the Plant submitted by Power Supplier in accordance to the WESM rules and the Grid Code.
- (f) Upon receipt of the month-ahead energy nomination schedule submitted by Meralco, Power Supplier shall send confirmation of receipt of such nomination schedule by e-mail.

5 Day-Ahead Capacity Availability and Energy Nomination Schedules

- 5.1 Power Supplier shall furnish Meralco the Plant's day-ahead capacity availability schedule. The day-ahead capacity availability schedule shall indicate the 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 Power Supplier does not furnish Meralco the Plant's day-ahead capacity availability schedule, the capacity for the same Day in the month-ahead capacity availability schedule shall be deemed the

available capacity for the Day. In case of outages incurred after the submission, Power Supplier shall resubmit its day-ahead capacity availability schedule reflecting the revised availability due to outages. In case the Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days are exceeded, the revised day-ahead capacity availability schedule shall be derived from the Metered Quantity of the Plant.

- 5.2 Upon receipt of the day-ahead capacity availability schedule submitted by Power Supplier, Meralco shall send to Power Supplier confirmation of receipt of such schedule by e-mail.

- 5.3 Meralco shall, in all Trading Intervals not affected by a Scheduled Outage, Forced Outage, Event of Force Majeure, or suspension of delivery of Associated Energy as requested by Meralco, nominate any value from zero up to the Contract Capacity in any interval as its day-ahead energy nomination, subject to the Dispatch Ramp Rates under Appendix B. If Meralco does not furnish Power Supplier with its day-ahead energy nomination schedule, the nomination for the same Day in the month-ahead energy nomination schedule shall be deemed the nominated schedule for the Day. Notwithstanding the foregoing, Meralco shall have the option to increase or decrease its day-ahead energy nomination schedule on an intra-day basis, subject to Operating Procedures and WESM Rules. In addition, Meralco shall have the option to increase its day-ahead energy nomination schedule on a day-after basis up to the Metered Quantity and shall be declared by the Power Supplier in its day-after declaration to the WESM as BCQs for Meralco. Such revised nomination in excess of the day-ahead energy nomination schedule up to the Contract Capacity shall be the Incremental Energy for that Trading Interval. Subject to the allocation of Metered Quantity as agreed by the Parties, in case the Metered Quantity exceeds the Contract Capacity, Parties may agree to allow Meralco to take the Excess Energy, subject to the component of Monthly Capacity Payment for Excess Energy, as computed in Section 1 (Component A) of Appendix E.

- 5.4 Upon receipt of the day-ahead energy nomination schedule submitted by Meralco, Power Supplier shall send to Meralco confirmation of receipt of such schedule by e-mail.

- 5.5 Power Supplier shall be responsible for submitting the price and quantity offers to the WESM for the Dispatch schedule of the Plant in accordance with the WESM Rules. If necessary, Power Supplier shall coordinate with the System Operator the Dispatch schedule of the Plant in accordance with the Rules under the Grid Code.

6 Day-After BCQ Declaration with Market Operator

- 6.1 Power Supplier shall be responsible for declaring BCQ with the Market Operator before the deadline set under the WESM Rules. Power Supplier shall ensure that such BCQ declaration accurately reflects the day-ahead energy nomination schedule for the Day by Meralco with corresponding revisions set forth in Section 5.3 of this Appendix.
- 6.2 On a daily basis, Power Supplier shall furnish Meralco its actual Metered Quantity and a copy of its day-after BCQ declaration prior to submission with the Market Operator. It shall contain both the Associated Energy and Replacement Power to be declared as BCQ. 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.

- 6.3 On a daily basis, Power Supplier shall furnish Meralco a copy of its day-after BCQ declaration with the Market Operator. Meralco shall have the right, but not the obligation, to review such reports and upon its review, shall inform Power Supplier of any discrepancies or exceptions it may find. Power Supplier shall immediately notify Market Operator of any corrections to its BCQ declarations in accordance with the WESM Rules.

7 Confirmation After the Billing Month

- 7.1 Power Supplier shall provide Meralco, by 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, 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 email, 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.

8 3-Year and Annual Scheduled Maintenance Outages

- 8.1 In accordance with Section 9.2 of this Agreement, Power Supplier shall furnish Meralco of its Annual Maintenance Plan. Likewise, Power Supplier shall furnish Meralco its proposed 3-year provisional maintenance plan. Power Supplier shall submit to Meralco said maintenance plans prior to submitting such plan to the System Operator in compliance with the Grid Code. Such maintenance plans shall indicate the dates and duration of each proposed Scheduled Outages and/or Major Maintenance Outages for the relevant calendar years.
- 8.2 Power Supplier shall furnish Meralco a copy of the 3-year maintenance plan and Annual Maintenance Plan approved by the System Operator.

9 Implementation of Scheduled Maintenance Outage

- 9.1 Power Supplier shall confirm to Meralco the implementation of a scheduled maintenance outage and 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 and day-ahead capacity availability schedules 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 and day-ahead energy nomination schedules 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 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 and day-ahead energy nomination schedules indicating the appropriate energy nomination during the hours of the revised scheduled maintenance outage. 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 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 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 by e-mail 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.

11 Competitive Selection Process for the Plant Fuel

- 11.1 A detailed protocol for conducting an international competitive selection process for the fuel supply and its freight for the Plant shall be submitted by Power Supplier for confirmation by the Operating Committee not later than one hundred eighty (180) Days before the onset of provision of Commissioning Energy.
- 11.2 Any material deviation from the specifications set out in Section 11.1 shall be subject to the prior written approval of the Operating Committee.

Appendix H

INVOICING AND PAYMENT PROCEDURES

1 Definitions

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

Invoice means any invoice rendered according to Appendix E

Final Invoice means any Final Invoice rendered according to Section 3 below.

Payment Date shall have the meaning given to it in Section 4 below.

Provisional Invoice means any provisional invoice rendered according to Section 2.1 below.

Receipt means any Receipt issued according to Section 7 below.

2 Provisional Invoice

2.1 Any Invoice rendered by Power Supplier to Meralco pursuant to Article 11 of this Agreement 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 provided that both Parties discuss and validate the billing amounts prior to the issuance of the Provisional Invoice.

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) Business 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 3 of this Appendix H, 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**"). For this

purpose, the Payment Date shall be adjusted, Day for Day, for the same period that the delivery and Meralco's receipt of the Final Invoice was delayed.

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, PhP BVAL Reference Rate plus two hundred (200) basis points for PhP-denominated charges and/or LIBOR plus two hundred (200) basis points for USD-denominated payments shall apply on the outstanding amount, computed from the due date until full payment is received by the Party entitled thereto.

5 Method of Payment

All payments by Meralco pursuant to this Appendix shall be made by check, or wire transfer of cleared funds to such account/s as Power Supplier may notify in writing.

6 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.

7 Option to Pay in US Dollars

Meralco has the option to pay in Philippine Peso or US Dollars, the USD-denominated portions of the Monthly Power Bill, provided, if Meralco opts to pay in US Dollars, it shall send written notice to the Power Supplier within 10 days after the receipt of the Provisional Invoice.

Appendix I

FORM OF DIRECT AGREEMENT

NOTICE TO COUNTERPARTY

Date []

To: Manila Electric Company (Counterparty)

Re: Power Supply Agreement dated _____ (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.

4. The Company and the Collateral Trustee have agreed that:
- (i) subject to the assignment provision under the Agreement and 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 the Philippines.
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: _____

Name:
Title:

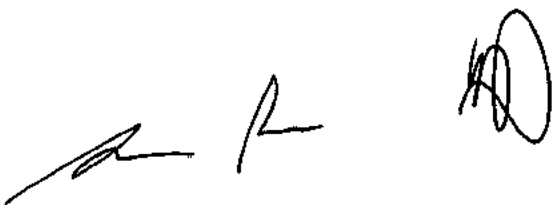
By: _____
Name:
Title:

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

By: _____
Name:
Title:

By: _____
Name: []
Title: First Vice - President

- Attachments:**
- 1. Form of Direct Agreement of Counterparty.
 - 2. Form of Transfer Notice to Counterparty.
 - 3. Two copies of this Notice of Assignment.

Three handwritten signatures are present at the bottom right of the page. The first is a stylized signature, the second is a more formal signature, and the third is a circular stamp or signature.

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 _____ (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: _____

ATTACHMENT B

Form of REPLY

Date []

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

From: Manila Electric Company (Counterparty)

Re: Power Supply Agreement dated _____ (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 J

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 J.
- 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 J 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 J, 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 J 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 J.
- 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 J.

- 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 J.

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 J, 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 J 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 J 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 J, 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 J without reasonable cause, it shall bear the costs and expenses incurred by Power Supplier in conducting, monitoring or supervising such test or re-test.

PART B – NET PLANT HEAT RATE

1. Introduction

The definitions of terms, calculation methods, uncertainty and final heat rate computational results are defined in the ASME PTC codes. The Plant test procedure defined herein conforms to ASME PTC 6S, PM and associated referenced standards for routine tests unless specified otherwise. Other capitalized terms not defined in this Appendix J 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 J.
- All test data required in the calculations will be collected using instrumentation calibrated in accordance with the procedures provided within this Appendix J.
- 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 J.
- 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 J 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 J, any test that does not meet the requirements of the ASME PTC referenced in this Appendix J 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, HR_{corr} in Btu/kWh, shall be calculated as the corrected thermal heat input from fuel, Q_{corr} in Btu/hr, divided by the corrected net plant power, P_{corr} in kW.

$$HR_{corr} \text{ (Btu/kWh)} = \frac{Q_{corr} \text{ (Btu/hr)}}{P_{corr} \text{ (kW)}} \times \text{heat rate corrections}$$

Since:

$$Q_{corr} = Q_{meas} \pm \text{corrections}$$

and

$$P_{corr} = P_{meas} \pm \text{corrections}$$

$$\text{HRcorr (Btu/kWh)} = \frac{\{Q_{\text{meas}} (\text{Btu/hr}) + \text{corrections}\}}{\{P_{\text{meas}} (\text{kW}) \pm \text{corrections}\}} \times \text{heat rate corrections}$$

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
MASINLOC POWER PARTNERS
CO., LTD. (MPPCL), WITH
MOTION FOR CONFIDENTIAL
TREATMENT OF INFORMATION**

ANNEX “E”

ERC CASE NO. 2021-___ RC

**MANILA ELECTRIC COMPANY
(MERALCO) AND MASINLOC
POWER PARTNERS CO., LTD.
(MPPCL),**

Applicants.

X-----X

JUDICIAL AFFIDAVIT OF RYAN S. MORALES

The following examination of witness Mr. Ryan S. Morales, of legal age, with office address at 4th Floor, Technical Services Building, MERALCO Compound, Ortigas Avenue, Pasig City, who is employed at the Manila Electric Company (“**MERALCO**”) as Head of Energy Sourcing Office, was conducted by Atty. Adrian Rex C. Dimalanta, counsel for Applicant MERALCO, at the 7th Floor, Lopez Building, Ortigas Avenue, Pasig City, this 2nd day of March 2021.

The testimony of Mr. Ryan S. Morales is being offered to show and prove the following:

1. The existence and details of the Power Supply Agreement (“**PSA**”) executed between MERALCO and Masinloc Power Partners Co., Ltd. (“**MPPCL**”);
2. The necessity for the approval of the PSA to ensure continuous and reliable electricity for MERALCO’s customers;

3. The reasonableness and fairness of the provisions of the PSA, including the contract price thereunder;
4. The correctness and accuracy of the calculation of the PSA's rate impact;
5. MERALCO's compliance with the Department of Energy ("**DOE**") Department Circular No. DC2018-02-0003 ("**DOE CSP Circular**");
6. Documents that will be identified in the course of the proceedings; and
7. Other matters relevant to the Joint Application.

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

QUESTION 1: What are your educational and professional qualifications?

ANSWER 1: I have obtained a Bachelor's degree in Electrical Engineering 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 07 September 2001. On 01 February 2019, I became the Head of the Energy Sourcing Office.

Q4: What are some of your duties and responsibilities as Head of the Energy Sourcing Office?

A4: My duties and responsibilities include, among other things, 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, participating in the drafting of power

supply agreements as member of the power supply agreement working team of MERALCO, and performing any and all other acts and/or functions as may be directed by management.

Q5: Are you familiar with the case entitled: *"In the Matter of the Application for the Approval of the Power Supply Agreement (PSA) between Manila Electric Company (MERALCO) and Masinloc Power Partners Co., Ltd. ("MPPCL"), with Motion for Confidential Treatment of Information"* jointly filed by Applicants MERALCO and MPPCL? If so, why?

A5: Yes, I am familiar with the same as I was directly involved in the preparation of the Application, including its Annexes, that was filed with 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 PSA that was executed between the Applicants MERALCO and MPPCL ("**2021 PSA**").

Q6: For what purpose is your Judicial Affidavit being taken?

A6: My Judicial Affidavit is being taken in support of the aforesaid Application for the approval of the 2021 PSA between MERALCO and MPPCL. The 2021 PSA was executed following the conduct of a Competitive Selection process ("**CSP**") for the procurement of 1800 MW baseload capacity.

Q7: Who conducted the CSP?

A7: MERALCO, through the Third-Party Bids and Awards Committee ("**TPBAC**"), conducted the CSP in accordance with the DOE CSP Circular.

Q8: What transpired during the conduct of the CSP?

A8: Based on the report of the TPBAC Secretariat to MERALCO dated 2 March 2021, on 1 October 2020, MERALCO caused the publication of an Invitation to Bid ("**Invitation**"), which contained the basic terms of reference, indicating a summary of the process and timelines of the CSP, and inviting power generation companies to submit an Expression of Interest and Confidentiality Undertaking on or before the deadline set out in said Invitation. Immediately thereafter, MERALCO caused the posting thereof on its website and the DOE's e-based portal. A second publication was done on 8 October 2020.

On 27 January 2021, the bidders submitted their compliance with the Bid Requirements and the respective submissions of

the bidders were opened by the TPBAC. On 19 February 2021, the respective bid offers of bidders who passed the pre-qualification evaluation were opened. MPPCL's bid was declared as one of the best bids on even date.

On 26 February 2021, TPBAC sent a letter-notice to MPPCL, as one of the winning power suppliers, confirming after post-qualification evaluation that its proposed energy price was found to be among the best bids. The said letter-notice also contained the Notice of Award in its favor.

On 02 March 2021, MERALCO and MPPCL executed the 2021 PSA.

Q9: What are the salient provisions of the 2021 PSA?

A9: The salient provisions of the 2021 PSA are as follows:

"Commercial Operations Date	means the date that the conditions set out in Section 3.3.2 (other than the Commercial Operations Date Certificate) have been satisfied, and 600MW of the Plant shall have consequently entered into commercial operation. ¹
Contract Capacity	shall be, subject to Article 10, 600 MW (net) sourced from the Plant ²

xxx

2.2 Term of Agreement

Subject to Article 3, this Agreement shall become effective on the Execution Date. The term of this Agreement ("**Term**") shall commence on the Commercial Operations Date, and shall expire on the last day of the 20th Contract Year, unless terminated earlier in accordance with the terms of this Agreement or extended by the application of Section 2.2 and Section 17.3.3.

The Term may be renewed for an additional period of up to one (1) year 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.

¹ See PSA, p. 4, clause 1.1, "Commercial Operations Date".

² See PSA, p. 4, clause 1.1, "Contract Capacity".

3.3 **Commercial Operations Date**

- 3.3.1 Power Supplier covenants that 600 MW of the Plant shall achieve Commercial Operations Date no later than 26 April 2025 (the "**Scheduled Commercial Operations Date**").
- 3.3.3 If the Commercial Operations Date has not occurred by the Scheduled Commercial Operations Date, from and after the Scheduled 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 (net), as may be applicable, subject to Article 6 and in accordance with Appendix E, to be paid for by Meralco at the lower between WESM price and the Price; or (ii) to the extent that such Replacement Power is not available due to inadequate supply from WESM or from any other source, pay to Meralco a fine equivalent to Nine Hundred Eight Philippine Pesos (PhP 908.00) multiplied by each affected MWh nomination by Meralco, until the earlier of: (a) the Commercial Operations Date, and (b) 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.

xxx

6.1 **Supply of Power**

Subject to the terms and conditions of this Agreement:

- 6.1.1 From the Commercial Operations Date 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 (and Replacement Power), to the extent of Meralco's relevant day-ahead nominations.
- 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; provided, however, that Power Supplier shall be allowed to deliver and sell to Meralco the Associated Energy from

WESM or any other source only when the Plant is on Outage beyond Full Load Equivalent Scheduled Outage Allowance Days and/or Full Load Equivalent Forced Outage Allowance Days. For this purpose, should Power Supplier fail to source from the Plant when it is available, Meralco shall pay the lower between WESM price and Price, in accordance with Appendix G.

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 not exceeding fifteen (15) Full Load Equivalent Outage Days ("**Full Load Equivalent Scheduled Outage Allowance Days**") and Forced Outages not exceeding three (3) Full Load Equivalent Outage Days ("**Full Load Equivalent Forced Outage Allowance Days**") each Contract Year; provided that a Forced Outage may be counted towards the Full Load Equivalent Forced Outage Allowance Days upon provision by Power Supplier to Meralco of a copy of the acknowledgement letter from the System Operator or report from the Market Operator that a Forced Outage has occurred.
- 9.1.2 During Scheduled Outages within the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages within the Full Load Equivalent Forced Outage Allowance Days, Meralco shall procure Replacement Power from the WESM and Power Supplier shall not bill Meralco for these quantities.
- 9.1.3 During Scheduled Outages that exceed the Full Load Equivalent Scheduled Outage Allowance Days and Forced Outages that exceed the Full Load Equivalent Forced Outage Allowance Days, Power Supplier shall purchase Replacement Power, which shall be declared as BCQ and paid by Meralco at the lower between WESM price and Price.

xxx

9.5 Fine for Failure to Provide Replacement Power

In case Power Supplier fails to provide Replacement Power from any other source or WESM due to inadequate supply, Power Supplier shall pay a fine equivalent to Nine Hundred Eight Philippine Peso (Php908) multiplied by each affected MWh nomination by Meralco, which shall be used to reduce the generation charge to the consumers. For the avoidance of doubt, in case Power Supplier fails or refuses to supply Replacement Power despite availability thereof, then Section 18.3.1 shall apply.

xxx

Article 10. Assignment or Transfer of Contract Capacity

10.1 Transfer of Contract Capacity and Associated Energy

10.1.1 Contract Capacity and Associated Energy that is no longer required by Meralco shall not be assigned, transferred, designated, delegated or allocated (collectively in this context, "**Transfer**") to another, except (i) if required for project financing in the case of the Power Supplier, as provided in Article 21; (ii) when allowed by the ERC; or (iii) when necessary to mitigate or avoid any losses or costs due to stranded contract capacity; provided that any assignment or transfer to a distribution utility shall comply with applicable competitive selection process rules. In the case of item (iii), Meralco shall 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 (a) to any of its business segments or wholly-owned Affiliates without the prior consent of Power Supplier, or (b) 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. In the case of (b), 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; and 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.

10.1.2 In respect of Transfers not requiring Power Supplier's consent, Meralco shall give a written notice to 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 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 Power Supplier of the written acceptance of such Transfer by the transferee:

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

10.2 Reduction in Contract Capacity and Associated Energy

10.2.1 Subject to the provisions of Section 10.2.2 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 in order to avoid stranded contract capacities or costs, or by reason of the enforcement of Retail Competition and Open Access, the Renewable Energy Law and other Laws and Legal Requirements.

10.2.2 Meralco shall give a written notice to Power Supplier of the Reduction in Contract Capacity and Associated Energy 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

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.

XXX

APPENDIX E

CALCULATION OF PAYMENT

B. MONTHLY POWER BILL UPON COMMERCIAL OPERATIONS DATE

The MPB upon COD shall consist of Capacity Payment, Energy Payment, and Other Payment. The Capacity Payment consists of Component A (MCP), Component B (MIFP) and Component C (MFOM) and the Energy Payment consists of Component D (MFP), and Component E (MVOM). Other Payments are Component F (RCP), Component G (LRAP), and Component H (ASCRP). Thus, the MPB upon COD ("**MPB**") for Contract Capacity and Associated Energy (and Replacement Power) for each Billing Period shall be equal to:

$$\text{MPB} = \text{MCP} + \text{MIFP} + \text{MFOM} + \text{MFP} + \text{MVOM} + \text{RCP} - \text{LRAP} + \text{ASCRP}$$

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

A copy of the 2021 PSA, including its attachments, is attached to the Application as **Annex "D"**.

Q10: What is the capacity contracted under the 2021 PSA?

A10: The capacity contracted under the 2021 PSA is 600 MW (net) from MPPCL's Plant.

Q11: What is the effective rate under the 2021 PSA?

A11: Given a certain set of assumptions, the annual effective rate under the PSA is **PhP 3.3708 per kWh (at plant gate, VAT inclusive)**.

Q12: What is the annual delivered rate under the 2021 PSA?

A12: The annual delivered rate under the PSA is **PhP 3.4708 per kWh (VAT and line rental inclusive)**. It is noted that the annual delivered rate of PhP 3.4708 per kWh is **lower** by about PhP 1.2585 per kWh than the effective cost of PhP 4.7293 per kWh (VAT inclusive), if the equivalent capacity under the instant PSA will be sourced from the WESM. In fact, by sourcing the capacity through the instant PSA, MERALCO's average blended generation rate will be reduced by about **PhP 0.1562 per kWh** (as seen in the *Masinloc Power Partners Co., Ltd. PSA – Rate Impact*), resulting in savings to consumers of about PhP 6.28 Billion.

*A copy of the Masinloc Power Partners Co., Ltd. PSA – Rate Impact is hereto attached as **ANNEX "A"**.*

Q13: What prompted MERALCO to enter into this 2021 PSA?

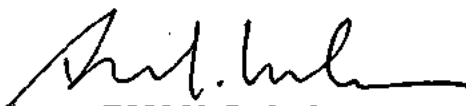
A13: Based on its power situation outlook for 2024 and succeeding years, as shown in its 2020 Power Supply Procurement Plan as approved by the Department of Energy ("**DOE**"), MERALCO foresees a baseload capacity deficit in its portfolio covering 1800 MW.

Thus, in order to ensure continuous and reliable electricity for MERALCO's customers, there is a need for MERALCO to source additional baseload capacity through the instant 2021 PSA. Otherwise, MERALCO will be constrained to source its capacity deficit from the WESM, thereby exposing its customers to volatile WESM prices.

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 2nd day of March 2021, at Pasig City, Philippines.

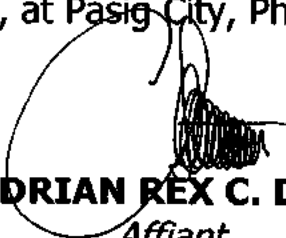

RYAN S. MORALES
Affiant

ATTESTATION

I, **ATTY. ADRIAN REX C. DIMALANTA**, 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, **RYAN S. MORALES**;
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 2nd day of March 2021, at Pasig City, Philippines.


ATTY. ADRIAN REX C. DIMALANTA
Affiant

SUBSCRIBED AND SWORN TO before me this 2nd day of March 2021 by Ryan S. Morales and Atty. Adrian Rex C. Dimalanta exhibiting their SSS ID with No. 33-72285673 and Driver's License No. N03-03-365433, respectively, as proof of their identities.

Doc. No.: 392;
Page No.: 80;
Book No.: 10;
Series of 2021.



BILLING COMPONENT	UNIT	BASE RATE ^(a)	CPI Adj Factor ^(c)	BILLING DETERMINANT ^(b)	AMOUNT (PHP)
A. Capacity Payment (MCP) Peso Portion	(Php/kw-yr)	9,289.5967		600,000 (kw)	5,573,758,020.00
B. Interconnection Facilities Payment (MIFF) Interconnection Facilities Capacity Portion	(Php/kw-yr)	-		600,000 (kw)	0.00
Interconnection Facilities FOM Portion	(Php/kw-yr)	-	1.151964	600,000 (kw)	0.00
C. Fixed O&M Payment (MFOM) Non-escalating US Dollar Portion	(USD/kw-yr)	-		600,000 (kw)	0.00
Escalating US Dollar Portion	(USD/kw-yr)	-	1.078194	600,000 (kw)	0.00
Non-escalating Peso Portion	(Php/kw-yr)	4,803.0160		600,000 (kw)	2,881,809,600.00
Escalating Peso Portion	(Php/kw-yr)	-	1.151964	600,000 (kw)	0.00
D. Fuel Payment (MIFFP)					
Variable O&M Payment (MVOM)	(Php/kWh) ^(b)	1.1357		4,996,800,000 (kWh)	5,674,686,907.29
Non-escalating US Dollar Portion	(USD/kWh)	-		4,996,800,000 (kWh)	0.00
Escalating US Dollar Portion	(USD/kWh)	-	1.078194	4,996,800,000 (kWh)	0.00
Non-escalating Peso Portion	(Php/kWh)	0.1818		4,996,800,000 (kWh)	908,418,240.00
Escalating Peso Portion	(Php/kWh)	-	1.151964	4,996,800,000 (kWh)	0.00
Total Energy Payment (VAT exclusive)	(Php/kWh)	3.0097			15,038,672,767.29
VAT Payment	(Php)				1,804,640,732.07
Total Energy Payment (VAT inclusive)	(Php)				16,843,313,499.36
Effective Rate at Plant Gate	(Php/kWh)				3.3708
WESM Line Rental Rate ^(c)	(Php/kWh)				0.1000
Delivered Rate (VAT inclusive) ^(d)	(Php/kWh)				3.4708
Effective Cost if sourced from WESM ^(e)	(Php/kWh)				4.7293
Increase / (Decrease) over WESM Price	(Php/kWh)				(1.2585)
Meralco Captive Energy Demand ^(f)	(kWh)				40,256,100,690
Increase / (Decrease) in Generation Cost	(Php)				(5,288,586,062.97)
Increase / (Decrease) in Generation Cost	(Php/kWh)				(0.1562)

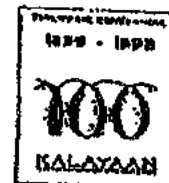
NOTE:

- ^(a) Base Rates as set forth in Schedule 1 of Appendix E of the PSA.
- ^(b) Fuel Payment calculated based on Guaranteed Net Plant Heat Rate at 100.00% load factor for Contract Year 1, and Forex = PHP 51.352/USD.
- ^(c) Line Rental rate for Masinloc Power Partners Co. Ltd. is based on the maximum allowable value for Contract Year 1 as stated in the PSA.
- ^(d) Delivered Rate (VAT inclusive) will include AS Cost Recovery rate once imposed under existing rule or regulation. AS Cost Recovery rate for Masinloc Power Partners Co. Ltd. shall be based on the lower between actual rate and cap of Php 0.28/kWh.
- ^(e) Cost if equivalent volume of Masinloc Power Partners Co. Ltd. is sourced from the WESM based on forecasted average hourly prices from May 2025 to Apr 2026, inclusive of 6% VAT.
- ^(f) Forecasted Meralco Captive Energy for May 2025 to Apr 2026 based on Power Supply Procurement Plan as submitted to DOE.
- ^(g) Forecasted Indices for 2025.
- ^(h) Energy Payments based on 95.07% plant capacity factor.

Prepared by: 
Reviewed by: Ryan S. Morales



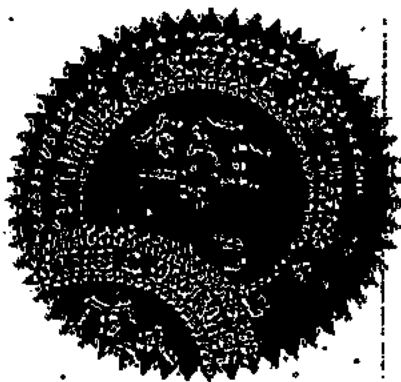
REPUBLIC OF THE PHILIPPINES
Office of the President
SECURITIES AND EXCHANGE COMMISSION
SEC Building, EDSA, Greenhills,
City of Mandaluyong, Metro Manila



C E R T I F I C A T I O N

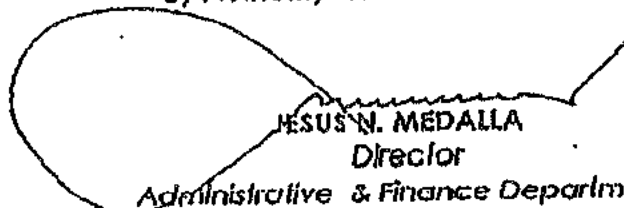
I, JESUS N. MEDALLA, Director, hereby certify that according to the records of the Securities and Exchange Commission, the MANILA ELECTRIC COMPANY was incorporated under the laws of the Philippines on MAY 7, 1919 and that said corporation has not been dissolved by action of its stockholders nor has this Commission received any information derogatory to the good standing of said corporation in the Philippines that would prevent it from conducting its normal corporate franchise.

IN WITNESS WHEREOF, I have set my hand and cause the seal of this Commission to be affixed at EDSA, Greenhills, Mandaluyong City, Philippines this 14th day of July in the Year of Our Lord Nineteen Hundred and Ninety-nine.



precious
0513167K/P400

By Authority of this Commission:


JESUS N. MEDALLA
Director
Administrative & Finance Department

The Government of the Philippine Islands



DEPARTMENT OF COMMERCE AND COMMUNICATIONS BUREAU OF COMMERCE AND INDUSTRY MERCANTILE REGISTER

To All to Whom These Presents May Come, Greeting:
A todos los que la presente oieren. Salud:

Whereas, Articles of Incorporation, duly signed and acknowledged for the organization of the
FOR CRANTO, as incorporados Articulos de Incorporación debidamente firmados y ratificados, para la organización de la

MANILA ELECTRIC COMPANY

under and in accordance with the provisions of Act of the Philippine Commission Numbered Fourteen hundred
conforme a las disposiciones de la Ley de la Comisión de Filipinas Número Mil cuatrocientas

and fifty-nine, enacted March first, nineteen hundred and six, and in force April first, nineteen hundred and six
y sesenta y nueve, emitida el primero de marzo de mil novecientos seis y en vigor desde el primero de abril de mil novecientos seis

and of Act of the Philippine Legislature Numbered Twenty-seven hundred and twenty-eight, enacted January
y por la Ley de la Legislatura Filipina Número Dos mil setecientos veintiocho, aprobada el

thirty-first, nineteen hundred and eighteen, were presented for filing in the Mercantile Register of the Bureau of
treinta y uno de enero de mil novecientos dieciocho, para ser archivados en el Registro Mercantil de la Oficina de

Commerce and Industry, a copy of which said articles is hereto attached:
Comercio e Industria, una copia de los cuales se acompaña:

Now, therefore, By virtue of the powers and duties vested in me by law, I do hereby certify that the
Por tanto, en virtud de los poderes y deberes que la ley me confiere, certifico por la presente que

said Articles of Incorporation were duly filed with the Mercantile Register of the Bureau of Commerce and
dichos Artículos de Incorporación han sido debidamente archivados en el Registro Mercantil de la Oficina de Comercio e

Industry on the seventh day of May Anno Domini
Industria el día del Año del Señor

nineteen hundred and nineteen
mil novecientos

In testimony whereof, I have hereunto set my hand and caused
En testimonio de lo cual firmo la presente con mi puño y letra y hago

(S E A L)

the seal of the said Register to be affixed at Manila
el stampo del dicho Registro en

this 7th day of May Anno Domini
por el día del Año del Señor

nineteen hundred and nineteen
mil novecientos

(Sgd.) F. A. REYES
Acting Director



REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
Ground Floor, Secretariat Building, PICC
City Of Pasay, Metro Manila

COMPANY REG. NO. 102

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

MANILA ELECTRIC COMPANY

(Amending Article IV by extending the term of its existence thereof)

copy annexed, adopted January 29, 2018 by majority vote of the Board of Directors and on May 29, 2018 by the vote of the stockholders owning or representing at least two-thirds of the outstanding capital stock, and certified under oath by the Assistant Corporate Secretary and a majority of the Board of Directors of the corporation was approved by the Commission on this date pursuant to the provision of Section 16 of the Corporation Code of the Philippines, Batas Pambansa Blg. 68, approved on May 1, 1980, and copies thereof are filed with the Commission.

Unless this corporation obtains or already has obtained the appropriate Secondary License from this Commission, this Certificate does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/broker/merchant, financing/lending company and time shares/club shares/membership certificates issuers or selling agents thereof; nor to operate a fiat money to virtual currency exchange. 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 Pasay City, Metro Manila, Philippines, this 19th day of December, Twenty Eighteen.

GERARDO E. DEL ROSARIO

Director

Company Registration and Monitoring Department

EJ/mii

305
9/18/18

COVER SHEET
for Applications at
COMPANY REGISTRATION AND MONITORING DEPARTMENT

Nature of Application
AMENDMENT

SEC Registration Number
PW-102

Former Company Name
MANILA ELECTRIC COMPANY

AMENDED TO:
New Company Name

Principal Office (No./Street/Barangay/City/Town/Province)
**LOPEZ BLOC, ORTIGAS AVENUE,
BRGY. UGONG, PASIG CITY**

COMPANY INFORMATION

Company Email Address: **www.meralco.com.ph**

Company's Telephone Number: **16220**

Mobile Number:

CONTACT PERSON INFORMATION

The designated person **MUST** be a Director/Trustee/Partner/Officer/Resident Agent of the Corporation

Name of Contact Person: **William S. Pamintuan**

Email Address: **Wspamintuan@meralco.com.ph**

Telephone Number: **672-8014**

Mobile Number:

Contact Person's Address:

To be accomplished by CRMD Personnel

Assigned Processor: _____ Date: _____ Signature: _____

Document I.D. _____

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	_____

AMENDED
ARTICLES OF INCORPORATION OF THE
MANILA ELECTRIC COMPANY

KNOW ALL MEN BY THESE PRESENTS:

That we, a majority of whom are residents of the Philippine Islands, have this voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the Philippine Islands.

AND WE HEREBY CERTIFY-

FIRST. That the name of said corporation shall be the "MANILA ELECTRIC COMPANY".

SECOND. That the purpose for which such corporation if formed is to engage in the production of light, heat and power, and in furtherance thereof, to acquire, construct, equip, own, lease, operate, and maintain in City of Manila, and elsewhere in the Philippine Islands, street railway, tramlines, and passenger and freight buses, whether operated by electric power, steam power, animal power, or power of any other kind; to acquire, construct, equip, own, lease, operate, and maintain in the City of Manila, and elsewhere in the Philippine Islands, plants for the production of electric light, heat, and power, water- power plants, gas plants, and other plants for the production of illumination, heat or power, and ice plants, refrigeration, cold-storage, and bottling plants and to produce, manufacture, develop, distribute, buy, sell, deal in, and dispose of the products of supplies of all kinds, to acquire, construct, equip, own, operate, and manage warehouses, docks, and other terminal facilities; to acquire, own, hold, lease, operate, and dispose of any and all franchises or right to operate street railways or other railways or plants for the production of

electricity, water power, or gas, or to carry on any of the businesses hereinbefore described; to acquire, hold, dispose of any patents, and to deal in any kind of machinery and apparatus or supplies, or to carry on all the works necessary or convenient for the purpose and powers herein set forth.

To purchase, hold, sell, assign, transfer, mortgage, pledge, or otherwise dispose of real or personal properties, shares of stock, bonds or other securities or evidences of indebtedness, of any corporation or corporation of the Philippine Islands or any state, territory, or country, and, while owner of any such securities, to exercise all the rights, powers, and privileges of ownership, including the right to vote therein.

To invest its corporate funds in another corporation or business to improve or enhance the services of the Company or leverage on the Company's assets and other incidental or necessary investment of corporate funds.

Without in any particular limiting any of the powers of the corporation, it is hereby expressly declared and provided that the corporation shall have power to guarantee any dividends or bonds, contracts, or other obligations; to make and perform contracts of any kind and description, and, in carrying on its business, and for the purpose of attaining or furthering any of its objects, to do any and all other powers which a natural person could do and exercise and which are now or hereafter may be authorized by law.

Notwithstanding any other provision of these Articles of Incorporation, or the laws

of the Republic of the Philippines, so long as there shall be outstanding any of the Corporation's First Mortgage Bonds, due 1984, Series L, the Corporation's Series Q Bonds, due 1987, or the Corporation's Series R Bonds, due serially 1971, 1972, and 1973, or the Corporation's Bonds of each additional series as the Board of Directors of the Corporation may designate for this purpose by resolution filed with the Trustee under the Indenture referred to below, the Corporation shall not, and shall lack the corporate power to, create or suffer to exist any lien (other than the lien of the Corporation's Indenture, dated as of December 31, 1957, as the same has

heretofore been supplemented and amended, and may be further supplemented and amended, said Indenture, as thus heretofore and to be supplemented and amended being herein referred to as the "Indenture") upon the property, or any part thereof, covered or intended to be covered by the lien of the Indenture, or the income therefrom, other than (1) excepted encumbrances as defined in the Indenture, and (2) in the case of property acquired after September 25, 1964, prior liens existing thereon at the time of acquisition thereof, provided, however, that this provision shall not relate to any unsecured obligation or liability of the Corporation incurred in the ordinary course of business which, if unpaid, might solely as a matter of general Philippine Law, be given precedence over or equality with the lien of the Indenture as a lien or charge upon any of the property covered or intended to be covered by the lien of the Indenture or the income therefrom, as long as the Corporation shall cause the same to be discharged when due and in any event within four months after the accruing thereof.

THIRD. That the place where the principal office of the Corporation is to be established or located is at Lopez Building, Ortigas Avenue, Barangay Ugong, Pasig City, Metro Manila, Philippines. (As amended on 27 May 2014)

FOURTH. That the term for which said Corporation is to exist is fifty (50) years from May 7, 2019. (As approved by its Board of Directors on 29 January 2018 and ratified by 2/3 of its Stockholders on 29 May 2018).

FIFTH. That the names and residences of the incorporators of said Corporation are as follows:

<u>NAME</u>	<u>WHOSE RESIDENCE IS AT</u>
J.C. Rockwell	MANILA, P.I
D.M. Shaw	MANILA, P.I
R. W. Spofford	MANILA, P.I
James Ross	MANILA, P.I
J.G Lawrence	MANILA, P.I

SIXTH. That the number of directors of said Corporation shall be eleven (11) and that the names and residences of the directors of the Corporation who are to serve until their successors are elected and qualified as provided by the By-Laws are as follows, to wit:

<u>NAME</u>	<u>WHOSE RESIDENCE IS AT</u>
J. C. Rockwell	MANILA, P.I.
D.M.Shaw	MANILA, P.I.
R. W. Spofford	MANILA, P.I.
James Ross	MANILA, P.I.
J. G. Lawrence	MANILA, P.I.

SEVENTH. That the capital stock of the Corporation is FIFTEEN BILLION FIVE HUNDRED MILLION PESOS (Php 15,500,000,000.00) and said capital stock is divided into:

- a) ONE BILLION TWO HUNDRED FIFTY MILLION (1,250,000,000) Shares of Common Stock, with par value of TEN PESOS (Php10.00) per share, or TWELVE BILLION FIVE HUNDRED MILLION PESOS (Php12,500,000,000.00); and
- b) THREE HUNDRED MILLION (300,000,000) shares of Preferred Stock, with par value of TEN PESOS (Php10.00) per share, or THREE BILLION PESOS (Php3,000,000,000.00).

(As approved by the Board of Directors on 26 February 2007 and by the stockholders representing at least 2/3 of the outstanding capital stock on 29 May 2007)

3 M
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In no case, however, shall the capital stock of the corporation be reduced to Less than sixty percent (60%) full Filipino ownership.

Preferred stock shall be issued serially in blocks of not Less than ONE HUNDRED THOUSAND (100,000) shares. Shares of preferred stock comprising one series shall have the same rights and restrictions. There shall be no pre-emptive right on the part of the holders of shares of either the common stock or preferred stock of the Corporation to subscribe to any or all issues or other disposition of shares of preferred stock.

Holders of preferred stock shall be entitled to cumulative preferential dividends before any dividend is paid upon shares of common stock, payable at a rate and at such interval as may be determined by the Board of Directors from time to time for each series or block of preferred stock, provided that such dividend rate shall in no case be higher than Twenty Percent (20%) per annum. Preferred stock may be issued subject to call by the Corporation or with rights for their redemption, either mandatory at a fixed or determinable date after issue or at the option of the holders thereof. Any and all shares of preferred stock so redeemed shall not be considered retired and may be re-issued by the Corporation. Preferred shares shall have such other features as the Board of Directors may determine prior to the issue of each series or block of preferred stock to which they are applicable.

Voting rights shall be vested exclusively in common shares. Preferred stock shall be non-voting, except in those cases expressly provided by Law.

After full cumulative dividends upon the outstanding preferred shares shall have been paid, the holders of common shares shall be entitled to receive such dividends as may from time to time be declared by the Board of Directors.

EIGHTH. That the amount of said capital stock which has been actually subscribed is TWENTY THOUSAND PESOS (20,000.00), and the following persons have subscribed for the number of shares and amount of capital stock set out after their respective names:

<u>NAME</u>	<u>RESIDENCE</u>	<u>NUMBER OF SHARES</u>	<u>AMOUNT OF CAPITAL STOCK SUBSCRIBED</u>
J. C. Rockwell	MANILA, P.I.	40	P 4,000.00
D.M.Shaw	MANILA, P.I.	40	4,000.00
R. W. Spofford	MANILA, P.I.	40	4,000.00
James Ross	MANILA, P.I.	40	4,000.00
J. G. Lawrence	MANILA, P.I.	<u>40</u>	<u>4,000.00</u>
		<u>200</u>	<u>P 20,000.00</u>

NINTH. That the following persons have paid on the shares of capital stock for which they have subscribed the amounts set out after their respective names:

<u>NAME</u>	<u>RESIDENCE</u>	<u>AMOUNT OF CAPITAL STOCK SUBSCRIBED</u>
J. C. Rockwell	MANILA, P.I.	P 4,000.00
D.M.Shaw	MANILA, P.I.	4,000.00
R. W. Spofford	MANILA, P.I.	4,000.00
James Ross	MANILA, P.I.	4,000.00
J. G. Lawrence	MANILA, P.I.	<u>4,000.00</u>
		<u>P 20,000.00</u>

TENTH. That D. M. Shaw, has been elected by 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 the Corporation and to receipt in its name for all subscriptions paid in by said subscribers.

ELEVENTH. That tram lines to be acquired and operated by the corporation are the tramlines now owned and operated in the City of Manila, and the province of Rizal, Philippine Islands, by the Manila Electric Railroad and Light Company and the Manila Suburban Railways Company.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 5th day of May, 1919.

(SGD.) J.C. ROCKWELL	(SEAL)
(SGD.) R.W. SPOFFORD	(SEAL)
(SGD.) D.M. SHAW	(SEAL)
(SGD.) JAMES ROSS	(SEAL)
(SGD.) J.G. LAWRENCE	(SEAL)

Signed and sealed in the
Presence of

(SGD.) JAMES M. ROSS
(SGD.) EWALDE E. SELPH

PHILIPPINE ISLANDS)

CITY OF MANILA) S.S.

On this 6th day of May in the year A. D. one thousand nine hundred and nineteen, before me, J.R. Mateo, a notary public in and for the City of Manila, P.I., personally appeared J.C. Rockwell, with personal cedula No. F-7422 issued at Manila, P.I., on the 7th day of January, 1919; D. M. Shaw, with personal cedula no. F-7612, issued at Manila, P.I., on the 9th day of January, 1919; R. W. Spofford, with personal cedula No. M-168888, issued at Manila, P.I., on the 6th day of May, 1919; James Ross, with personal cedula No. F-5318, issued at Manila, P.I., on the 4th day of January, 1919; and J. G. Lawrence, with personal No. F-6628, issued at Manila, P.I., on the 9th day of January, 1919, known to me to be the persons whose names are subscribed and who executed the within instrument, and each of them acknowledged to me that he freely and voluntarily executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last written.

Doc. No. 239 Page 87 of my register.

(SGD.) J. R. MATEO

Notary Public

My commission expires

December 31, 1920

PHILIPPINE ISLANDS)

CITY OF MANILA)S.S

D. M. Shaw, being duly sworn, depose and says that on the 5th day of May, anno domini nineteen hundred and nineteen, he was duly elected by the subscribers named in the foregoing articles of incorporation as treasurer of the corporation to act as such until his successor has been duly elected and qualified in accordance with the by-laws of the corporation, and that as such treasurer, he has been authorized by the subscriber to receive for the corporation all subscriptions paid in by subscribers for the capital stocks; that Twenty Thousand (P20,000) pesos worth of stock has been actually subscribed and that of said subscription, Twenty Thousand (P20,000) pesos, has been actually transferred to him in trust and received by him for the benefit and to the credit of the corporation, and that at least twenty per centum of the entire capital stock has been subscribed and at least twenty-five per centum of the subscription has been actually paid to him for the benefit and credit of the corporation.

(SGD.) D. M. SHAW

Subscribed and sworn to before me this 6th day of May, 1919, the affiant exhibiting his cedula No. F-7612, issued at Manila, P.I., on the 9th day of January 1919.

(SGD.) J. R. MATEO

Notary Public

My commission expires

December 31, 1919

Doc. No. 240

Page No. 88



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

Company Reg. No. 102

**CERTIFICATE OF FILING
OF
AMENDED BY-LAWS**

KNOW ALL MEN BY THESE PRESENTS:

This is to certify that the Amended By-Laws of

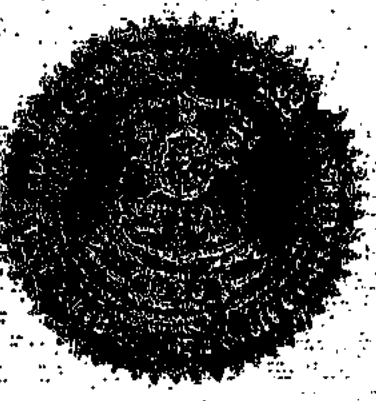
MANILA ELECTRIC COMPANY

copy annexed, adopted on March 22, 2013 by the Board of Directors pursuant to the power conferred and ratified by the stockholders on May 28, 2002 owning at least two-thirds of the outstanding capital stock, certified by a majority of the Board of Directors and countersigned by the Assistant Corporate Secretary of the Corporation, was approved by the Commission on this date, pursuant to the provisions of Section 48 of the Corporation Code of the Philippines, Batas Pambansa Blg. 68, approved on May 1, 1980 and attached to the other papers pertaining to said corporation.

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 7th day of August, Twenty Thirteen.


FERDINAND B. SALES
Acting Director

Company Registration and Monitoring Department



COVER SHEET

P W - 1 0 2

S.E.C. Registration Number

M A N I L A E L E C T R I C C O M P A N Y

(Company's Full Name)

L O P E Z B U I L D I N G , O R T I G A S

A V E N U E , P A S I G C I T Y

(Business Address: No. Street City / Town / Province)

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

Total No. of Stockholders

Total Amount of Borrowings

Domestic

Foreign

To be accomplished by SEC Personnel concerned

File Number

ECU

Document I.D.

Cashier

STAMPS

Remarks = pls. use black ink for scanning purposes

Republic of the Philippines)
City of Pasig) S.S.

SECRETARY'S CERTIFICATE

I, **WILLIAM S. PAMINTUAN**, Filipino, of legal age, with office address at 8th Floor, Lopez Building, Meralco, Ortigas Avenue, Pasig City, after having been sworn, in accordance with law, depose and state that:

1. I am the duly elected and qualified Assistant Corporate Secretary of Manila Electric Company, a corporation duly organized and existing under and by virtue of the Republic of the Philippines, with principal office at Lopez Building, Ortigas Avenue, Pasig City.
2. To the best of my knowledge, no action or proceeding has been filed or is pending before any Court involving an intra-corporate dispute and/or claim by any person or group against the Board of Directors, individual directors and/or major corporate officers of the Corporation as its duly elected and/or appointed directors or officers or vice versa.¹

Pasig City, 8th day of July, 2013


WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

SUBSCRIBED AND SWORN to before me on this JUL 09 2013 day of 2013, in PASIG CITY, affiant exhibiting his TIN No. 146473562000 issued on at.

Doc No. 1131
Page No. 23
Book No. ✓
Series of 2013.


NOTARY PUBLIC
JULY. FREEDOM L. NAVIDAD
PASIG, PATEROS, TAGUIG, AND SAN JUAN
ISSUED ON FEBRUARY 28, 2013 AT PASIG CITY
APPOINTMENT NO. 27 (2013-2015)
OIL NO. 52653 / IAP NO. 113518 / 4544413 RSM CHAPTER
PIS NO. 6157439 / 0715503 PASIG CITY
1st FLOOR LOPEZ BLDG. ORTIGAS AVENUE, PASIG CITY

¹ There are cases, other than those involving intra-corporate dispute and/or claim, that have been filed or are pending against the Board of Directors, individual directors and/or major corporate officers of the Corporation as its duly elected and/or appointed directors or officers or vice versa (see "Annex A" for details).

Annex A

a. Civil Cases

SUIT TYPE	CASE NAME	CASE NO.
Damages	MAGGIE SUELTO, ET. AL. (PABAHAY 2000) VS. MERALCO, HEREIN REPRESENTED BY MANOLO M. LOPEZ AND/OR JOSE DE JESUS	CIVIL CASE NO. 461-M-2009
Damages	EMMA LARDIZABAL, ET. AL. (PABAHAY 2000), REPRESENTED BY THE BOARD OF DIRECTORS OF PABAHAY CONSUMERS AFFAIR LEGAL CENTER, INC. VS. MERALCO, HEREIN REPRESENTED BY MANOLO M. LOPEZ &/OR JOSE DE JESUS	CA-G.R. CV NO. 96303
Service Irregularity	GLORIA CO VS. MERALCO REPRESENTED BY ITS PRESIDENT AND/OR THE BRANCH MANAGER, ROOSEVELT BRANCH	Q-03-50948
Billing Adjustment	G. G. SPORTSWEAR MFG. CORP., REPRESENTED BY ITS PRESIDENT NARI K. GIDWANI VS. MERALCO, REPRESENTED BY ITS PRESIDENT MANUEL M. LOPEZ, MANUEL L. TUASON, BRANCH MANAGER, MERALCO MAKATI CITY	01-424
Service Irregularity	JOHNNY CATAYONG VS. MERALCO AND MANUEL TUASON	01-1727
Damages	LITO ROSAL, ET. AL. (PABAHAY 2000), REPRESENTED BY THE BOARD OF DIRECTORS OF PABAHAY CONSUMERS AFFAIR LEGAL CENTER, INC. VS. MERALCO, HEREIN REPRESENTED BY MANOLO M. LOPEZ &/OR JOSE DE JESUS	CIVIL CASE NO. 417-M-2010
Damages	QUINTIN CANAYA VS. MERALCO, HEREIN REPRESENTED BY MANOLO M. LOPEZ &/OR JOSE DE JESUS	CIVIL CASE NO. 416-M-2010
Service Irregularity	IVY CORONADO, NONATO RODILLADO, AND ANTONIO VARGAS REPRESENTED BY HIS WIFE, ANNIE VARGAS VS. MERALCO, MS. M. P. DERPO, HEAD, COMMONWEALTH AVE. BRANCH, QUEZON CITY, A CERTAIN MR. CACHO, BR. INSPECTOR, JOGI AND LEO, BOTH BR. FIELD REPRESENTATIVES	Q-0247581

Service Irregularity	MARIE ANN R. ZAFRA VS. MERALCO, THE PRESIDENT/CEO, THE CHAIRMAN & MEMBERS OF THE BOARD OF DIRECTORS, NELLO AMURAO, RUBEN KALAW, GINO CRUZ, RONALD RAMOS, NEIL RODEL, DINDO VALDERAMA, JOHN DOE, PETER DOE & JAMES DOE	CIVIL CASE NO.422-M-2008
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b. Labor Cases

SOLUTION	CASE TITLE	CASE NO.
Illegal Dismissal	VICENTE VILLANUEVA VS. NATIONAL LABOR RELATIONS COMMISSION, MERALCO AND/OR MANUEL M. LOPEZ	G.R. NO. 176893
Illegal Dismissal	CELESTINO G. SANTOS VS. NATIONAL LABOR RELATIONS COMMISSION, MERALCO AND MANUEL M. LOPEZ	G.R. NO. 193266
Illegal Dismissal	(FILE NO: LABOR-10-11-0001) PASTOR P. SAJORDA, JR. VS. MERALCO MANAGEMENT & LEADERSHIP CTR./ NINO SUAREZ/ VIVIEN ARNOVIT/ MANNY PANGILINAN/ AGNES FIDELINO	NLRC NCR 10-14725-10
Illegal Dismissal	ARNOLD M. ROMEN VS. MERALCO &/OR MANUEL M. LOPEZ/ JESUS FRANCISCO, AND CALAPAR SERVICES, INC., AND MR. VIRGILO P. TAMAYO	NLRC NCR NO. LAC 01-000235-08
Illegal Dismissal	CARLOS S. ORDENA VS. MERALCO AND MANUEL M. LOPEZ	NLRC NCR CASE NO. 10-11415-07
Illegal Dismissal	HARLITO CARBONELL VS. MERALCO AND MANUEL LOPEZ	NLRC NCR CASE NO. 00-04-03498-06
Illegal Dismissal	VIRGILO ESPIRITU VS. NLRC, MERALCO AND MANUEL M. LOPEZ	CA-G.R. SP NO. 108139
Illegal Dismissal	LEONARDO S. ANGELO, JR. VS. MERALCO AND MANOLO LOPEZ	G.R. NO. 189768
Illegal Dismissal	(FILE NO: LABOR-10-10-0003) MERALCO/ MANUEL M. LOPEZ VS. NLRC, EDDIE R. DUNGO, ET. AL.	CA-G.R. SP No. 124534

Illegal Dismissal	(FILE NO: LABOR-ID-10-0008) THE LATE ROGER F. NOCEJA, REP. BY HIS HEIRS LOLITA, RYAN, ROBERT, ROGER, KONNIE AND LORIZZA, ALL SURNAMED NOCEJA VS. MERALCO, RUBEN SAPITULA, & MANUEL PANGILINAN	NLRC LAC NO. 05-001322-11
Illegal Dismissal	(FILE NO: LABOR-ID-10-0009) MERALCO VS. JOSELITO L. DE LUNA, ET. AL.	CA-G.R. SP NO. 124664
Illegal Dismissal	(FILE NO: LABOR-ID-11-0002) RANDY A. DAYO VS. MERALCO, MANUEL V. PANGILINAN, PRESIDENT/ E.V. CARASIG, HEAD HUMAN RESOURCE OPERATION	NLRC LAC No. 03-0010883-12
Regularization	(FILE NO: LABOR-REG-11-0002) ROGELIO G. REYES VS. MERALCO/ MERALCO INDUSTRIAL ENG'G. SERVICE CORP. &/OR MANNY PANGILINAN/ JESUS FRANCISCO	CA G.R. SP No. 126766
Illegal Dismissal	(FILE NO: LABOR-ID-11-0010) JETHRO FAJARDO VS. MERALCO & MANNY PANGILINAN	NLRC NCR Case No. 07-20774-11
Underpayment & Illegal Deduction	(FILE NO: LABOR-OTH-UP-11-0004) BERNARD L. ANONUEVO VS. MERALCO/ 3RD LANTING SECURITY & WATCHMAN AGENCY &/OR MANNY PANGILINAN & ATTY. LANTING	NLRC LAC No. 01-000517-12
Illegal Dismissal	(FILE NO: LABOR-ID-11-0011) PROCESO FEBRERO, JR. VS. MERALCO, MANNY PANGILINAN/ AIRBORNE MAINTENANCE & ALLIED SERVICES INC., ENRIQUE PELEGRIN	NLRC LAC Case No. 07-002072-12
Illegal Dismissal	(FILE NO: LABOR-ID-11-0017) WILFREDO S. TAN & PABLO R. BAUTISTA VS. MERALCO, MANNY PANGILINAN/ RETRIEVERS, INC., NATHANIEL G. CRUZ	NLRC LAC Case No. 09-002487-12
Illegal Dismissal	(FILE NO: LABOR-ID-11-0018) REI A. CAGUAY VS. LANTING SECURITY & WATCHMAN AGENCY, ATTY. THOMAS LANTING & MS. NIMFA LANTING/ MERALCO, THE PRESIDENT	NLRC LAC Case No. 07-002060-12
Illegal Dismissal	(FILE NO: LABOR-ID-12-0002) JONALIE B. ANOS VS. J. G. TECHNICAL SERVICES, INC. &/OR JORGE P. GUSILATAR, JR./ MERALCO &/OR MANNY PANGILINAN	NLRC NCR Case No. 03-04388-12
Illegal Dismissal	(FILE NO: LABOR-ID-12-0005) BERNARDO L. ANONUEVO VS. 3RD LANTING SECURITY & WATCHMAN AGENCY/ LANTING SECURITY AGENCY/ MERALCO/ LIBRADA A. LANTING/ ALBERTO S. LANTING/ MANNY PANGILINAN	NLRC NCR 06-06-09075-12

Illegal Dismissal	NARCISO MATIS, NEMENCIO HIPOLITO, JR., RAYMUNDO ZUNIGA AND GERARDO DE GUIA VS. NLRC, MERALCO AND/OR MANUEL M. LOPEZ	CA-G.R. SP NO. 113273
Illegal Dismissal	RICARDO R. IGNACIO VS. MERALCO AND MANUEL M. LOPEZ	NLRC NCR CASE NO. 0-07-05757-2006
Regularization	MARIZER B. MIRANDA VS. MERALCO/ MR. RAMON B. SEGISMUNDO/ DR. EFREN VICALDO/ MR. OSCAR REYES	CA-G.R. SP No. 125292
Illegal Dismissal	JOVEN L. MALUBAY, ET. AL VS. MERALCO / MANOLO M. LOPEZ / JESUS P. FRANCISCO	CA-G.R. SP NO. 108884
Illegal Dismissal	SENEH S. SENA, FRANCISCO M. VIDAL & ELDEFONSO V. SAMBAJON VS. MERALCO, MANNY V. PANGILINAN/ JOLLYE ALLIED SPORTS SVCS. INC., JOSE B. ALDANES	NLRC NCR Case No. 08-12717-11

c. Criminal Cases

SUBTYPE	CASE TITLE	CASE NO.
RPC	PELITA CATIMON VS. MERALCO, REP. BY ITS PRESIDENT MANUEL M. LOPEZ, AND ALL OTHER OFFICERS RESPONSIBLE THEREIN, AND MR. REYNALDO JURIAL	
RPC	NONINO, INC. VS. MANUEL M. LOPEZ AND MANUEL MACATANGAY	I.S. NO. 07-593
RPC	FERDINAND P. LOPEZ VS. MANILA ELECTRIC COMPANY, MANUEL M. LOPEZ CEO, JESUS P. FRANCISCO CHIEF EXECUTIVE, DANTE NATHANIEL L. CACHOLA, JOHN DOE	I.S. NO. 07-7286
Plunder and Violation of Sec. 3 © of RA 3019	LAND BANK OF THE PHILIPPINES VS. CONCHITA MINAS, ET. AL.	DMB-G-C-09-0113-0

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AMENDED BY-LAWS

OF THE

MANILA ELECTRIC COMPANY

(Latest amendment approved by the SEC on September 6, 2010)

ARTICLE I

MEETINGS OF STOCKHOLDERS

SECTION 1. ANNUAL MEETING. - The annual meeting of the stockholders shall be held on the last Tuesday of May in each year at the principal office of the Company, or at such other places in Metro Manila as may be fixed by the Board of Directors or the Chairman of the Board and specified in the notice, at such day and hour as the Board or the Chairman shall direct.

SECTION 2. SPECIAL MEETINGS. - Special meetings of the stockholders may be called by the Chairman of the Board or by order of the Board of Directors whenever he or they may deem it necessary, and shall be so called whenever persons holding of record at least one-fourth of -outstanding stock of the Company entitled to vote shall in writing request the same. Special meetings shall be held at the principal office of the Company or at such other place in Metro Manila as may be specified in the call.

SECTION 3. VOTING. - At all meetings of the stockholders, each stockholder entitled to vote thereat shall be entitled to one vote for each share held of record by

him, which vote may be given personally or by attorney or proxy authorized in writing. The instrument authorizing an attorney or proxy to act shall be filed with the Office of the Corporate Secretary of the Company not later than twenty (20) business days prior to the scheduled stockholders meeting. In the election of directors each stockholder entitled to vote for directors may accumulate and distribute his votes in accordance with provisions of law applicable in such case.

SECTION 4. QUORUM. - The holders of record for the time being of a majority of the stock issued and outstanding and entitled to vote represented in person or by attorney or proxy shall constitute a quorum for the transaction of business, but in the absence of a quorum the stockholders entitled to vote who are present or represented at the time and place for which a meeting shall have been called may adjourn the meeting for any period.

SECTION 5. NOTICE OF MEETING. - Written notice of the annual and of any special meeting of stockholders shall be given to each stockholder entitled to vote thereat by posting the same in a postage prepaid letter, addressed to each such stockholder at his last known address or at the address last left by him with the Secretary of the Company, or by delivering the same to him personally, at least twenty eight (28) working days before the meeting. A copy of the notice of meeting shall likewise be made available for download at the Company website. If any stockholder shall have filed with the secretary his letter of appointment of any attorney or proxy, whose address is registered with the Secretary, the notices may be sent to such attorney or proxy instead of to such stockholder. The notice of a

special meeting shall state briefly the object of the meeting and, except as herein otherwise specifically provided, no other business shall be transacted at such meeting. Nevertheless, if all the stockholders entitled to vote at any meeting, either annual or special, shall, in person or by attorney or proxy in writing, waive notice of such meeting, no notice of such meeting shall be required, and such meeting shall be valid, and any corporate action may then be taken. No notice of any meeting need be published in any newspaper. (As amended on 22 March 2013)

The Board of Directors shall fix the record date which will determine the stockholders entitled to notice and attend a scheduled stockholders meeting.

SECTION 6. AUDITORS AND INSPECTORS OF ELECTION. - The Board of Directors shall appoint auditors and inspectors to canvass and inspect ballots at all stockholders meeting.

ARTICLE II

BOARD OF DIRECTORS

SECTION 1. ELECTION. - There shall be a Board of Directors of such number, within the limits at the time provided by law, as may from time to time be determined by the formal assent of the stockholders of the corporation entitled to elect directors, at a regular or special meeting of such stockholders, at which a quorum shall be present. All directors shall be stockholders in their own right. The directors may be elected by ballot at the annual meeting.

SECTION 2. NOMINATIONS. - The Nomination Committee shall prepare a Final List of Candidates which shall be made available to the Securities and Exchange Commission (SEC) and to all stockholders through the filing and distribution of the Information Statement. Only nominees whose names appear in the Final List of Candidates shall be eligible for election as Independent Directors. No further nomination shall be allowed on the floor during the actual annual stockholders meeting.

The Company adopts the procedure for the nomination and election of independent directors prescribed under Rule 38 of the Implementing Rules and Regulation Code, as amended.

SECTION 3. QUORUM. - The directors shall act only as a board, and the individual directors shall have no power as such. A majority of the whole number of directors shall constitute a quorum for the transaction of business, and every decision of a majority of the quorum duly assembled as a Board shall be valid as a corporate act; but one or more directors present at the time and place for which a meeting shall have been called may adjourn any meeting from time to time until a quorum shall be present.

SECTION 4. MEETINGS. - There shall be a first meeting of the Board of Directors, for organization, immediately after their election, of which meeting no notice shall be required. Thereafter regular meetings may be held at such time and

in such places, and upon such notice, if any, as the Board of Directors may by resolution prescribed. Special meetings of the Board may be called by the Chairman or by written request of any two directors, upon at least one day's notice of the time and place of holding the same, given personally or by letter, telegram or telephone. Meetings may be held at any time and place without notice if all the directors are present or of those not present waive notice in writing before or after the meeting.

SECTION 5. QUALIFICATION. - All directors must possess the following minimum qualifications and such additional qualifications under any amendments to the Corporation Code, Securities and Regulation Code, the Code of Corporate Governance issued by the Securities and Exchange Commission and other relevant laws, rules and regulations in effect at the relevant time:

- (a) must own at least one (1) share of stock of the Company of which he is a director, standing in his name in the books of the Company;
- (b) must possess integrity and probity;
- (c) as much as possible, must have a practical understanding of business in general and of the business of the Company, in particular; and
- (d) must have attended a seminar in corporate governance conducted by a duly recognized private institution or government entity or must have issued an undertaking to attend such a seminar as soon as practicable.

(As amended on 22 March 2013)

SECTION 6. VACANCIES. - If any vacancy shall occur among the directors by death, disqualification or otherwise by removal, such vacancy may be filled, pending action by the stockholders, at any regular or special meeting of the Board of Directors, by vote of a majority of all the remaining directors. Any such vacancy may be filled by stockholders entitled to elect directors, by ballot, at any meeting or adjourned meeting, whether the meeting shall have been called to fill such vacancy or not. The stockholders at any such meeting entitled to elect directors may also receive the resignation of any director and fill the vacancy thereby caused for the remainder of the year. Directors may be disqualified or removed and the vacancies so caused filled as prescribed by law, rules or regulation.

SECTION 7. COMPENSATION. - All Directors may receive reasonable per diems for their attendance at each regular or special meeting of the Board of Directors and Board Committees and additional compensation, as such, whether in the form of a fixed retainer, bonus or stock grant, or a combination thereof, as may be approved by the ^{vote} majority of the outstanding capital stock and the majority vote of the Board of Directors; Provided, That the total value of such additional compensation, in whatever form so given, shall not exceed one percent (1%) of the net income before tax of the Company during the preceding year; but nothing herein contained shall be construed to preclude any director from serving the Company in any other capacity and receiving compensation therefor. (As amended on 22 March 2013)

SECTION 8. EXECUTIVE COMMITTEE. — The Board of Directors may, by a majority vote of the whole Board, designate five (5) of their number to constitute an Executive Committee, one of whom shall be an independent director with an alternate who will also be an independent director, to hold office for one year and/or until respective successors shall be designated, which committee shall between sessions of the Board of Directors have all the powers of the Board of Directors in the management of the business and affairs of the Corporation and shall have power to authorize the seal of the Corporation to be affixed to all papers which may require it. The taking of any action by the Executive Committee shall be conclusive evidence that the Board of Directors was not at the time of such action in session. The Secretary or a member of the Executive Committee shall keep the minutes of its proceedings; and all such proceedings shall be from time to time reported to the Board of Directors, and shall be subject to revision or alteration by the Board; provided that no rights of third persons shall be affected by such revision or alteration. A majority of the Executive Committee shall constitute a quorum at any meeting. The Executive Committee may take action without a meeting on the written approval of such action by a majority of the committee. A majority of the directors may fill vacancies in the Executive Committee. The executive committee may from time to time, subject to the approval of the Board of Directors prescribe rules and regulations for the calling and conduct of meetings of the committee, and other matters relating to its procedure and the exercise of its powers.

ARTICLE III

OFFICERS

SECTION 1. DESIGNATIONS. - The Board of Directors shall annually, at its first meeting after the election of directors by the stockholders, appoint a Chairman and Vice Chairman of the Board of Directors, a President, one or more Vice-Presidents, a Treasurer and a Secretary, and may also from time to time appoint Assistant Treasurers, Assistant Secretaries, and such other officers and agents as they deem proper. The Chairman of the Board of Directors and the President shall each be a director; other officers need not be stockholders. The Treasurer may also be a Vice President. The Secretary shall be a resident and a citizen of the Republic of the Philippines. Every officer shall hold office only during the pleasure of the Board of Directors, and all vacancies among such officers, however arising, shall be filled by the Board of Directors.

SECTION 2. COMPENSATION. - The salary or compensation of all officers and agents elected or appointed by the directors shall be fixed by the Board.

SECTION 3. DUTIES. - Subject to the direction and control of the stockholders, the Board of Directors shall have charge of all the business of the Company and the administration of its affairs; and all officers, agents and employees of the company shall be subject to immediate removal by the Board of Directors with or without cause.

SECTION 4(A). THE CHAIRMAN OF THE BOARD. - The Chairman of the Board of Directors shall preside at all meetings of the Board of Directors and stockholders and shall exercise such other powers as may be conferred upon by the Board of Directors.

SECTION 4(B). THE VICE CHAIRMAN. - The Vice Chairman of the Board of Directors shall perform the duties of the Chairman of the Board of Directors in the latter's absence or temporary incapacity. He shall preside over the meetings of the Board of Directors and stockholders in the absence of the Chairman of the Board and the President. He shall perform such other duties as the Board of Directors may designate from time to time.

SECTION 5(A). THE PRESIDENT. - The President shall be the Chief Executive Officer of the Company. He shall have general supervision, direction and control of the business and affairs of the Company. He shall sign all certificates of stock and all instruments required to be executed on the part of the Company, except as otherwise provided by the by-laws or by the Board of Directors, or the Executive Committee. He shall preside at the meetings of the stockholders and the Board of Directors in the absence of the Chairman of the Board. He shall perform such other duties as the Board of Directors may designate from time to time.

SECTION 5(B). THE VICE PRESIDENTS. - The Vice Presidents shall respectively perform such duties as the Chairman of the Board, President or the Board of Directors shall from time to time designate or require. In the absence of the President from Metro Manila, they shall in the order of their appointment perform the duties of the latter.

SECTION 6(A). THE TREASURER. - The Treasurer shall deposit all moneys and other valuable effects of the Company in such trust companies, banks or depositories as the Board of Directors shall from time to time designate or in the absence of such designation as he shall determine. He shall have authority to receive and give receipts for all moneys paid to the Company from any source whatsoever and to endorse checks, drafts and warrants in its name and on its behalf. Proper accounts shall be kept in his office of all receipts and disbursements made by him for the Company, with the vouchers in support thereof, which shall be submitted to any auditor or auditors appointed by the stockholders or directors for inspection as and when required. Except as may from time to time be otherwise ordered by the Board of Directors, the Treasurer shall keep all business and corporate records not required to be kept by the Secretary. He shall at all times be subject to the control of the Board of Directors, and shall perform such other duties as the Chairman of the Board, Vice Chairman or Board of Directors may from time to time direct. He may be required by the Board of Directors to give bond, to the satisfaction of the Board of whomsoever it may designate, for the faithful performance of his duties.

SECTION 6(B). THE ASSISTANT TREASURERS. - The Assistant Treasurer(s), if and when appointed by the Board of Directors, shall have power, with such limitation or conditions as the Board may fix, to sign checks and drafts upon banks and depositories of the Company, and to endorse checks and drafts for deposit with such banks or depositories to the credit of the Company. The Assistant Treasurers shall perform such other duties as may from time to time be prescribed by the Board of Directors or Chairman of the Board. They shall, if the Board of Directors so require, give a bond in such an amount as the Board may direct, for the faithful performance of their duties.

SECTION 7(A). THE SECRETARY. - The Secretary shall record all the votes and proceedings of the stockholders and of the directors in a book for that purpose. He shall have charge of the corporate seal of the Company, and attest the same when affixed to any document. He shall countersign all certificates of stock. He shall keep at the principal office of the Company the stock and transfer books and therein keep record of all stock showing the names of stockholders (and registered attorneys or proxies) alphabetically arranged, with the addresses to which notices may be sent, the installments paid and unpaid on all stock for which subscription has been made and the date of payment of any installment, and a record of every transfer of stock with the date thereof and by and to whom made. He shall perform such duties as pertain to his office or as the Chairman of the Board, Vice Chairman or Board of Directors may require.

SECTION 7(B). THE ASSISTANT SECRETARIES. - The Board may delegate to the assistant secretaries all or any part of the duties of the secretary.

ARTICLE IV

CONTRACT AND OBLIGATIONS

SECTION 1. - No agreement, contract or obligations involving the payment of money or the credit or liability of the Company, shall be made without the approval of the board of directors, except by an officer or agent thereunto generally or specifically authorized by the Board of Directors.

ARTICLE V

SHARES AND THEIR TRANSFERS

SECTION 1. - Subscribers for shares of stock shall not be required to pay any interest upon their unpaid subscription except after the same shall have been called for payment and become delinquent.

SECTION 2. CERTIFICATES. - Each holder of stock shall be entitled to a stock certificate signed by the President and Secretary or Assistant Secretary of the Company certifying the class and number of shares owned by him. All such certificates representing shares of a particular class shall be numbered and registered in the order in which they are issued, and on the records of the Company there shall be entered the name of the person owning the shares represented by

such certificate when issued, with the number of shares and the date thereof, and the amount paid in on account of the par value thereof, and in case of cancellation the date of cancellation. Every certificate returned to the Company for the exchange or transfer of shares shall be cancelled, and no new certificate shall be issued upon the exchange or transfer of shares until the old certificate has been thus returned and cancelled.

The signatures of the President and Secretary or Assistant Secretary of the Company on all certificates of stock may be imprinted mechanically by the use of plate signature machine.

The corporate seal of the Company shall be printed on all certificates of stock.

SECTION 3. TRANSFERS. - Transfers of shares shall be made only on the books of the Company on the surrender of the certificate or certificates for such shares properly endorsed. The transfer books may be closed by the board for such period as may be deemed advisable previous to and on the day of any meeting of the stockholders, and for dividend purposes.

No transfer of share shall be made nor allowed to be recorded in books of the corporation and no corresponding stock certificate shall be issued, if such transfer of shares and issuance of stock certificate shall be in violation of and contrary to the provisions of Article Seventh of the ARTICLES OF INCORPORATION.

SECTION 4. ADDRESSES. - Every stockholder and transferee, and every attorney or proxy for any stockholder, shall furnish the Secretary with an address at which notice of meetings and all other notices from any officer of the Company 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 Company in Metro Manila.

SECTION 5. LOST CERTIFICATE. - The Board of Directors, subject to such rules and regulation as they may from time to time adopt, may order a new certificate or certificates of stock to be issued in the place of any certificate or certificates of the Company alleged to have been lost or destroyed; but in every such case the owner of the lost certificate or certificates shall first cause to be given to the Company a bond, with sufficient surety, satisfactory to the Board of Directors, in such sum, not less than the par or any then higher market value of such lost or destroyed certificate or certificates of stock, as the Board may in their discretion require, as indemnity against any loss or claim that the Company may incur by reason of such issuance of such new stock certificates; but the directors may, in their discretion, refuse to replace any lost certificates, save upon the order of some court having jurisdiction in such matter.

ARTICLE VI
DIVIDENDS, SURPLUS AND FINANCE

Section 1. - The Board of Directors shall have the power and authority to fix and determine, and from time to time vary, the amount to be reserved, over and above its capital stock paid in, as working capital, to meet contingencies, to provide for the equalization of dividends and/or for other purposes; to direct and determine the use and disposition of the working capital and of any amounts so reserved; to use and apply the surplus or any part thereof in acquiring the bonds or other obligations or shares of capital stock of the Company, to such extent, in such manner and upon such terms as the Directors shall deem expedient (and shares of capital stock so, purchased or acquired may be resold, and shall not be deemed to have been retired, unless such shares shall have been retired for the purpose of reducing the capital of the Company in the manner provided by law); to determine whether any, and if any, what part, of the net profits or surplus shall be declared and paid as dividends; to fix the times for the declaration and payment of dividends; and generally to fix and determine the use and disposition of any net profits or surplus.

Against any reserve or surplus so established, there may be charged losses at any time incurred by the Company, also dividends or other distribution upon stock. Such reserve or surplus may be reduced from time to time by the Board of Directors for the purposes above specified, or by transfer from such reserve or surplus to capital account or otherwise.

SECTION 2. - The Board of Directors shall also have power and authority to create a surplus, to be known as the "Capital Surplus" of the Company, and at any time, and from time to time, to transfer and credit to such capital surplus all or any part of the surplus or net profits of the Company available for dividends. In case any amount shall be so transferred and credited to capital surplus, the same shall not thereafter, without affirmative vote or written consent of the holders of a majority of the voting stock of the Company, be declared or paid, or made the basis of the declaration of payment, of dividends (other than stock dividends) on any class of stock of the Company from time to time outstanding, it being the intent of this provision that all amounts transferred and credited to capital surplus shall thereafter have the same status as if the same had been paid to the Company in payment for shares of its capital stock.

SECTION 3. - Anything herein to the contrary notwithstanding, the powers of the Board of Directors, as set forth in this. ARTICLE VI, are subject in all respects to, and are governed by, the provisions of the Articles of Incorporation of the Company, as amended.

SECTION 4. - The fiscal year of the Company shall begin on the first day of January and end on the 31st day of December in each calendar year.

ARTICLE VII

SEAL

The corporate seal, unless otherwise ordered by the Board of Directors, shall consist of a circular design on which is inscribed the words and numbers:

Manila Electric Company

MERALCO

Metro Manila, Philippines

1919

ARTICLE VIII

INDEMNIFICATION OF DIRECTORS AND OFFICERS

Each director and officer of the Company, whether or not then in office, and in the event of his death, his legal representatives, shall be indemnified by the Company with respect to any acts or omissions alleged to have occurred subsequent to the adoption of this By-Law provision, against (1) all costs and expenses reasonably incurred by or imposed upon him in connection with or resulting from any action, suit or proceeding prosecuted to final determination on the merits to which he or his personal representative may be made a party by reason of his being or having been a director or officer of the Company or of any other company which he serves as a director or officer at the request of the Company, except any costs or expenses incurred by or imposed upon him in relation to matters as to which he shall

be finally adjudged: to be liable, and (2) all costs and expenses incurred or imposed upon him in connection with or resulting from any such action, suit or proceeding which is settled with the approval of the court having jurisdiction thereof but only in such amount (which shall not include any sum ordered to be paid to the Company by him) as such court shall determine and find to be reasonable in the circumstances.

No present or future director or officer of the Company (or his legal representative) shall be liable for any act, omission, step or conduct taken or had in good faith after December 24, 1957, which (whether by condition or otherwise) is required, authorized, or approved, or is otherwise in compliance with or in reliance upon a regulation, rule, order or determination issued or made by a department, agency, board, commission or authority pursuant to any statute of the Republic of the Philippines, any Province, or any other political subdivision thereof, whether or not such regulation, rule, order or determination shall have been subsequently amended, rescinded or determined by judicial or administrative authority to be invalid or illegal, or which is taken in contesting in good faith the validity or legality of any such regulation, rule, order or determination. In any action, suit or proceeding based on any act, omission, step or conduct, as in this paragraph described, the provision hereof shall be brought to the attention of court. In the event that any of the foregoing provisions of this paragraph is found by the court not to constitute a valid defense on the ground that such provision is not applicable to the particular class of plaintiff, each such director or officer (or his legal representatives) shall be reimbursed for, or indemnified against all expenses and liabilities reasonably incurred by him or imposed on him, in connection with or resulting from any such

action, suit or proceeding (other than for any sum ordered to be paid to the Company by him). Such expenses and liabilities shall include, but shall not be limited to, judgments, court costs and attorneys fees.

The foregoing rights of indemnification shall not be exclusive of any other rights to which any director or officer (or his legal representatives) may be entitled as a matter of law nor of any rights of indemnification to which any director or officer (or his legal representatives) may be entitled under any By-Law of the Company heretofore in effect.

ARTICLE IX AMENDMENTS

These By-Laws may be added to, altered, amended or repealed, or new By-Laws may be adopted by the Board of Directors of the Company at any regular or special meeting duly called for the purpose.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 5th day of May, 1919.

(SGD.) J. C. ROCKWELL (SEAL)

(SGD.) R. W. SPOFFORD (SEAL)

(SGD.) D. M. SHAW (SEAL)

(SGD.) JAMES ROSS (SEAL)

(SGD.) J. G. LAWRENCE (SEAL)



DIRECTORS' CERTIFICATE

WE, the undersigned members of the Board of Directors of the **MANILA ELECTRIC COMPANY** (the "Corporation"), hereby certify that the amendments to the Section 5, Article I, Section 5 and Section 7, Article II of the Corporation's by-laws, are true and correct, and that the same were approved by the unanimous vote of the Board of Directors at its Meeting held on 22 March 2013 at 13th Floor, Lopez Building, Ortigas Avenue, Pasig City and the vote of stockholders representing at least two-thirds (2/3) of the outstanding capital stock at the Annual Stockholders' Meeting held on 28 May 2013 at Meralco Theatre, Ortigas Avenue, Pasig City. The power of the Board of Directors to add, alter, amend, repeal, or adopt new By-Laws under Article IX was conferred and ratified by the Stockholders at their Annual Meeting on 28 May 2002.

The amended provisions of the attached Amended By-Laws are quoted hereunder:

Article I Meetings of Stockholders

"SECTION 5. NOTICE OF MEETING. - Written notice of the annual and of any special meeting of stockholders shall be given to each stockholder entitled to vote thereat by posting the same in a postage prepaid letter, addressed to each such stockholder at his last known address or at the address last left by him with the Secretary of the Company, or by delivering the same to him personally, at least twenty eight (28) working days before the meeting. A copy of the notice of meeting shall likewise be made available for download at the Company website. xxx"

Article II Board of Directors

SECTION 5. QUALIFICATIONS. - All directors must possess the following minimum qualifications and such additional qualifications under any amendments to the Corporation Code, Securities and Regulation Code, the Code of Corporate Governance issued by the Securities and Exchange Commission and other relevant laws, rules and regulations in effect at the relevant time;

- (a) must own at least one (1) share of stock of the Company of which he is a director, standing in his name in the books of the Company;
- (b) must possess integrity and probity;
- (c) as much as possible, must have a practical understanding of business in general and of the business of the Company, in particular; and
- (d) must have attended a seminar in corporate governance conducted by a duly recognized private institution or government entity or must have issued an undertaking to attend such a seminar as soon as practicable."

XXX

"SECTION 7. COMPENSATION. - All Directors may receive reasonable per diems for their attendance at each regular or special meeting of the Board of Directors and Board Committees and additional compensation, as such, whether in the form of a fixed retainer, bonus or stock grant, or a combination thereof, as may be approved by the Board of Directors; Provided, That the total value of such additional compensation, in whatever form so given, shall not exceed one percent (1%) of the net income before tax of the Company during the preceding year; but nothing herein contained shall be construed to preclude any director from serving the Company in any other capacity and receiving compensation therefor."

majority vote of the outstanding capital stock and the majority vote of the

[The rest of the page has been intentionally left blank]

IN WITNESS WHEREOF, this Certificate is signed this APR 25 2013 day of March 2013 in Pasig City.

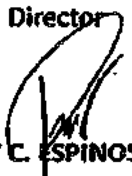


MANUEL V. PANGILINAN
TIN: 914-481-801
Chairman of the Board



RAMON S. ANG
TIN: 118-247-725
Vice Chairman

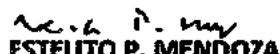
MANUEL M. LOPEZ
TIN: 100-749-139
Director



RAY C. ESPINOSA
TIN: 113-248-897
Director



JOSE MA. K. LIM
TIN: 100-930-065
Director

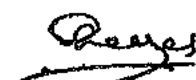

ESTELITO P. MENDOZA
TIN: 106-190-582
Director


ARTEMIO V. PANGANIBAN
TIN: 106-197-693
Director


VICENTE L. PANLILIO
TIN: 115-321-338
Director



ERIC O. RECTO
TIN: 108-730-891
Director



OSCAR S. REYES
TIN: 136-623-569
Director



PEDRO E. ROXAS
TIN: 104-738-165
Director

Countersigned:

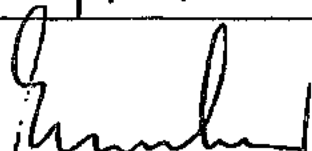


Atty. WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

SUBSCRIBED and SWORN to before me this APR 25 2013 day of 2013 at Pasig City, the following individuals exhibiting to me their government issued ID's as indicated below:

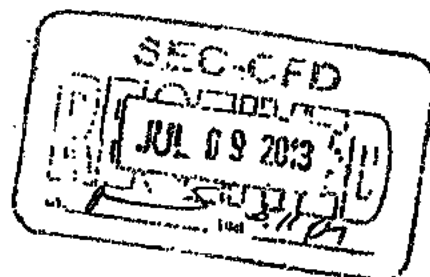
NAME	GOVERNMENT ISSUED ID	VALID UNTIL
MANUEL V. PANGILINAN	Passport No. EB0160000	April 27, 2015
RAMON S. ANG		
MANUEL M. LOPEZ	Passport No. DP0007682	Dec. 29, 2015
JOSE MA. K. LIM	Passport No. EB5936209	July 15, 2017
RAY C. ESPINOSA	Passport No. EB6814744	Nov. 22, 2017
ESTELITO P. MENDOZA	Passport No. EA0010949	January 20, 2017
ARTEMIO V. PANGANIBAN	Passport No. DE0000999	January 20, 2017
VICENTE L. PANLILIO	Passport No. XX2640167	Dec. 5, 2013
ERICO O. RECTO	Passport No. EB4084549	Nov. 15, 2016
OSCAR S. REYES	Passport No. XX2143931	Sept. 28, 2013
PEDRO E. ROXAS	Passport No. EB0094507	April 12, 2015

Doc. No. 154
Page No. 32
Book No. VII
Series of 2013


ATTY. EDITO E. CEDRO, CPA
NOTARY PUBLIC
for and in Pasig, Paleros, Taguig & San Juan
Appl. No. 76 (2012-2013) 2-20-12 Pasig City
Until December 31, 2013
8th Fl Lopez Bldg. Ortigas Ave., Pasig City
Tel. No. (02) 1622-3444
Attorney's Roll No. 52528
IBP No. 813524 / 1-08-13 RSM Chapter
PTR No. 1457944 / 1-10-12 / Pasig City

Republic of the Philippines

~~Pasig City~~ S.S



UNDERTAKING

I, **WILLIAM S. PAMINTUAN**, Filipino, of legal age, with office address at 8th Floor, Lopez Building, Meralco, Ortigas Avenue, Pasig City, after having been sworn, in accordance with law, depose and state that:

1. I am the duly elected and qualified Assistant Corporate Secretary of Manila Electric Company (the Company), a private corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines, with principal office at Lopez Building, Ortigas Avenue, Pasig City.
2. The Securities and Exchange Commission (SEC) had earlier imposed a penalty of P28,700.00 to the Company due to alleged inaccuracies and incompleteness of its 2012 General Information Sheet. The Company then requested for reconsideration of the SEC penalty through its letter dated 04 April 2013 now still pending decision.
3. In the event that its request for reconsideration be denied by the SEC with finality, the Company hereby undertakes to comply with the SEC's decision on the matter.

This Affidavit is executed to attest to the truth of the foregoing and for whatever legal purpose and intent it may serve.

Pasig City, 8th day of July, 2013

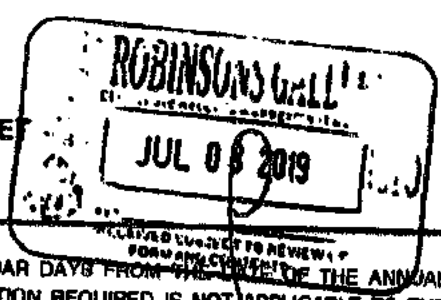
WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

SUBSCRIBED AND SWORN to before me on this JUL 09 2013 day of JULY 2013, in PASIG CITY, affiant exhibiting his TIN No. 444-3562000 issued on at .

Doc No. 1182
Page No. 23
Book No. J
Series of 2013.

Notary Public
ATTY. FREEDOM IANPE M. NAVIDAD
NOTARY PUBLIC
PASIG, PATINGOS, TAGUIG, AND SAN JUAN
ISSUED ON FEBRUARY 28, 2012 AT PASIG CITY
APPOINTMENT NO. 77 (2012-2017)
ROLL NO. 53431 / IOP NO. 913518 / CIRCUIT RSR CHAIRMAN
PTR NO. 0457619 / 0105013 PASIG CITY
3rd FLOOR 10th 2nd BLDG. ORTIGAS AVENUE, PASIG CITY

AMENDED GENERAL INFORMATION SHEET
FOR THE YEAR 2019
STOCK CORPORATION



GENERAL INSTRUCTIONS:

- 1. FOR USER CORPORATION: THIS GIS SHOULD BE SUBMITTED WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THE ANNUAL STOCKHOLDERS' MEETING. DO NOT LEAVE ANY ITEM BLANK. WRITE "N.A." IF INFORMATION REQUIRED IS NOT APPLICABLE TO THE CORPORATION OR "NONE" IF THE INFORMATION IS NON-EXISTENT. IF THE ANNUAL STOCKHOLDERS' MEETING IS HELD ON A DATE OTHER THAN THAT STATED IN THE BY-LAWS, THE GIS SHALL BE SUBMITTED WITHIN THIRTY (30) CALENDAR DAYS FROM THE ACTUAL DATE OF THE ANNUAL STOCKHOLDERS' MEETING.
- 2. IF NO MEETING IS HELD, THE CORPORATION SHALL SUBMIT THE GIS NOT LATER THAN JANUARY 30 OF THE FOLLOWING YEAR. HOWEVER, SHOULD AN ANNUAL STOCKHOLDERS' MEETING BE HELD THEREAFTER, A NEW GIS SHALL BE SUBMITTED/FILED.
- 3. THIS GIS SHALL BE ACCOMPLISHED IN ENGLISH AND CERTIFIED AND SWORN TO BY THE CORPORATE SECRETARY OF THE CORPORATION.
- 4. THE SEC SHOULD BE TIMELY APPRISED OF RELEVANT CHANGES IN THE SUBMITTED INFORMATION AS THEY ARISE. FOR CHANGES RESULTING FROM ACTIONS THAT AROSE BETWEEN THE ANNUAL MEETINGS, THE CORPORATION SHALL SUBMIT ONLY THE AFFECTED PAGE OF THE GIS THAT RELATES TO THE NEW INFORMATION TOGETHER WITH A COVER LETTER SIGNED BY THE CORPORATE SECRETARY OF THE CORPORATION. THE PAGE OF THE GIS AND COVER LETTER SHALL BE SUBMITTED WITHIN SEVEN (7) DAYS AFTER SUCH CHANGE OCCURRED OR BECAME EFFECTIVE.
- 5. SUBMIT FOUR (4) COPIES OF THE GIS TO THE CENTRAL RECEIVING SECTION, GROUND FLOOR, SEC BLDG., EDSA, MANDALUYONG CITY. ALL COPIES SHALL BE UNIFORMLY ON A4 OR LETTER-SIZED PAPER WITH A STANDARD COVER PAGE. THE PAGES OF ALL COPIES SHALL USE ONLY ONE SIDE. CORPORATIONS SUBMITTING A COPY OF THEIR GIS ONLINE OR VIA INTERNET SHALL SUBMIT ONE (1) HARD COPY OF THE GIS TOGETHER WITH A CERTIFICATION UNDER OATH BY ITS CORPORATE SECRETARY THAT THE COPY SUBMITTED ONLINE CONTAINS THE EXACT DATA IN THE HARD COPY.
- 6. ONLY THE GIS ACCOMPLISHED WITH 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.

PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY		DATE REGISTERED: MAY 7, 1918
BUSINESS/TRADE NAME: N.A.		FISCAL YEAR END: DECEMBER 31
SEC REGISTRATION NUMBER: PW-102		CORPORATE TAX IDENTIFICATION NO. (TIN): 000-101-528-000
DATE OF ANNUAL MEETING PER BY-LAWS: LAST TUESDAY OF MAY		WEBSITE/URL ADDRESS: www.meralco.com.ph
ACTUAL DATE OF ANNUAL MEETING: MAY 28, 2019		E-MAIL ADDRESS: skderr@meralco.com.ph
COMPLETE PRINCIPAL OFFICE ADDRESS: LOPEZ BUILDING, ORTIGAS AVENUE, BARANGAY UGONG, PASIG CITY, METRO MANILA		FAX NUMBER: 631-5572
COMPLETE BUSINESS ADDRESS: LOPEZ BUILDING, ORTIGAS AVENUE, BARANGAY UGONG, PASIG CITY, METRO MANILA		TELEPHONE NUMBER: 633-4553
NAME OF EXTERNAL AUDITOR & ITS SIGNING PARTNER: SYCIP GORRES VELAYO & CO. NARCISO T. TORRES, JR		SEC ACCREDITATION (If Applicable): SEC ACCREDITATION NO. 1511-A (GROUP A)
PRIMARY PURPOSE/ACTIVITY/INDUSTRY PRESENTLY ENGAGED IN: DISTRIBUTION OF ELECTRICITY	INDUSTRY CLASSIFICATION: ELECTRIC UTILITY	GEOGRAPHICAL CODE: 1605
***** INTERCOMPANY AFFILIATIONS *****		
PARENT COMPANY N.A.	SEC REGISTRATION NO. N.A.	ADDRESS N.A.
SUBSIDIARY/AFFILIATE	SEC REGISTRATION NO.	ADDRESS
REFER TO ANNEX "A"		
NOTE: USE ADDITIONAL SHEET IF NECESSARY		

AMENDED GENERAL INFORMATION SHEET

STOCK CORPORATION

PLEASE PRINT LEGIBLY

Corporate Name:

MANILA ELECTRIC COMPANY

A. Is the Corporation a covered person under the Anti Money Laundering Act (AMLA), as amended? (Rep. Acts. 9160/9164/10167/10365)

☐ Yes ☒ No

Please check the appropriate box:

1.

- ☐ a. Banks
- ☐ b. Offshore Banking Units
- ☐ c. Quasi-Banks
- ☐ d. Trust Entities
- ☐ e. Non-Stock Savings and Loan Associations
- ☐ f. Pawnshops
- ☐ g. Foreign Exchange Dealers
- ☐ h. Money Changers
- ☐ i. Remittance Agents
- ☐ j. Electronic Money Issuers
- ☐ k. Financial Institutions which Under Special Laws are subject to Bangko Sentral ng Pilipinas' (BSP) supervision and/or regulation, including their subsidiaries and affiliates.

2.

- ☐ a. Insurance Companies
- ☐ b. Insurance Agents
- ☐ c. Insurance Brokers
- ☐ d. Professional Reinsurers
- ☐ e. Reinsurance Brokers
- ☐ f. Holding Companies
- ☐ g. Holding Company Systems
- ☐ h. Pre-need Companies
- ☐ i. Mutual Benefit Association
- ☐ j. All Other Persons and entities supervised and/or regulated by the Insurance Commission (IC)

3.

- ☐ a. Securities Dealers
- ☐ b. Securities Brokers
- ☐ c. Securities Salesman
- ☐ d. Investment Houses
- ☐ e. Investment Agents and Consultants
- ☐ f. Trading Advisors
- ☐ g. Other entities managing Securities or rendering similar
- ☐ h. Mutual Funds or Open-end Investment Companies
- ☐ i. Close-end Investment Companies
- ☐ j. Common Trust Funds or Issuers and other similar entities
- ☐ k. Transfer Companies and other similar entities
- ☐ l. Other entities administering or otherwise dealing in currency, commodities or financial derivatives based there on
- ☐ m. Entities administering or otherwise dealing in valuable objects
- ☐ n. Entities administering or otherwise dealing in cash substitutes and other similar monetary instruments or property supervised and/or regulated by the Securities and Exchange Commission (SEC)

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:

DISTRIBUTION OF ELECTRICITY

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 GIST?

N/A

**AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION**

***** PLEASE PRINT LEGIBLY *****

CORPORATE NAME: MANILA ELECTRIC COMPANY							
CAPITAL STRUCTURE							
AUTHORIZED CAPITAL STOCK:							
	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (Php) (No. of Shares x Par/Stated Value)			
	COMMON	1,250,000,000	10.00	12,500,000,000			
	PREFERRED	300,000,000	10.00	3,000,000,000			
TOTAL		1,550,000,000	TOTAL	15,500,000,000			
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 OWNERSHIP
AS AT DECEMBER 31, 2017	42,357	COMMON	1,041,457,542	236,536,478	10.00	10,414,575,420	92.40%
TOTAL			1,056,840,131		10.00	10,568,401,310	93.77%
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 OWNERSHIP
REFER TO ANNEX "B"	330	COMMON	85,641,163		10.00	702,585,740	7.60%
Percentage of Foreign Equity: TOTAL			85,641,163		10.00	702,585,740	7.60%
NOTE: 236,018,160 SHARES OWNED BY PUBLIC						TOTAL SUBSCRIBED	11,270,987,050
PAID-UP CAPITAL							
FILIPINO	NO. OF STOCK-HOLDERS	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (Php)	% OF OWNERSHIP	
	42,357	COMMON	1,041,457,542	10.00	10,414,575,420	92.40%	
TOTAL			1,056,840,131	10.00	10,414,575,420	92.40%	
FOREIGN (INDICATE BY NATIONALITY)	NO. OF STOCK-HOLDERS	TYPE OF SHARES*	NUMBER OF SHARES	PAR/STATED VALUE	AMOUNT (Php)	% OF OWNERSHIP	
	330	COMMON	85,641,163	10.00	856,411,630	7.60%	
TOTAL			85,641,163	10.00	856,411,630	7.60%	
					TOTAL PAID-UP	11,270,987,050	100.00%
NOTE: USE ADDITIONAL SHEET IF NECESSARY							

* Common, Preferred, or other classification

** Other than Directors, Officers, Shareholders owning 10% of outstanding shares.

**AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION**

***** PLEASE PRINT LEGIBLY *****

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
1. MANUEL VELEZ PANGILINAN 15 Banaba Circle, South Forbes Park, Barangay Forbes Park, Makati City	FILIPINO	N	C	M	Y	N.A.	Exec/C Rem/C	914-481-801
2. LANCE YU GOKONGWEI No. 517 Sen. Gil Puyat Avenue Barangay Forbes Park, North Forbes, Makati City	FILIPINO	N	M	M	Y	N.A.	Exec/M Rem/M Audit/M Risk/M RPT/M Nom/M	118-247-725
3. RAY CELIS ESPINOSA Unit 25-H, One McKinley Place 26th Street corner 3rd Avenue Barangay Fort Bonifacio, Bonifacio Global City, Taguig City	FILIPINO	N	M	M	Y	President and Chief Executive Officer (CEO)	N.A.	113-248-897
4. ANABELLE LIM CHUA 200 Swallow Drive, Greenmeadows Subdivision 1 Barangay Ugong Norte, Quezon City	FILIPINO	N	M	F	Y	N.A.	Fin/C Audit/M Risk/M RPT/M Nom/M	108-904-025
5. VICTORICO PAREDES VARGAS #11 Degohoy St., Ayala Heights Village, Old Balcara, Quezon City	FILIPINO	N	M	M	Y	N.A.	Fin/M Rem/M	107-172-275
6. JOSE MA. KAMANTIGUE LIM 301 P. Guevarra Street, Barangay Little Baguio San Juan City	FILIPINO	N	M	M	Y	N.A.	Risk/C Exec/M Audit/M RPT/M Nom/M	100-930-065
7. ELPIDIO LAUREANO IBANEZ 687 Michigan St. Greenhills East, Barangay Wack-Wack, Mandaluyong City	FILIPINO	N	M	M	Y	N.A.	Fin/M	102-829-476
8. JAMES LIM GO Level 44 Sky 3, Laguna Unit One Roxas Triangle Condominium Cruz Street corner Paseo De Roxas Barangay Urdaneta Village, Makati City	FILIPINO	N	M	M	Y	N.A.	Exec/M Fin/M Audit/M Risk/M RPT/M Nom/M	124-294-200
9. JOHN LIM GOKONGWEI, JR. Unit 33A Galleria Regency Condominium Ortigas Ave., Brgy. Ugong Norte, Quezon City	FILIPINO	N	M	M	Y	N.A.	Fin/M	124-294-228
10. PEDRO EMILIO JOSE OLGADO ROXAS No. 6 Ipil Road, South Forbes Park Barangay South Forbes Park, Makati City	FILIPINO	N	I	M	Y	N.A.	Nom/C RPT/C Fin/M Rem/M Audit /M Risk/M	104-738-165
-see next page-								
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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
11. ARTEMIO VILLASENOR PANGANIBAN 1203 Acacia St., Barangay Dasmarinas Dasmarinas Village, Makati City	FILIPINO	N	I	M	Y	N.A.	Audit/C Exec/M Risk/M RPT/M	108-197-693
12. SIMEON KEN RIGOR FERRER 21 Wack-Wack St. Barangay Wack Wack Mandakuyong City	FILIPINO	N	N	M	Y	Corporate Secretary	N.A.	116-283-788
13. ROBERTO REYES ALMAZORA 1 Fiddlewood St., Greenwoods Executive Village, Brgy San Andres, Cainta, Rizal	FILIPINO	N	N	M	Y	Senior Vice President (SVP) and Head, Mpower	N.A.	100-750-166
14. RONNIE LEGURO APEROCHO Block 38, Lot 27, Amberg Street Mercedes Executive Village, Brgy. San Andres Cainta, Rizal	FILIPINO	N	N	M	Y	SVP and Head, Networks	N.A.	151-379-180
15. WILLIAM SAMSON PAMINTUAN 9 Argentina St., Loyola Grand Villas Barangay Mandalay, Quezon City	FILIPINO	N	N	M	N	SVP, Assistant Corporate Secretary, Chief Legal Counsel, Compliance Officer and Head, Legal and Corporate Governance Office and Data Protection Officer	N.A.	148-473-562
16. ROGELIO LAZO SINGSON 12 San Geronimo St. Magallanes Village Brgy. Magallanes, Makati City	FILIPINO	N	N	M	N	SVP and President and CEO, Meralco PowerGen Corporation	N.A.	133-836-290
17. BETTY CHENG SIY-YAP No. 7 Caroline St., Parkway Village, Brgy. Apolonio Samson, Quezon City	FILIPINO	N	N	F	N	SVP and Chief Finance Officer	N.A.	102-100-827
-see next page-								
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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

Resignation of Mr. Alfredo S. Panlilio effective June 30, 2019
 Resignation of Mr. Angelito D. Bermudo effective June 30, 2019

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
18. MARIA LUISA VARGAS ALVENDIA 7 Sandringham St. Barrington Place, Valley Golf, Brgy. Mambuyan, Antipolo, Rizal 1870	FILIPINO	N	N	F	N	First Vice President (FVP) and Chief of Staff of the President and CEO and Supply Chain Advisor	N.A.	208-076-467
19. VICTOR EMMANUEL SERRANO GENUINO* 16 Jackson St. West Greenhills, Brgy. Greenhills, San Juan, Metro Manila	FILIPINO	N	N	M	N	FVP and Head, Customer Retail Services and Corporate Communications	N.A.	161-838-067
20. MELANIE TOLENTINO OTEYZA Block 22 Lot 11 The Villas Highlands Pointe Havila, Brgy. Dolores, Taytay, Rizal	FILIPINO	N	N	F	N	FVP and Chief Audit Executive	N.A.	107-203-759
21. ANTONIO MANO ABUEL, JR. 1031 Ibarra Street, Brgy. 513 Zone 51 Sempaloc, Manila	FILIPINO	N	N	M	Y	Vice President (VP) and Head, Organizational Safety and Resiliency and Business Continuity Management	N.A.	108-253-315
22. IRENEO BONIFACIO ACUNA 26 Sempaguita St., DRJ Village, Brgy. Sauyo, Novaliches, Quezon City	FILIPINO	N	N	M	Y	VP and Head, Electric Distribution Development Group	N.A.	109-253-590
23. FERDINAND CELESTINO ALEJANDRO 388 St. Martin Subd., Barangay Bambang, Bocaue, Bulacan	FILIPINO	N	N	M	Y	VP and Head, Customer Process	N.A.	109-255-374
24. PATRICK DAVE BETIA BACANI 66 E. Aguinaldo Ave., Brgy. Western Biolan, AFPOVAI, Phase 2, Taguig	FILIPINO	N	N	M	N	VP and Human Resources Business Partner for Networks	N.A.	158-903-257
25. ROQUE DAYSON BACANI 4 Worcester St. Hillsborough Alabang VIII, Brgy. Cupang, Muntinlupa City, 1771	FILIPINO	N	N	M	N	VP and Head, IT Systems and Data Management	N.A.	152-046-621
-see next page-								
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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

*Appointment of Mr. Victor Emmanuel S. Genuino as FVP and Head, Customer Retail Services and Corporate Communications effective July 1, 2019.

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
26. BENNETTE DAPLAS BACHOCO 26 Stella Maris St., Brgy. Kapitolyo, Pasig City	FILIPINO	N	N	F	N	VP and Head, Financial Planning and Reporting	N.A.	129-433-570
27. JOSEPH ALLAN CONCEPTION BALTAZAR Block 3, Lot 30, Visayas Drive, Noel Homes, Brgy. San Francisco, Binan, Laguna	FILIPINO	N	N	M	N	VP and Head, Engineering Design	N.A.	109-261-186
28. EDGARDO VALERIO CARASIG 117 E. Rodriguez Jr. Ave, Brgy. Ugong, Pasig City	FILIPINO	N	N	M	N	VP and Head, Human Resources and Corporate Services	N.A.	128-150-105
29. BERNARD HTEROZA CASTRO Lot 32, Block 5, Luciano St., cor Icasanias St., Bahayang Pagasa 6, Brgy. Molino 5, Bacoor, Cavite	FILIPINO	N	N	M	Y	VP and Head, South Distribution Services	N.A.	109-269-544
30. BENJAMIN UMEREZ CUSI Galaxy Cor. Jupiter St., Brgy, Pulang Lupa, Mapayapa Village, Las Pinas City	FILIPINO	N	N	M	Y	VP and Head, Network Technology and Asset Management	N.A.	109-274-334
31. JENEVI LEGASPI DELA PAZ 22 Winchester St., Hillsborough Alabang Village, Brgy. Cupang, Muntinlupa City 1771	FILIPINO	N	N	M	N	VP and Chief Operating Officer, Radius Telecoms, Inc.	N.A.	182-457-857
32. MA. GECILIA MARIANO DOMINGO Unit 2007 Grand Emerald Tower Condominium, Emerald Ave. Cor. Gemat and Ruby Streets, Ortigas Ave., Brgy. San Antonio, Pasig City	FILIPINO	N	N	F	Y	VP and Head, Corporate Business Group	N.A.	109-301-734
33. LAWRENCE SISON FERNANDEZ Block 1 Lot 32 Ciudad Del Carmen Executive Village, Barangay Rosario, Pasig City	FILIPINO	N	N	M	Y	VP and Head, Utility Economics	N.A.	147-846-196
34. FERDINAND ORCULLO GELUZ BBL2 Talisay St., Nara Homes, Brgy. Pag-Asa 1, Imus, Cavite	FILIPINO	N	N	M	Y	VP and Head, Supply Chain and Logistics Management	N.A.	109-288-678
-see next page-								
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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
35. JOSE MARI PALOMO MELENDRES Block 4, Lot 8, Annaliza St., Greenville Homes I, Brgy. La Huerta, Paranaque City	FILIPINO	N	N	M	N	VP and Head, Sub- Transmission Services	N.A.	109-303-124
36. CHARINA PABLO PADUA #30-C Cliff Drive, Blue Ridge A Subdivision, Brgy. Blue Ridge, Quezon City	FILIPINO	N	N	F	Y	VP and Head, North Business Area	N.A.	109-309-120
37. ROSS RAYMOND BORROMEO RAVELO 2408 West, One Rockwell, Rockwell Drive Brgy. Poblacion Makati City	FILIPINO	N	N	M	N	VP and President, ESakay	N.A.	207-343-124
38. JOSE SANTOS REYES, JR. Lot 9 Block 18, Monark St., Woodridge Heights, Brgy. Tumana, Marikina City	FILIPINO	N	N	M	Y	VP and Head, North Distribution Services	N.A.	109-316-242
39. FROILAN JUSAYAN SAVET 138 JP Rizal St., Project 4, Brgy. Mlagrosa, Quezon City	FILIPINO	N	N	M	Y	VP and Head, Network Planning and Design	N.A.	109-323-274
40. LIZA ROSE GALGANA SERRANO-DIANGSON 22 Kingston St., Vista Real Classica Subd., Barangay Batasan Hills, Quezon City	FILIPINO	N	N	F	Y	VP and Lead, Customer Retail Services SRP	N.A.	109-323-684
41. MANUEL LORENZO LEANO TUASON U-301 Residencia 888 Condominium Pearl Drive, Ortigas Center, Brgy. San Antonio, Pasig City	FILIPINO	N	N	M	Y	VP and President and CEO, CIS Bayad Center, Inc.	N.A.	109-328-893
-see next page-								
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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY								
DIRECTORS/OFFICERS								
NAME/CURRENT RESIDENTIAL ADDRESS	NATIONALITY	INC'R	BOARD	GENDER	STOCK HOLDER	OFFICER	EXEC COMM.	TAX IDENTIFICATION NUMBER
42. JOSE ANTONIO TERMULO VALDEZ Unit 603 One Salcedo Place, Velasquez St. cor. Salcedo Village, Barangay Bal Air, Makati City	FILIPINO	N	N	M	N	VP and Head, Marketing, Customer Solutions and Product Development	N.A.	105-381-858
43. JOSE RONALD VILLA VALLES 49 Bangkok cor. Seoul st., Eastville, Filinvest, Brgy San Isidro Cainta, Rizal	FILIPINO	N	N	M	N	VP and Head, Regulatory Management	N.A.	198-802-168
44. MA. ZARAH RANGA VILLANUEVA-CASTRO L2 B17 Molave St., Northview II, Filinvest II, Brgy. Batasan Hills, Quezon City	FILIPINO	N	N	F	N	VP and Head, Corporate Legal Services	N.A.	200-327-848
45. MA. CYNTHIA CARIDAD SOLUREN 12 Comet's Loop, Blue Ridge B, Brgy. Blue Ridge B, Quezon City	FILIPINO	N	N	F	Y	Senior Assistant Vice President, Interim Treasurer and Head, Investment and Debt Management	N.A.	109-268-543
-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 THE COMPENSATION COMMITTEE; "A" FOR AUDIT COMMITTEE; "N" FOR NOMINATION AND ELECTION COMMITTEE. ADDITIONALLY WRITE "C" AFTER SLASH IF CHAIRMAN AND "M" IF MEMBER.								

AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION
PLEASE PRINT LEGIBLY

CORPORATE NAME: MANILA ELECTRIC COMPANY					
TOTAL NUMBER OF STOCKHOLDERS: 42,687 (AS AT DECEMBER 31, 2018)		NO. OF STOCKHOLDERS WITH 100 OR MORE SHARES EACH: 33,839 (AS AT DECEMBER 31, 2018)			
TOTAL ASSETS BASED ON LATEST AUDITED FS (PARENT): PhP326,267 million					
STOCKHOLDER'S INFORMATION					
NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS	SHARES SUBSCRIBED			AMOUNT PAID (PhP)	TAX IDENTIFICATION NUMBER
	TYPE	NUMBER	AMOUNT (PhP)		

1. REFER TO ANNEX "C"						
	TOTAL					
	TOTAL					
	TOTAL					
	TOTAL					
	TOTAL					
	TOTAL					
	TOTAL					
TOTAL AMOUNT OF SUBSCRIBED CAPITAL				0.00%		
TOTAL AMOUNT OF PAID-UP CAPITAL					0.00	
INSTRUCTION: SPECIFY TOP 20 STOCKHOLDERS AND INDICATE THE REST AS OTHERS						
Note: For PDTC Nominee included in the list, please indicate further the beneficial owners owning more than 5% of any class of the company's voting securities. Attach separate sheet if necessary.						

**AMENDED GENERAL INFORMATION SHEET
STOCK CORPORATION**

***** PLEASE PRINT LEGIBLY *****

CORPORATE NAME: MANILA ELECTRIC COMPANY			
1. INVESTMENT OF CORPORATE FUNDS IN ANOTHER CORPORATION (As at December 31, 2018)		AMOUNT (Php)	DATE OF BOARD RESOLUTION
1.1 STOCKS		26,962 million	
1.2 BONDS/COMMERCIAL PAPER (Issued by Private Corporations)		N.A.	
1.3 LOANS/ CREDITS/ADVANCES		N.A.	
1.4 GOVERNMENT TREASURY BILLS		N.A.	
1.5 OTHERS		43,410 million	
2. INVESTMENT OF CORPORATE FUNDS IN ACTIVITIES UNDER ITS SECONDARY PURPOSES (PLEASE SPECIFY)		DATE OF BOARD RESOLUTION	DATE OF STOCKHOLDERS RATIFICATION
NONE		NONE	NONE
3. TREASURY SHARES (As at December 31, 2018)		NO. OF SHARES	% AS TO THE TOTAL NO. OF SHARES ISSUED
		172,412	0.015%
4. UNRESTRICTED/UNAPPROPRIATED RETAINED EARNINGS AS OF END OF THE LAST FISCAL YEAR: (As at December 31, 2018)			Php61,972 million*
5. DIVIDENDS DECLARED DURING THE IMMEDIATELY PRECEDING YEAR (As at December 31, 2018)			
TYPE OF DIVIDEND		AMOUNT (Php)	DATE DECLARED
5.1 CASH		9,090 million	February 26, 2018
		5,985 million	July 30, 2018
5.2 STOCK			
5.3 PROPERTY			
TOTAL			
6. ADDITIONAL SHARES ISSUED DURING THE PERIOD:			
DATE	NO. OF SHARES		AMOUNT
NONE	NONE		NONE
SECONDARY LICENSE/REGISTRATION WITH SEC AND OTHER GOVT AGENCY:			
NAME OF AGENCY:	SEC	BSP	IC
TYPE OF LICENSE/REGN.	Licensing Securities	N.A.	N.A.
DATE ISSUED	February 23, 1996	N.A.	N.A.
DATE STARTED OPERATIONS:	May 7, 1919	N.A.	N.A.
TOTAL ANNUAL COMPENSATION OF DIRECTORS DURING THE PRECEDING FISCAL YEAR	TOTAL NO. OF OFFICERS:	TOTAL NO. OF RANK & FILE EMPLOYEES:	TOTAL MANPOWER COMPLEMENT:
Php23.47 million	37	1,189	5,602

*Includes the balance of revaluation increment in utility plant and others and investment properties carried at deemed cost, deferred tax assets and unrealized foreign exchange gains totaling to Php42,645 million which is restricted for dividends declaration purposes.

NOTE: USE ADDITIONAL SHEET IF NECESSARY

BENEFICIAL OWNERSHIP DECLARATION					
A. Natural person who ultimately owns or controls the corporation:					
COMPLETE NAME (Surname, Given Name, Middle Name, Name Extension [i.e Jr., Sr., III])	SPECIFIC RESIDENTIAL ADDRESS	NATIONALITY	% OF OWNERSHIP	TAX IDENTIFICATION NO.	
B. Natural person who exercises ultimate effective control [1] over the corporation:					
COMPLETE NAME (Surname, Given Name, Middle Name, Name Extension [i.e Jr., Sr., III])	SPECIFIC RESIDENTIAL ADDRESS	NATIONALITY	% OF OWNERSHIP	TAX IDENTIFICATION NO.	
CORPORATE STOCKHOLDERS: [2]					
ULTIMATE BENEFICIAL OWNER (3)					
CORPORATE NAME AND BUSINESS/TRADE NAME	COMPLETE NAME (Surname, Given Name, Middle Name, Name Extension [i.e Jr., Sr., III])	SPECIFIC RESIDENTIAL ADDRESS	NATIONALITY	% OF OWNERSHIP	TAX IDENTIFICATION NO.
OTHER STOCKHOLDERS:					
A. PARTNERSHIP					
ULTIMATE BENEFICIAL OWNER (4)					
PARTNERSHIP NAME	COMPLETE NAME (Surname, Given Name, Middle Name, Name Extension [i.e Jr., Sr., III])	SPECIFIC RESIDENTIAL ADDRESS	NATIONALITY	% OF OWNERSHIP	TAX IDENTIFICATION NO.
B. TRUSTS					
ULTIMATE BENEFICIAL OWNER (5)					
NAME	COMPLETE NAME (Surname, Given Name, Middle Name, Name Extension [i.e Jr., Sr., III])	SPECIFIC RESIDENTIAL ADDRESS	NATIONALITY	% OF OWNERSHIP	TAX IDENTIFICATION NO.

1.

Refer to the definition of ultimate effective control under Section 2.2 of SEC Memorandum Circular No. 17, series of 2018.
2.

Indicate the intermediate layers of the company's ownership structure, if any, in a separate sheet and attach an ownership chart clearly showing the intermediate layers with their respective ownership amounts.
3.

Refer to the definition of beneficial owner under Sections 2.1 and 2.2 of SEC Memorandum Circular No. 17, series of 2018.
4.

Refers to the natural person who ultimately owns or controls the partnership or who exercises ultimate effective control over the partnership.
5.

Identity of the persons who control the trust and make the investment decisions; trust beneficiaries and the trustee; and individuals who furnish funds into the trust.

I, WILLIAM S. PAMINTUAN, Assistant Corporate Secretary of Manila Electric Company declare under penalty of perjury that all matters set forth in this GIS have been duly verified by me and to the best of my knowledge and belief are true and correct.

By indicating herein the personal information of the incorporators, stockholders, directors, officers, beneficial owners, external auditor, notary public and their agents, I attest that the aforementioned persons authorize the SEC to: (1) collect, process and store their personal information through the GIS forms and related documents, for the period allowed under the applicable laws and regulations; and (2) share with and make available the GIS to interested parties in order to pursue lawful purposes and legitimate interests, and comply with legal mandate.

I also attest that the company and the aforementioned persons authorized the undersigned to file this GIS with SEC, and the information provided herein are true, accurate, timely and complete.

I further attest that they are aware of their rights under the Data Privacy Act, including the right to be informed, to access, to object, to erasure or blocking, to damages, to file a complaint, to rectify and to data portability, and understand that there are procedures, conditions and exceptions to be complied with in order to exercise or invoke such rights.

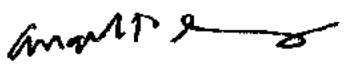
I likewise understand that the failure of the corporation to file this GIS for five (5) consecutive years shall be construed as non-operation of the corporation and a ground for the revocation of the corporations' certificate of incorporation. In this eventuality, the corporation hereby waives its right to hearing for the said revocation.

Done this _____ day of **04 JUL 2019**, 20 _____ in _____.


WILLIAM S. PAMINTUAN
Assistant Corporate Secretary

Subscribed and sworn to before me in Pasig City on **04 JUL 2019**, affiant personally appeared before me and exhibited to me his passport no. P2095480B valid until May 4, 2029 and who took an oath before me as to such instrument.

DOC. NO. **205**
PAGE NO. **42**
BOOK NO. **111**
SERIES OF 2019.


ATTY. ANGELO ALBERT T. SANCHEZ
Notary Public
Pasig, San Juan and Paleros
Issued on March 25, 2019 at Pasig City
Appointment No. 122(2019-2020)
Roll No. 58682/ IBP No. 09044/ Lifetime RSM Chapter
PTR No. 5312071/ 1-21-19 Pasig City
MCLE VI-0000252-07/11/16
8th Floor Lopez Bldg. Ortigas Avenue, Pasig City

ANNEX A

MERALCO SUBSIDIARIES AND AFFILIATES

<u>Name and Address</u>	<u>SEC Reg. No.</u>
1. Clark Electric Distribution Corporation Bldg. N2830, Bayanihan Street Clark Freeport Zone, Pampanga	A199710871
2. Corporate Information Solutions, Inc. Business Solutions Center, Meralco Center, Ortigas Avenue, Pasig City	57337
3. eMERALCO Ventures, Inc. 12th Floor, Tower 1, Rockwell Business Center, Meralco Compound, Ortigas Avenue, Pasig City	A200009418
4. Lighthouse Overseas Insurance Limited Date of Incorporation: August 28, 2007 Place of Incorporation: Bermuda Island Registration No.: 40562	
5. Meralco Energy, Inc. Business Solutions Center, Meralco Center, Ortigas Avenue, Pasig City	A199911349
6. Meralco Financial Services Corporation Meralco Center, Ortigas Avenue, Pasig City	A200204891
7. Meralco Industrial Engineering Services Corporation 4th and 5th Floors, Renaissance Tower 1000, Meralco Avenue, Pasig City	53817
8. MERALCO PowerGen Corporation 8th Floor, Rockwell Business Center I, Ortigas Avenue, Pasig City	A200117570
9. Meridian Atlantic Light Company Limited Date of Incorporation: October 2, 2013 Place of Incorporation: Nigeria Registration No.: RC1145528	
10. MRAIL, Inc. 4th Floor, Renaissance Tower 1000 Meralco Avenue, Pasig City	CS200908797
11. Comstech Integration Alliance, Inc. Ground Floor Comclark Bldg., M.A. Roxas Ave., Clark Freeport Zone, Pampanga	CS200800049
12. Vantage Energy Solutions and Management, Inc. 3/F BSC Bldg. Meralco Compound, Ortigas Avenue, Brgy. Ugong, Pasig City	CS201626932

- | | |
|---|-------------|
| 13. MSpectrum, Inc.
12 th Floor, Tower 2, Rockwell Business Center
Ortigas Avenue, Barangay Ugong, Pasig City | CS201601220 |
| 14. Bauang Private Power Generation
3 rd Floor, Benpres Building, Exchange Road
Corner Meralco Avenue, Ortigas Center, Pasig City | A593000810 |
| 15. Aclara Meters Philippines, Inc. (formerly General Electric
Philippines Meter and Instrument Company, Inc.)
28 1 st Avenue, Bagumbayan, Taguig City | 83886 |
| 16. MPioneer Insurance, Inc. (formerly Republic Surety
and Insurance Company, Inc.)
7th Floor Tower 1, Rockwell Business Center
Ortigas Avenue, Pasig City | 0000003756 |
| 17. Indra Philippines, Inc.
11th -12th floors, Rockwell Business Center
Tower I, Ortigas Avenue, Pasig City | AS095009617 |
| 18. Rockwell Business Center Joint Venture
The Rockwell Business Center, Meralco Compound
Ortigas Avenue, Ugong, Pasig City | |
| 19. Pure Meridian Hydropower Corporation
3F JTKC Center 2155 Don Chino Rocas Avenue
Makati, Metro Manila | CS201605135 |
| 20. eSakay, Inc.
3/F Business Solutions Center, Meralco Compound
Ortigas Avenue, Brgy. Ugong, Pasig City | CS201801911 |
| 21. Meridian Power Ventures Limited
Room 1102-3, 11/F., Regent Centre
88 Queen's Road Central, Hong Kong
Registration No.: 2714422 | |

ANNEX B

Report Title: Ownership of Securities by Citizenship

Issuer Code: MER
 Issuer Name: MANILA ELECTRIC COMPANY
 As of: 12/31/2018
 Class Type: COMMON

Printed by: jbs55514
 Report ID: STA16-028
 Print Date: 6/11/2019 9:21:40AM

CITIZENSHIP	OUTSTANDING	AMOUNT	PAID-UP	PERCENTAGE	# OF STOCKHOLDERS
FILIPINO	1,041,443,586.00	10,414,435,860.00	10,414,435,860.00	92.4094 %	42345
FRENCH	218.00	2,180.00	2,180.00	0.0000 %	1
GERMAN	1,707.00	17,070.00	17,070.00	0.0002 %	3
HONG KONG	4,607.00	46,670.00	46,670.00	0.0004 %	3
INDIAN	12,729.00	127,290.00	127,290.00	0.0011 %	6
ITALIAN	7,786.00	77,860.00	77,860.00	0.0007 %	1
JAPANESE	10,300.00	103,000.00	103,000.00	0.0009 %	7
LITHUANIA	2,390.00	23,900.00	23,900.00	0.0002 %	1
MALAYSIAN	1,261.00	12,610.00	12,610.00	0.0001 %	4
AMERICAN	189,015.00	1,890,150.00	1,890,150.00	0.0166 %	110
AUSTRALIAN	2,330.00	23,300.00	23,300.00	0.0002 %	6
BHUTAN	110.00	1,100.00	1,100.00	0.0000 %	1
BRITISH	75,798.00	757,980.00	757,980.00	0.0067 %	25
CANADA	1,051.00	10,510.00	10,510.00	0.0001 %	3
CANADIAN	12,624.00	126,240.00	126,240.00	0.0011 %	20
CHINESE	671,445.00	6,714,450.00	6,714,450.00	0.0596 %	123
PAKISTAN	3,300.00	33,000.00	33,000.00	0.0003 %	1
SPANISH	167.00	1,670.00	1,670.00	0.0000 %	2
SWEDISH	929.00	9,290.00	9,290.00	0.0001 %	1
SWISS	13,365.00	133,650.00	133,650.00	0.0012 %	1
TAIWANESE	55,644.00	556,440.00	556,440.00	0.0049 %	6
THAI	14,312.00	143,120.00	143,120.00	0.0013 %	2
OTHER ALIEN	84,573,949.00	845,739,490.00	845,739,490.00	7.5037 %	13

ANNEX C

MANILA ELECTRIC COMPANY
TOP 20 STOCKHOLDERS
As of December 31, 2018

STOCKHOLDER'S INFORMATION						
NAME, NATIONALITY AND CURRENT RESIDENTIAL ADDRESS	SHARES SUBSCRIBED			% OF OWNERSHIP	AMOUNT PAID (PHP)	TAX IDENTIFICATION NUMBER
	TYPE	NUMBER	AMOUNT (PHP)			
BEACON ELECTRIC ASSET HOLDINGS, INC. / FILIPINO / 10F MGO BLDG., LEGASPI COR. DELA ROSA ST., LEGASPI VILLAGE, MAKATI CITY 0721	Common	394,059,235		34.962265%	3,940,692,350	007-603-233
JG SUMMIT HOLDINGS, INC. / FILIPINO / JG SUMMIT HOLDINGS, INC. 43/F ROBINSONS-EQUITABLE TOWER ADB AVE. COR. POVEDA ST. ORTIGAS CENTER, PASIG CITY 1605	Common	333,189,397		29.561688%	3,331,893,870	000-7070-999
METRO PACIFIC INVESTMENTS CORPORATION / FILIPINO / 10F MGO BLDG., LEGASPI COR. DELA ROSA ST., MAKATI CITY	Common	116,364,807		10.501726%	1,163,648,070	244-620-457-000
PCD NOMINEE CORPORATION (FILIPINO) / FILIPINO / 37F ENTERPRISE TOWER 1, AYALA AVENUE, MAKATI CITY	Common	110,128,683		9.770988%	1,101,286,830	004-774-849-000
PCD NOMINEE CORPORATION (FOREIGN) / OTHERS / 37F ENTERPRISE TOWER 1, AYALA AVENUE, MAKATI CITY	Common	84,561,498		7.502581%	845,614,980	004-774-849-000
FIRST PHILIPPINE HOLDINGS CORPORATION / FILIPINO / 8TH FLR., CHRONICLE BUILDING, TEKITE ROAD COR. MERALCO AVE., PASIG CITY	Common	44,382,436		3.937769%	443,824,360	286-698-000
MANTES CORPORATION / FILIPINO / 2/F ERLAG BLDG., 102 ESTEGAN ST., LEGASPI VILL., MAKATI CITY	Common	2,486,427		0.220604%	24,864,270	000-314-677
YAN, LUCIO W. / FILIPINO / # 637 LAFAYETTE STREET, GREENHILLS EAST, MANDALUYONG CITY	Common	403,208		0.035774%	4,032,080	102-648-908-000
CHENG, CHARLOTTE CUA / FILIPINO / #1760 DRA. PAZ GUAZON ST., PACO, MANILA	Common	314,634		0.027907%	3,145,340	117-884-727
DEL ROSARIO, ALBERT FERREROS, & OR MARGARET GRETCHEN DE VENEZIA DEL ROSARIO / FILIPINO / 15F CHATHAM HOUSE # 116 VALERO COR. V.A. RUFINO ST. SALCEDO VILLAGE, MAKATI CITY	Common	291,140		0.025831%	2,911,400	119-816-369
AVESCO MARKETING CORPORATION / FILIPINO / AVESCO BLDG., AURORA BLVD., COR. YALE ST., CUBAO, Q.C.	Common	284,427		0.025235%	2,844,270	400-152-000
B. P. INSURANCE AGENCY, INC. / FILIPINO / 8F GMA LOU-BEL PLAZA, 7514 CHINO ROCES AVE. COR. ROCES AVE. COR.	Common	261,079		0.024936%	2,610,780	049-000-108-735
MAKATI SUPERMARKET CORPORATION / FILIPINO / 2QB ODC INT'L PLAZA CONDOMINIUM, #219 SALCEDO ST., LEGASPI VILLAGE, MAKATI CITY	Common	240,308		0.021321%	2,403,080	210-000-191-309
ALBERT FERREROS DEL ROSARIO AND/OR MARGARET GRETCHEN DE VENEZIA DEL ROSARIO / FILIPINO / 15F CHATHAM HOUSE, 116 VALERO COR V.A. RUFINO ST. SALCEDO VILLAGE, MAKATI CITY	Common	182,500		0.016192%	1,825,000	119-816-369
TAN, SIMEON V. / FILIPINO / #491 SAN FERNANDO ST., BINONDO, MANILA	Common	162,800		0.014444%	1,628,000	103-905-078
CARLOS, JOSE IGNACIO A. / FILIPINO / POLYMER, INC., #11 JOB BORRES JR., PASIG CITY	Common	161,687		0.014345%	1,616,870	150-756-652
AQUINO, ANTONIO T. & OR EVELINA S. AQUINO / FILIPINO / #31 FORDHAM ST., WHITE PLAINS, QUEZON CITY	Common	133,855		0.011876%	1,338,550	106-727-097
BP INSURANCE AGENCY, INC. / FILIPINO / 8F GMA LOU-BEL PLAZA, 7514 CHINO ROCES AVE. COR. ROCES AVE. COR.	Common	116,730		0.010357%	1,167,300	049-000-108-735
CONCEPCION, RAUL JOSEPH / FILIPINO / 1193 TAMARIND ROAD, DASMARINAS VILLAGE, MAKATI CITY	Common	112,431		0.009975%	1,124,310	104-450-509
TAN, JIMMY D. / FILIPINO / NO. 71 SANSO ST., CORINTHIAN GARDENS, UGONG NORTE, QUEZON CITY	Common	110,000		0.009760%	1,100,000	109-410-646
TOTAL SHARES (TOP 20)		1,089,967,182		96.705565%		
TOTA SHARES (REST OF STOCKHOLDERS)		37,131,523		3.294435%		
TOTAL ISSUED AND OUTSTANDING SHARES		1,127,098,705		100.000000%		



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

—oOo—

ERC Certificate No. CPCN-08-21

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

TO WHOM IT MAY CONCERN:

THIS IS TO CERTIFY that, pursuant to the power and authority conferred upon it by Republic Act No. 9136, the

ENERGY REGULATORY COMMISSION

after having duly considered the application filed in ERC Case No. 2008-081 MC for the issuance of Certificate of Public Convenience and Necessity to continue operating the electric light, heat and power system in the Cities/Municipalities of Metro Manila, Bulacan, Cavite, and Rizal and certain Cities/Municipalities/Barangays in Batangas, Laguna, Quezon and Pampanga and the evidence submitted in support thereof, has rendered a decision on October 20, 2008 declaring that the operation by the applicant of the business described therein will promote public interest in a proper and suitable manner.

WHEREFORE, the COMMISSION hereby issues to

MANILA ELECTRIC COMPANY

this CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY which shall be valid from June 28, 2003 to June 28, 2028 subject to the rules and regulations issued by the Commission in accordance with law:

Given at Pasig City, Philippines, this 20th day of October 2008.


ZENAIDA G. CRUZ-DUCUT
Chairperson


RAFF A. TAN
Commissioner


MARIA TERESA A.R. CASTAÑEDA
Commissioner


ALEJANDRO Z. BARIN
Commissioner


JOSE C. REYES
Commissioner

Attested by:


ATTY. FRANCIS S. TURNINO C. JUAN
Executive Director III

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

CONTENTS

EXECUTIVE SUMMARY	1
1. UTILITY SITUATION/ BACKGROUND	1
1.1 Overview of the Company	1
1.2 Overview of Operational Issues	3
1.3 Customer	4
1.4 Trends	4
1.4.1 Customers	4
1.4.2 Energy Sales	5
1.4.3 Peak Load	5
2. LOAD FORECAST	6
2.1 Energy Sales and Demand	6
2.2 Overview of Alternative Forecasts	7
3. OBJECTIVES	8
3.1 Corporate Objectives	8
3.2 DSM Objectives	10
3.2.1 Load Reduction Objectives	10
3.2.2 Non-Load Reduction Objectives	11
4. RECOMMENDED OPTIONS, PROGRAMS & PLAN	12
4.1 Options	12
4.2 Rationale for selection of customer groups targeted	12
4.3 Program	12
4.3.1 Overview	12
4.3.2 Compact Fluorescent Lighting Program	14
4.3.3 Green Buildings Program	17
4.3.4 Industrial Efficiency Program	18
4.3.5 Industrial Process Efficiency Program	20
4.3.6 Power Factor Correction Program	21
4.3.7 Load Management Program	22
4.3.8 Site-Specific Conservation Program	24
4.3.9 Load Reduction Program	26
4.4 Avoided Costs and Externalities	27
4.5 Technology Cost Effectiveness	29
4.5.1 Compact Fluorescent Lighting Program	29
4.5.2 Green Buildings Program	31
4.5.3 Industrial Efficiency Program	31
4.5.4 Industrial Process Efficiency Program	31
4.5.5 Power Factor Correction Program	31
4.5.6 Load Management Program	31
4.5.7 Load Reduction Program	31

4.5.8 Load Research.....	34
4.6 Market Size and Participation Projections.....	34
4.6.1 Compact Fluorescent Lighting Program.....	34
4.6.2 Green Buildings Program.....	34
4.6.3 Industrial Efficiency Program.....	34
4.6.4 Industrial Demonstration Program.....	34
4.6.5 Power Factor Correction Program.....	35
4.6.6 Load Factor Improvement Program.....	35
4.6.7 Streetlight Conversion Program.....	35
4.6.8 Load Research.....	35
4.7 Energy and Demand Effects.....	35
4.7.1 Compact Fluorescent Lighting Program.....	35
4.7.2 Green Buildings Program.....	36
4.7.3 Industrial Efficiency Program.....	36
4.7.4 Industrial Demonstration Program.....	37
4.7.5 Power Factor Correction Program.....	37
4.7.6 Load Factor Improvement Program.....	37
4.7.7 Streetlight Conversion Program.....	38
4.7.8 Load Research.....	38
4.8 Externalities.....	38
4.9 Expected Costs.....	38
4.9.1 Program Costs.....	39
4.9.2 Other Costs.....	40
4.10 Cost-Effectiveness Test Results.....	40
4.11 Bills/Rates.....	41
4.12 Sensitivity Analysis Results.....	42
4.12.1 Avoidable Costs.....	42
4.12.2 Discount Rates.....	42
4.12.3 Participation Rates.....	42
5. FINANCIAL PLAN.....	42
5.1 Proposal for DSM Financial Incentives.....	42
5.2 Proposal for Cost and Revenue Recovery.....	43
6. IMPLEMENTATION PLAN.....	44
6.1 Proposed Implementation Process.....	44
6.1.1 Programs for 1998.....	44
6.1.2 Programs for 1999.....	44
6.1.3 Programs for 2000 to 2002.....	45
6.2 Timeline Chart of Activities and Milestones.....	45
7. MEASURING DSM PROGRAM RESULTS.....	45
7.1 Monitoring.....	45
7.1.1 Compact Fluorescent Lighting Program.....	45
7.1.2 Green Buildings Program.....	45
7.1.3 Industrial Efficiency Program.....	45

7.1.4 Industrial Demonstration Program.....	46
7.1.5 Power Factor Correction Program.....	46
7.1.6 Load Factor Improvement Program.....	46
7.1.7 Streetlight Conversion Program.....	46
7.1.8 Load Research.....	46
7.2 Evaluation.....	47
8. APPENDICES.....	47
8.1 Forecast.....	47
8.1.1 Historical and Projected Data.....	47
8.1.2 Forecast Models.....	50
8.1.3 Forecast Methodologies.....	50
8.1.4 Forecast Assumptions.....	50
8.1.5 Alternative Forecasts.....	50
8.2 DSM Options.....	50
8.2.1 Data and Assumptions used in Option Analysis.....	50
8.2.2 Options rejected.....	50
8.2.3 Model Used in Analysis.....	50
8.2.4 Optimisation by the Cost Effectiveness Test Perspectives.....	50
8.2.5 Breakdown of Program Costs.....	50

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 electricity

utilization not only on the bulk sale or generation level but as well as on the retail level.

The new rate structure provides incentives for customers to improve load factor. Only those with demand meters, namely, the Industrial and Non-Industrial customers which accounted for more than 60% of total sales felt the impact of the restructuring. A customer with a load factor higher than 36.6% will experience a decline in the average rate while a customer with a load factor lower than 36.6% will be adversely affected with an increase in its rate. Demand-Side Management programs directed to this group of customers will also help cushion the impact of the restructuring.

DSM Objectives

The proposed Omnibus Electric Industry Bill will create fundamental changes in regulation of electric utilities as well as the industry structure itself. Initially, there will be competition in the wholesale market and will eventually move towards retail competition.

In order to face the challenges and new market conditions, MERALCO will focus on the needs of its customers. Our mission is to serve our customers by providing efficient, adequate and reliable electric service at reasonable cost. Improving customer service is considered to be MERALCO's primary objective of Demand Side Management (DSM).

It has established the "account management" approach and taken more aggressive DSM activities with its customers. It is within this environment that DSM can be offered to customers as a package of services aimed at providing solutions to customers' needs.

MERALCO has undertaken a program of continuous system upgrading to improve the quality and reliability of the electricity delivered to the customers. It believes that through efficiencies and productivity gains, lower price of electricity can also be achieved.

Programs and Activities Selected

A total of eight programs and supporting activities were selected for implementation over the first two years of the Plan. Most programs will be undertaken initially on a pilot scale and cover all the customer sectors. The following programs have been selected:

1. Compact Fluorescent Lighting Program - promotion of CFLs through trade allies and offering incentives for repayment in instalments through electricity bills;
2. Green Buildings Program - pilot energy efficiency project in a shopping mall and an office building under an EPC;
3. Industrial Efficiency Program - customized value added services through an ESCO to discourage wastage and promote efficiency.

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 35-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 streetlight 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	2 596 467	90.5%	5 975 600	33.6%
Commercial Customer	255 640	8.9%	5 805 100	32.6%
Industrial Customer	13 073	0.5%	5 909 200	33.2%
Others	4 132	0.1%	120 400	0.7%
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 new franchisee

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.

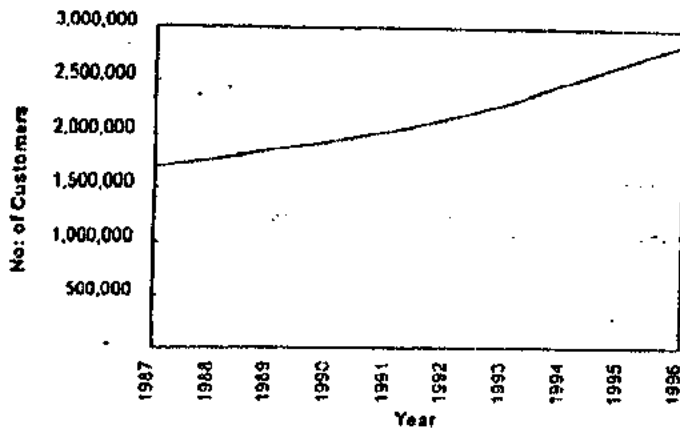


Figure 1 Historical Growth in Customer Numbers

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.

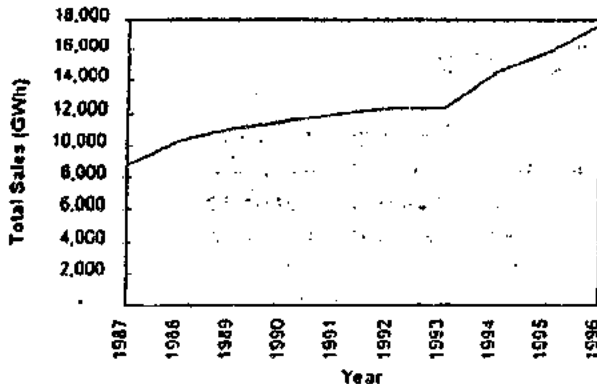


Figure 2 Historical Energy Sales

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 1991, 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.

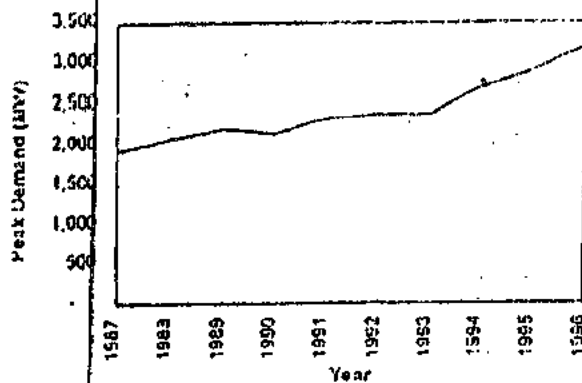


Figure 3 Historical
Peak Load

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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/REP² 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.

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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 Appendixes (Section S.1) and shown in Figure 4 below.

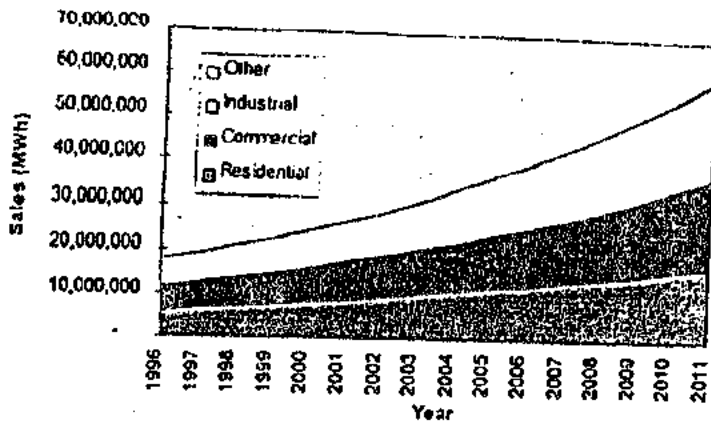


Figure 4 Electricity Sales Forecast (SJW2)

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.

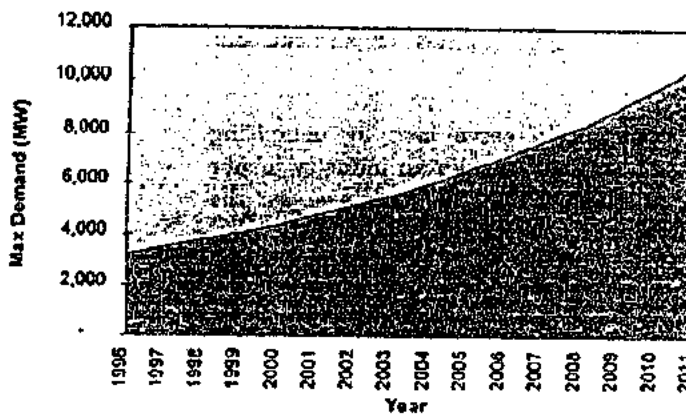


Figure 5 Electricity Demand Forecast

2.2 Overview of Alternative Forecasts_[SJW3]

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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

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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 gearing up for competition in the future in what it considers the most uncertain situation. It is aware of the challenges.

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.

3.2 DSM Objectives

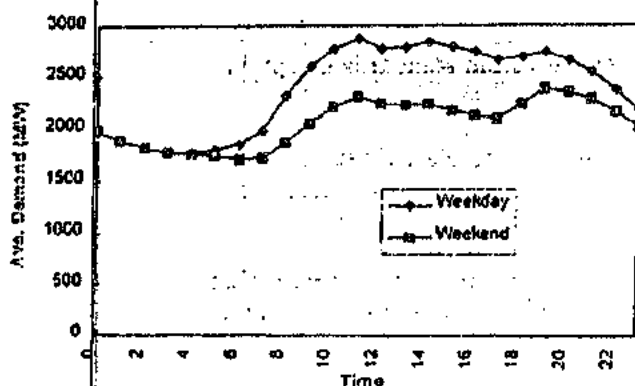
5 (I) 1 d

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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 by shifting peak demand while at the same time maintaining the same total load.

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 (SRW4)

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 (f) 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 Objectives	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	"Best" Technology
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

Table 3 Customer Segments Targeted by the Programs

Overview of Customer Segments

The programs apply to the customer segments as indicated in Table 4.

Program	Residential	Commercial	Industrial	Other
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	✓	✓	✓	

Table 4 Customer Segments Targeted by the Programs

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, 19 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

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 measures

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 rewind motor with an high efficiency motor; installation of pressure control device in the air compressor plant to provide effective load control and discharge pressure; an retrofit of the hot face of an electric oven with ceramic fiber blanket to reduce heat-up time.
3. Filtex Manufacturing Corporation : Installation of a Variable Speed Drive for a circulation pump and also replace the 40 hp motor with a high efficiency motor of a water supply system, and installation of an Ogden pump for efficient conversion 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 still a minor component of the overall cost of production.

source capital resources towards process improvements rather than on energy.

In addition, most industries have limited technical resources who are normally preoccupied in plant operation and maintenance that they have little time spend on improvements outside the core business.

Local 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 P 1.8435 /kWh. Starting April 1995, the NPC billed MERALCO on a demand and energy rate system, charging P 290.14 /kW of maximum demand and P 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 P 2.33 /kWh to a demand and energy rate of P 195.00 /kW and P 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 P 25.00 /kW in the Distribution Charge to P 220.00 /kW (P 25.00 + P 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 factor.

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 a revenue-neutral, zero-sum transfer

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 MIS and IS customers, MERALCO will phase-in the new rate structure to these customers over a period of twelve months. The first phase began last April 1997, the second on October 1997, and the final phase on April 1998, with the demand charge increasing to 90 P/kW, 155 P/kW, and 220 P/kW, respectively.

Among MERALCO's customers, manufactures of food, beverages, textiles, paper, plastics, cement, glass and electronics; private hospitals and hotels will benefit from the restructuring because of their typically high load factors. On the other hand, low load factor customers will have to manage their electrical consumption to avail themselves of the new incentives [SJWS] that are provided in the restructured rates. For its part, MERALCO will direct Demand Side Management (DSM) programs to these customers to help cushion the impact of the restructuring. With DSM, all customers have the potential to improve their energy efficiencies and bring up their load factors. [SJWS]

The program will initially include a pilot program covering about 40 customers in various industrial and commercial segments with load factors below 37% and would include workshops, seminars, replacement of existing kWh meters with digital meters, walk-through audits and assistance with implementation. A full scale program will be designed based on the lessons learnt from the pilot project.

4.3.8 Streetlight Conversion Program

Customer Segment Targeted

The customer group targeted is local government units.

End Use and Technology

The program would replace existing MERALCO-owned high pressure mercury vapour street lights with high pressure sodium street lights and develop a standard design for street lighting in the franchise area applicable to all existing and new installations.

Key Barrier/s

The street lights are owned by MERALCO. The lighting is paid for by local governments on a flat fee basis. This is known as a "chaufage" arrangement: the customer is buying an energy service from the utility - which provides both the energy and the equipment - rather than buying units of energy. Under this program MERALCO will provide the same (or better) energy service with high capital cost, low energy consumption lamps rather than low capital cost, high energy consumption lamps.

Program Objective

The program aims to:

- optimise the energy efficiency of street lighting,
- to contribute to a reduction of the evening peak;
- to minimise the cost of street lighting inventory and installation costs (via use of a standard design); and
- to provide a standard level of lighting service (via use of a standard design).

Program Description

There are currently around 178 000 high pressure mercury (HPM) street light installations in MERALCO's franchise area. The program proposes to replace these lamps with energy efficient high pressure sodium (HPS) lamps over a 10 year period. For the first seven years of the program priority will be given to streetlights within Metro Manila covering 97 142 installations.

The cost of installation per streetlight varies depending on the road classification, type of construction and lamp wattage. The maintenance costs of the HPS lamps are higher than the existing HPM lamps primarily due to higher costs of some parts of the HPS fixture. The effectiveness of the program will be monitored and evaluated during the program period.

In addition to the demand and energy savings the program offers other non quantifiable benefits to society, primarily in reduction of night time road accidents and crime.

A pilot program was implemented from 1993 to 1995 covering a total of 3 925 70 W HPS fixtures.

MERALCO also intends to standardise the design for street lighting for both existing and new installations.

The costs associated with this program are as follows:

- monitoring and evaluation

4.3.9 Load Research

Customer Segment Targeted

All customer segments will be targeted

End Use and Technology

Most end uses especially lighting, air conditioning and motor drives.

Key Barrier/s

This is not a DSM program as such, it is a research activity to support DSM programs.

Research Objective

To develop an end-use load shape database for estimating end-use demand and designing and evaluating DSM programs.

Research Description

Load research is the measurement and evaluation of the utility's electric load characteristics. Data used to characterize loads can be gathered by metering, conducting energy-use surveys and reviewing billing information. Load research parameters that are determined usually include system peak and average loads, customer's coincident and non-coincident demand and the simultaneous demand of a customer group. Factors that characterize loads can then be derived for a system or specified subsystem.

The main objective of a load research project is to produce cost-effective, statistically sound, detailed databases necessary for resource planning, DSM program design and evaluation, cost allocation and tariff design, and load forecasting. Specifically, from the load research results, load profiles will be created and broken down into identifiable end-uses. This is essential for determining the patterns of energy usage and maximum demand of individual customer groups. Load research data also aids 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.^(SJM7) This means that if MERALCO's customers reduce energy consumption, then MERALCO reduces its purchases from NPC.

The analysis in this submission uses the NPC contract charges to MERALCO as a proxy for the true total resource or societal avoidable costs of energy and generation capacity. The true values would be the energy and generation costs that would be avoided by NPC due to marginal reductions in energy and demand at the MERALCO bulk supply points. These numbers were not available to MERALCO within the time and resource constraints of this submission.

The "avoidable costs" used in this DSM analysis represent the value of those costs that would be avoided by MERALCO due to energy and demand savings from the equipment and behaviour changes promoted by the proposed DSM programs. Energy and demand savings achieved

MERALCO makes to the National Power Corporation (NPC) under its energy supply contract, provided that those savings do not take MERALCO's total purchases below the take-or-pay "contract demand" threshold for energy and/or demand. The current MERALCO contract with NPC is structured to:

- 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.kWh ^{-1.y⁻¹}

Table 5 MERALCO's NPC Contract Charges used as Avoidable Costs in the Analysis [SJW9]

Table 3 shows the marginal energy charge from NPC. Note that it is a conservative value, as it does not include the "Fuel and Purchased Power Adjustment" (FPCA) nor does it include the "Foreign Exchange Adjustment" (ForEx). [SJW10]

Network Avoidable Costs

The analysis does not assign any avoidable cost values to the sub-transmission and distribution network. This would require very detailed, time-consuming and costly work treating each small local area separately and is not appropriate for first-time pilot DSM programs as proposed here. Moreover, experience elsewhere suggests that the avoidable costs available in the local network are usually small compared with the avoidable costs of energy and generation capacity.

Avoidable Environmental externality Costs

This analysis does not use avoidable externality costs. A collaborative process is underway to determine a set of avoidable externality costs for DSM planning in the Philippines, but it has not yet produced a set of numbers for use. The addition of avoidable externality cost data to the analysis would only make the proposed DSM programs more cost-effective under the societal test than they are as presented below.

5 (i) 1 g & j
6 a (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 (SJM11)

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(SJM12) to MERALCO and its customers as a whole at an incremental technology cost of ₱ yyy(SJM13) for a net benefit of ₱ zzz(SJM14) at a benefit / cost ratio of BCR(SJM15).

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 ¹	kWh
Delta Annual Energy	kWh
Marginal System Losses ³	kWh
System Annual Energy Impact	kWh
Present Value Avoidable Energy Costs ⁴	\$/kWh
Present Value Reduced Energy Supply Costs	\$
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	kW
Present Value Avoidable Demand Costs ⁴	\$/kW
Present Value Reduced Demand Supply Costs	\$
Equipment Cost	
DSM Equipment Cost ¹	\$
Base Equipment Cost ¹	\$
Net Equipment Cost	\$
Total	
Present Value Reduced Supply Costs	\$
Present Value Net Participant Costs	\$
Present Value Net Benefit	\$
Benefit / Cost Ratio	

Notes:

1. Assuming 2 lamps * 0.05 kW * 3 hours * 365 days. (SJV16)
2. Assuming 2 lamps * 0.021 kW * 3 hours * 365 days. (SJV17)
3. The average system energy losses as a percent of consumption are x% (SJV18). The marginal losses are equal to twice the average losses, and are therefore 2x% (SJV19).
4. The MERIALCO avoidable energy cost is 1.2520 \$/kWh. Avoiding 1 kWh for six years (the life of the CFL) delivers MERIALCO a stream of savings with a present value \$ (SJV20) when discounted at the total resource cost discount rate of 4%.
5. The peak-coincident demand figures are calculated as the savings for two lamps with a 90% coincidence factor meaning that only one of the lamps is on during the peak. (SJV21)

6. The MERALCO avoidable demand cost is 290.14 P/kW.month or 3481.68 P/kW-yr. Reducing the system peak by 1 kW throughout the year for six years (the life of the CFL) saves MERALCO P. [SNW22]
7. Based on [SNW24]
8. This assumes the purchase of 6 incandescent lamps at P 15 over a period of 6 years, discounted at 10%pa.[SNW24]

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.[SNW23]

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. [SNW26]

4.5.6 Load Factor Improvement Program

As noted in the general program description above, in compliance with an order from ERE, MERALCO has restructured its Generation Charge, from a straight energy rate of P 2.33 /kWh to a demand and energy rate of P 2.33 /kWh and P 0.00 /kW.

4.5.7 Streetlight Conversion Programsjwn

Table 7 Technology Cost-Effectiveness of Street Lighting Program

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 ⁵
Present Value Reduced Energy Supply Costs	P
Demand	
Base Peak-Coincident Demand ⁶	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 ⁷
Present Value Reduced Demand Supply Costs	P
Equipment Cost	
DSM Equipment Cost ⁸	P
Base Equipment Cost ⁹	P
Net Participant Costs	P
Total	
Present Value Reduced Supply Costs	P
Present Value Net Participant Costs	P
Present Value Net Benefit	P
Benefit / Cost Ratio	

Notes:

1. Assuming 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%.[SAV30]. The marginal losses are equal to twice the average losses, and are therefore 2x%.[SJW31]
4. The NERALCO avoidable energy cost is 1.2929 P/kWh. Avoiding 1 kWh for x[SJV32] years (the life of the CFL) delivers NERALCO a stream of savings with a present value P [SJW33] when discounted at the total resource cost discount rate of 4%.
5. Street lamps are not coincident with the NERALCO peak, therefore this value is zero.
6. Based on [SJW34]
7. [SJW35]
8. [SJW36]
9. [SJW37]

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.W.36)

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 ERE at that time.

4.6.3 Industrial Efficiency Program

(S.W.37) 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. [S/W:11]

4.6.7 Streetlight Conversion Program

[S/W:12]

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) 1 i & j
6 a (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.

[S/W:10]

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 evaluated using the monitored results from the pilot stage of the program. (S.W.41)

4.7.3 Industrial Efficiency Program

(S.W.42) The industrial customers over 1 MW collectively consume 1 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
1999		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. [SNV43]

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 [SNV44] (measured kVA), therefore reducing transformer capacity requirements and hence network capital costs for the same level of energy (kWh) 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

[3JW43]

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 summarizes the externality effects of the proposed programs. Programs that reduce total energy consumption will also reduce those marginal external costs associated with each unit of energy generated. The residential compact fluorescent lighting program is indicated as producing "some reduction" in peak demand because the end use is only partly coincident with the MERALCO peak.

Program	Peak Demand	Total Energy	Environmental Costs
Compact Fluorescent Lighting	Some kW Reduction	Reduced	Reduced
Green Buildings	kW Reduced	Reduced	Reduced
Industrial Efficiency	kW Reduced	Reduced	Reduced
Industrial Demonstration	kW Reduced	Reduced	Reduced
Power Factor Correction	kVA Reduced	No change	No change
Load Factor Improvement	kW Reduced	No change	No change
Streetlight Conversion	No change	Reduced	Reduced
Load Research	No change	No change	No change

Table 10 Externality Effects of Proposed Programs

4.9 Expected Costs

5 (i) 1 g & j
6 e (ii) & (iii)

The costs outlined in this Section are the estimated costs associated with the implementation of the eight programs over a two year period (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
ERL 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	796 408	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	7 376 h	379	600 000		900 000
Contingency				357 363	357 363
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 P
CEL Program					
Set up costs	2 345 h	116	272 825	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	1 800 h	38	68 800	200 000	268 800
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 Demolition Program					
Monitor & Evaluate	96 h	102	9 744	31 396	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	900 000		900 000
Contingency				357 853	357 853
Total					4 257 214

Table 11 Estimated Program Costs

Load Factor Improvement Program						
Pilot Program:	7 392	h	109	805 000	953 637	1 758 737
Full Scale						
Key Accounts						
Workshops					259 500	259 500
Implement	11 616	h	95	1 104 000	733 829	1 837 829
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	1 350 000	1 410 000
Workshops					1 357 000	1 357 000
Implement	13 200	h	106	1 395 000	885 724	2 280 724
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					
End Use Surveys					
Total					
1998					
End 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 (b) 1 h
5 (b) 2 f
3 c

4.11 Bills/Rates

5 (i) 1 k 2 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 N/C charges to MERALCO, and using a discount rate of 7% would save the utility \$ xx, (SJV46) but would incur program costs and reduced revenue totaling \$ yy, (SJV47) resulting in a net loss to MERALCO of \$ zz, (SJV48). Using a utility discount rate of d%, (SJV49) a once-off residential tariff adjustment of adj \$/kWh (SJV50) 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 (SJV51) would be just under \$ imp (SJV52) per year.

Year	Projected Consumption MWh	Calculated Savings MWh	Projected Consumption With Program MWh	Recovered Revenue P
Once-off Tariff Adjustment (\$/kWh 1)				
Recovered Revenue Loss 1998 present value discounted at d% (SJV53)				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				

Table 13 Revenue and Tariff Effects

(SJV54)

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. (S/W53)

5. FINANCIAL PLAN

5.1 Proposal for DSM Financial Incentives

This chapter presents financial incentives for 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 as 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 $xx \text{ P/kWh}$ (\$/kWh) to recover net losses over the life of the projected residential CFL program effects with a present value of $P \text{ xnsawt}$ when discounted at $d\%$ (\$/kWh). This could be reviewed when the program goes into full implementation.

It is proposed that pilot results be used to:

- adjust cost recovery for the pilot and

for lamps from retailers and pay them off on their MERALCO electricity bill from the energy savings delivered by the lamps.

The proposed program delivery mechanism for both the green buildings and industrial efficiency programs is an ESCO. ESCOs provide a financial incentive to customers in the form of performance-guaranteed shared-savings.

The industrial demonstration program has third-party incentives from USAID in the form of funding of high efficiency demonstration equipment.

The power factor improvement program will provide financial incentives to customers in the form of a loan to be repaid in instalments on the customers' monthly MERALCO bill.

Financial incentives for the load factor improvement program will be considered 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

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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 XX P/kWh (\$/kWh) to recover net losses over the life of the projected residential CFL program effects with a present value of P xxx (\$/kWh) when discounted at d% (\$/kWh). 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
- determine 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 NERALCO 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 major programs and the

6.1.3 Programs for 2000 to 2002

The programs to be undertaken during this period would be dependent on the load shape and corporate objectives achieved during 1998 and 1999. It is likely to include the continuation of all or some of the initial programs. In addition, the following programs will be considered :

- Promotion of efficient air conditioners and other appliances
- Promotion of high efficiency fluorescent lamps
- Promotion of high efficiency motors and variable speed drives.

6.2 Timeline Chart of Activities and Milestones

The Gantt Charts covering tasks and milestones for each of the five programs for 1998 and 1999 are detailed in the following sheets. The schedules are based on obtaining Energy Regulatory Board approval by the end of February 1998.

7. MEASURING DSM PROGRAM RESULTS

5 (i) 1 e & j
6 b

7.1 Monitoring

5 (i) 2 c

The following monitoring procedures will be adopted for each of the programs:

7.1.1 Compact Fluorescent Lighting Program

The procedure to be adopted for this program involves the setting up of a database of relevant information from each of the participating customers. The database would include the following information:

- Customer name, address and electricity account number
- Date and number of CFLs purchased
- Date of first and last payments
- Customer estimate of hours of usage/day per CFL
- Calculation of energy and demand savings
- Details of CFLs returned and reasons

In addition, the database would assist in tracking customer compliance with the program, 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 seeds of mutual interest in energy conservation will

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	189 320	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	10 438	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	3 382	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	12 938	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	13 768	4 396	3 172 109
1999	2 932 586	282 201	14 214	4 487	3 233 498
2000	2 987 251	289 150	14 702	4 678	3 295 681
2001	3 040 968	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	3 388 183	357 055	19 856	5 244	3 770 334
2009	3 432 953	366 998	20 713	5 319	3 826 932
2010	3 478 271	377 332	21 628	5 390	3 882 622
2011	3 524 430	387 992	22 604	5 455	3 931 422
2012	3 571 430	398 992	23 644	5 515	3 989 522
2013	3 619 271	410 332	24 748	5 570	4 055 922
2014	3 667 953	422 013	25 917	5 620	4 126 503
2015	3 717 476	434 038	27 151	5 665	4 204 270
2016	3 767 842	446 417	28 451	5 705	4 288 415
2017	3 818 959	459 160	29 817	5 740	4 374 876
2018	3 870 826	472 277	31 250	5 770	4 469 923
2019	3 923 443	485 777	32 751	5 795	4 573 266
2020	3 976 810	499 670	34 320	5 815	4 681 615

Table 14 Historical and Projected Customer Counts

Year	Residential	Commercial	Industrial	Streetlight	Total
1987	3 044.9	2 931.8	2 788.6	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	13 485.1	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	4 735	6.5%
2002	5 070	7.1%
2003	5 443	7.4%

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%	2.7%
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%	1.5%	1.5%
2007	1.4%	2.7%	4.1%	1.5%	1.5%
2008	1.4%	2.6%	4.2%	1.5%	1.5%
2009	1.3%	2.8%	4.3%	1.4%	1.5%
2010	1.3%	2.9%	4.4%	1.4%	1.5%
2011	1.1%	2.9%	4.5%	1.3%	1.5%

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

(SJV59)

8.2.1 Data and Assumptions used in Option Analysis

5 (i) 2 a
6 a (i)-(iii)
6 f

8.2.2 Options rejected

5 (i) 2 d

8.2.3 Model Used in Analysis

5 (i) 2 g
6 g

8.2.4 Optimisation by the Cost Effectiveness Test Perspectives

6 (i)

8.2.5 Breakdown of Program Costs

Page: 2
 [SJW1] Perhaps we could use a positive expression here, such as "encourage customer loyalty" rather than the negative expression "discourage self generation".

Page: 7
 [SJW2] Include 10 year historical data on the graph to give context. Will energy sales really grow exponentially for ever? I assume that this is the official MERALCO forecast, so use it, but be prepared to defend it under questioning from ERB!

Page: 7
 [SJW3] We have used this generic paragraph in all of the four case study submissions. Are you happy with it?

Page: 11
 [SJW4] I wrote an introductory paragraph, and edited the text to tighten it up a little bit. Please check over it!

Page: 24
 [SJW5] This is perhaps a bit disingenuous! You can think of the new rate structure as providing everyone with "incentives" for a low load factor, but in reality the customers that we are talking about here - whose bills WILL GO UP if they do nothing - will first be trying to avoid a penalty rather than to avail themselves of an incentive!

Page: 24
 [SJW6] You have listed the customer groups who do not need the program. It would be a good idea to list those that DO need the program. Put them in priority order starting with the lowest load factor groups.

Page: 27
 [SJW7] Do you want to mention the IPP?

Page: 28
 [SJW8] Make sure that this is correct!

Page: 23
 [SJW9] Check that these NPC avoidable costs are correct.

Page: 23
 [SJW10] Make sure that this note is right.

Page: 29
 [SJW11] JOSEPH: summarise the results of the SRC/COMPASS* technology analysis here. I have included the numbers from one of the other case study utilities. CHANGE these numbers to the ones that you are using and CHECK that the result matches the SRC/COMPASS* technology analysis!!!

Page: 29
 [SJW12] Insert the correct result here.

Page:		29
	(SJW13) Insert the correct result here.	
Page:		29
	(SJW14) Insert the correct result here.	
Page:		29
	(SJW15) Insert the correct result here.	
Page:		30
	(SJW16) CHECK that these numbers match yours. CHANGE if necessary.	
Page:		30
	(SJW17) CHECK that these numbers match yours. CHANGE if necessary.	
Page:		30
	(SJW18) Insert the value here for (MERALCO purchases minus MERALCO consumption) divided by MERALCO consumption.	
Page:		30
	(SJW19) Insert the value here.	
Page:		30
	(SJW20) Insert the calculated value here.	
Page:		30
	(SJW21) CHANGE this if you used a different assumption.	
Page:		31
	(SJW22) ... and here.	
Page:		31
	(SJW23) Say what the price is based on.	
Page:		31
	(SJW24) Need to make the discount rates consistent.	
Page:		31
	(SJW25) Make sure you attach them!	
Page:		31
	(SJW26) If you have any sort of technology-level cost-effectiveness analysis, include it here. or example, if you have the full installed cost of capacity banks per kW of load, and the savings associated with an increment of improvement in power factor, you may be able to indicate the range of power factors where capacitor banks would be cost-effective.	
Page:		32
	(SJW27) JOSEPH, ANNIE, can you drop the cost-effectiveness analysis for this program in this form here? Include a summary write-up at the front.	
Page:		32
	(SJW28) Put the values in here.	

Page:		33
	[SJW29] Put the values in here.	
Page:		33
	[SJW30] Insert the value here for (MERALCO purchases minus MERALCO consumption) divided by MERALCO consumption.	
Page:		33
	[SJW31] Insert the value here.	
Page:		33
	[SJW32] Insert the number of years life of the lamps here.	
Page:		33
	[SJW33] Insert the calculated value here.	
Page:		33
	[SJW34] Say what the price is based on.	
Page:		33
	[SJW35] Say what the price is based on.	
Page:		34
	[SJW36] JOSEPH to find eligible market using residential survey results as discussed.	
Page:		34
	[SJW37] I have made a start. Can you finish a paragraph about the number of customers in the target group (>1MW) and how many are projected to participate in the pilot (and in the full program if possible).	
Page:		35
	[SJW38] RON: paste in the table from your document DSM_277:Load_Nolprog.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:	[S/W53] Joseph, my back-of-the envelope analysis shows this, but we should perhaps check this in SRC/COMPASS.	42
Page:	[S/W56] Put the tariff impact value in here.	43
Page:	[S/W57] put the net revenue loss value in here.	43
Page:	[S/W59] Put the correct discount rate in here.	43
Page:	[S/W59] Put the long list, the screening process and the results here.	50

National Power Corporation (NPC) Certification

Certification by the NPC regarding availability of Transition Supply Capacity (TSC)
is **NOT APPLICABLE** since MERALCO has no TSC with NPC.

ANNEX J
1. Meralco Supply-Demand Scenario
2019 - 2029

ANNEX “ J ” 99

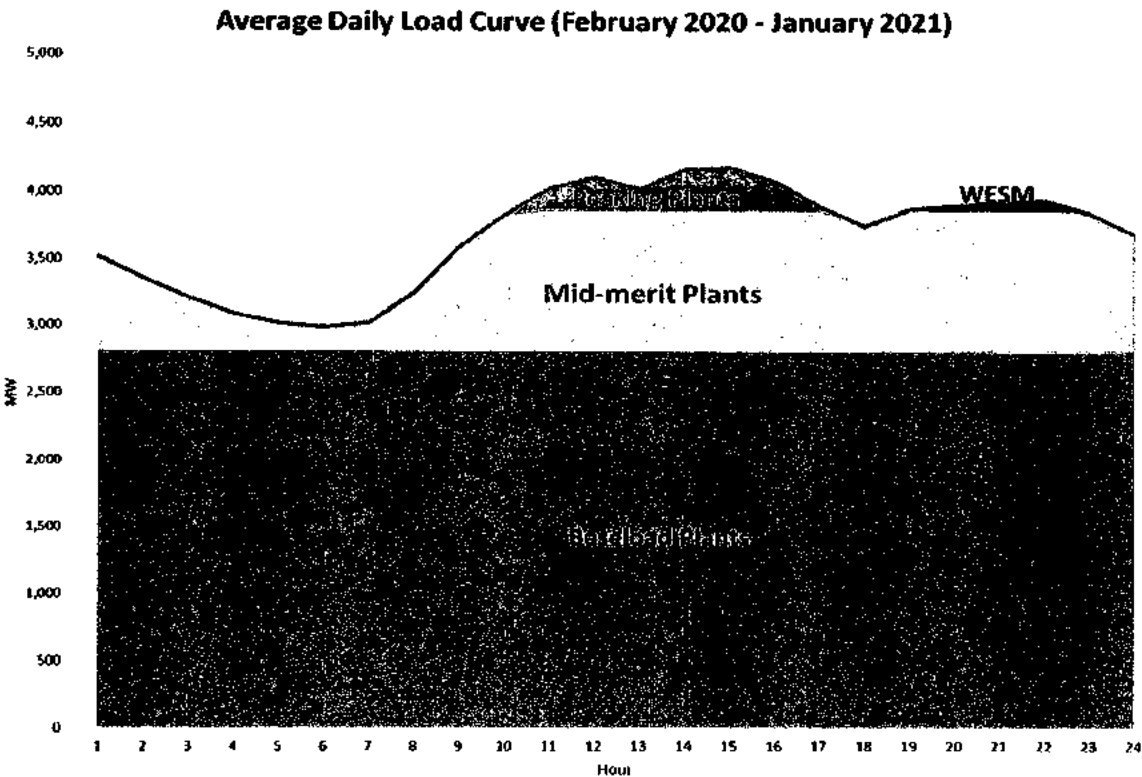
	ACTUAL		FORECAST								
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Peak Demand (MW)	7,740.31	7,613.94	7,800.75	8,118.00	8,420.00	8,742.00	9,109.00	9,476.00	9,864.00	10,244.00	10,708.00
Captive Peak Demand (MW)	5,656.14	5,345.03	5,571.03	5,801.18	6,020.27	6,253.67	6,520.11	6,786.35	7,067.83	7,343.50	7,680.12
Suppliers:											
Quezon Power Philippines Ltd	460.00	460.00	460.00	460.00	460.00	460.00	460.00				
First Gas Power Corporation (FGPC – Sta. Rita)	1,090.82	1,095.07	1,095.07	1,095.07	1,095.07	1,095.07	1,095.07				
FGP Corp. (FGP – San Lorenzo)	558.29	567.06	567.06	567.06	567.06	567.06	567.06	567.06	567.06		
Masinioc Power Partners Co. Ltd	260.00		260.00								
Therma Luzon Inc. - Pagbilao Plant	250.00	250.00									
San Miguel Energy Corp. – Sual Plant	330.00										
South Premiere Power Corp. - Ilijan Plant	1,065.00										
First NatGas Power Corporation (FNPC - San Gabriel)	419.98	428.00	428.00	428.00	428.00						
Pansy Energy Development Corporation	70.00	70.00									
San Buenaventura Power Ltd. Co.	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00	455.00
AC Energy Philippines, Inc. - SLTEC (Baseload 2019)		200.00	200.00	200.00	200.00	200.00	100.00	200.00	200.00	200.00	200.00
San Miguel Energy Corp. - Sual Plant (Baseload 2019)		330.00	330.00	330.00	330.00	330.00	165.00	330.00	330.00	330.00	330.00
South Premiere Power Corp. - Ilijan Plant (Baseload 2019)		670.00	670.00	670.00	670.00	670.00	335.00	670.00	670.00	670.00	670.00
AC Energy Philippines, Inc. - SLTEC (Mid-merit 2019)		110.00	110.00	110.00	110.00	110.00					
First Gen Hydro Power Corporation (Midmerit 2019)		100.00	100.00	100.00	100.00	100.00					
South Premiere Power Corp. - Ilijan Plant (Midmerit 2019)		290.00	290.00	290.00	290.00	290.00					
Therma Mobile Inc.	165.00	165.00									
Millennium Energy, Inc. (MEI)	73.00	73.00									
Philpodeco	1.50	1.61									
Solar Philippines Tarlac Corporation (Phase 1)	35.30	42.00	75.00	75.00	75.00	85.00	85.00	85.00	85.00	85.00	85.00
PowerSource First Bulacan Solar, Inc.			50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Solar Philippines Tanauan Corporation			50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Solar Philippines Tarlac Corporation (Phase 2)			50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Baseload 70 MW			70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00	70.00
Baseload 1800 MW							1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
Baseload 1000 MW							500.00	750.00	1,000.00	1,000.00	1,000.00
Mid-Merit 600 MW								600.00	600.00	600.00	600.00
RE Baseload 200 MW					200.00	200.00	200.00	200.00	200.00	200.00	200.00
RE Mid-Merit 250 MW							250.00	250.00	250.00	250.00	250.00
RE Mid-Merit 500 MW									500.00	500.00	500.00
Peaking CSP ^(a)				250.00	250.00	250.00	150.00	250.00	250.00	300.00	600.00
Total Supply (MW)	5,233.89	5,306.73	5,260.13	5,250.13	5,450.13	5,032.13	5,882.13	6,127.06	6,377.06	6,610.00	6,910.00
(Deficit) / Surplus (MW)	(422.25)	(38.30)	(310.91)	(551.06)	(570.15)	(1,221.74)	(637.99)	(659.29)	(690.77)	(733.50)	(770.12)

^(a) Peaking CSP will be contracted annually, with term of up to 5 months only (March - July)

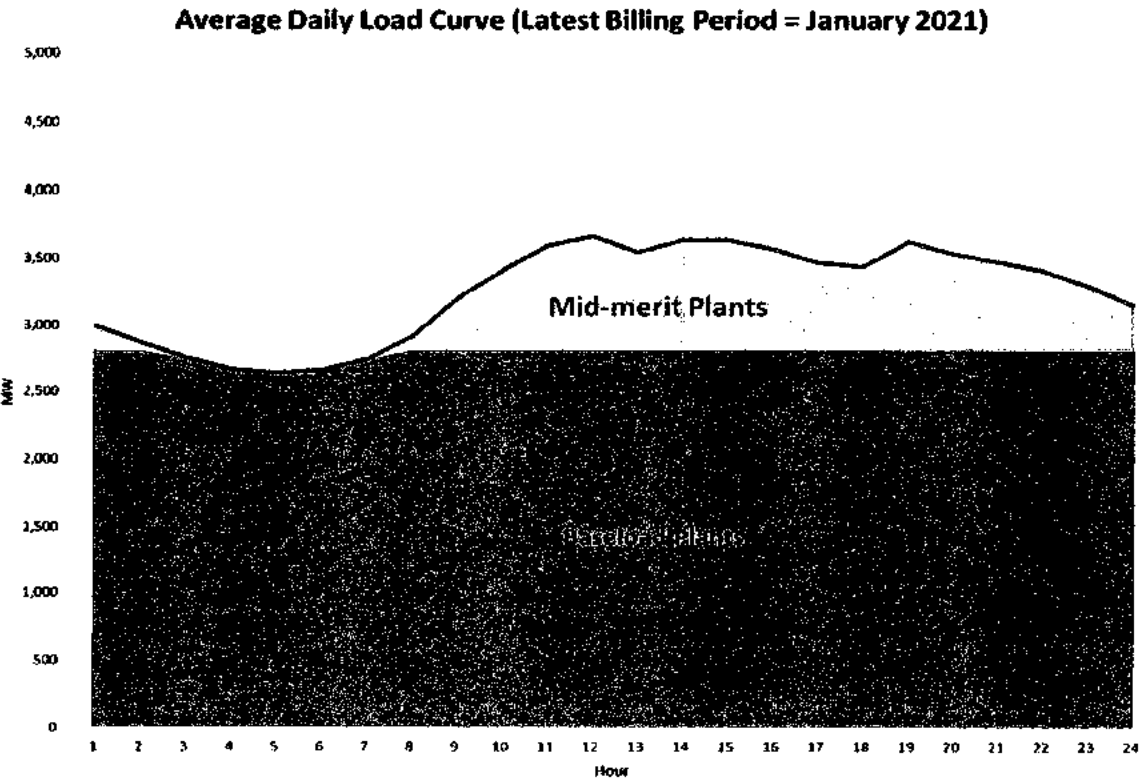
ANNEX J-1
Meralco Load Curves

ANNEX "J-1" 95

2. Average Daily Load Curve (Last 12 Months from the time of the Application)

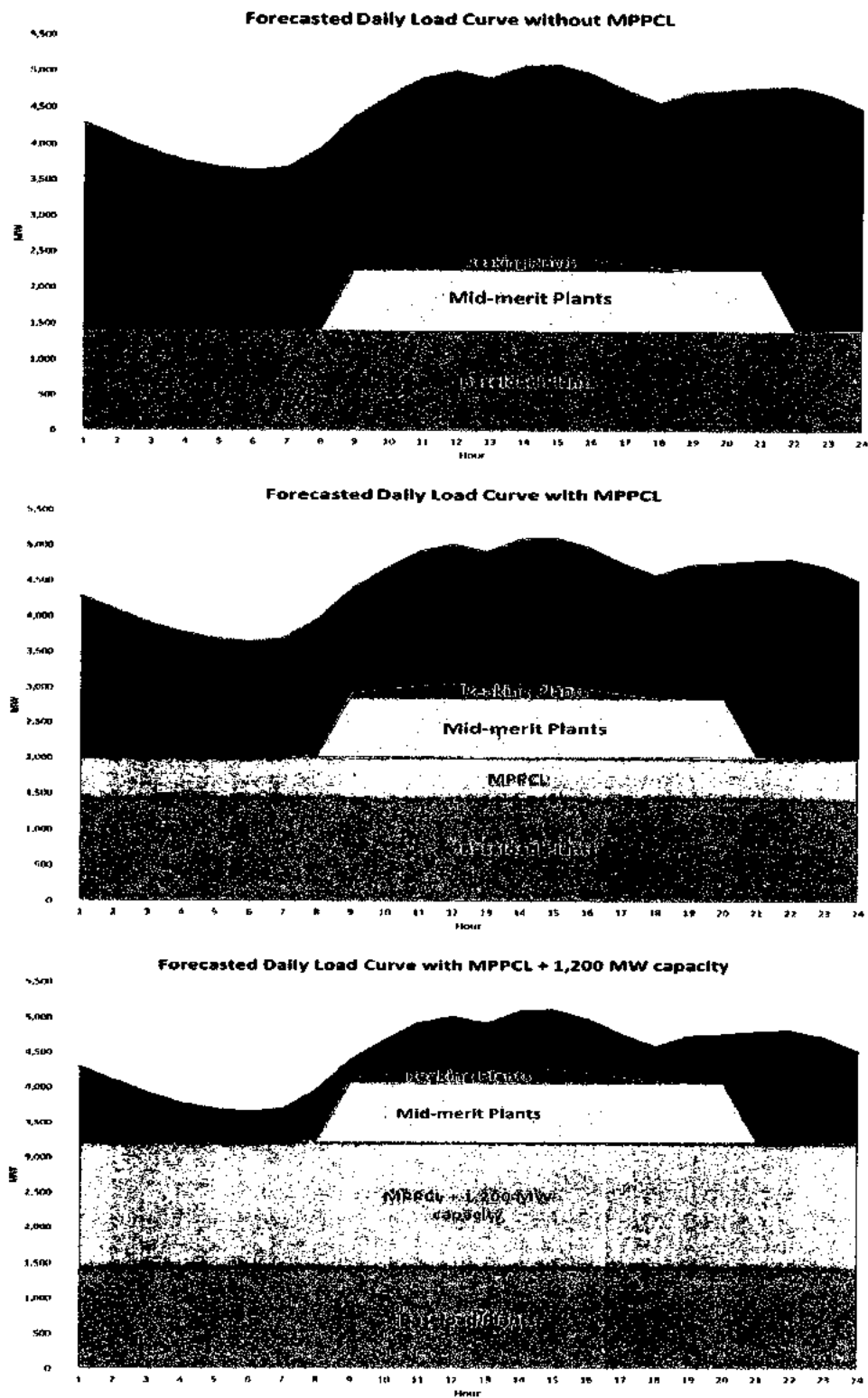


3. Average Daily Load Curve (Latest billing Period)



Meralco Load Curves

4. Forecasted Average Daily Load Curve



Prepared by: Janine Marie T. Abella

Reviewed by: Ryan S. Morales

**MERALCO'S
COMPETITIVE SELECTION
PROCESS**

ANNEX " K-2 "

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

AFFIDAVIT OF PUBLICATION

I, **EMMA V. DOROTE**, of legal age, single, Filipino and with office address at c/o **PhilSTAR Daily, Inc.**, 202 Railroad Street corner Roberto S. Oca Street, Port Area, Manila, after being duly sworn to in accordance with law, depose and state:

That I am the **BILLING & COLLECTION MANAGER** of the **PhilSTAR Daily, Inc.** a domestic corporation duly organized and existing under by virtue of Philippine laws with office and business address at 202 Railroad Street corner Roberto S. Oca Street, Port Area, Manila.

That the said corporation publishes **THE PHILIPPINE STAR**, a daily broadsheet newspaper published in English and of general circulation.

That the order of _____
MANILA ELECTRIC COMPANY (MERALCO)

captioned as follows: _____
INVITATION TO BID

Please see attached printed text which had been published in **The Philippine STAR** in its issues of: _____

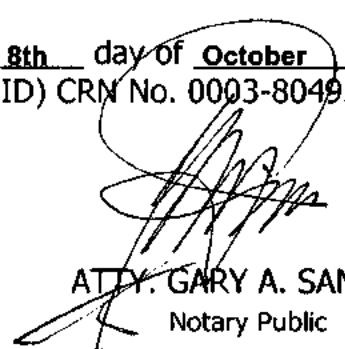
October 1 & 8, 2020

FURTHER AFFIANT SAYETH NAUGHT.
QUEZON City, Philippines


EMMA V. DOROTE
Affiant

SUBSCRIBED AND SWORN to before me this 8th day of October 2020 affiant exhibited to me her Unified Multi-Purpose ID (UMID) CRN No. 0003-8049504-7.

Doc. No. 311
Page No. 69
Book No. 8
Series of 2020


ATTY. GARY A. SANCIO
Notary Public

Until December 31, 2020

Adm. Matter No. NP-020 (2019-2020)

Roll No. 44261

IBP No. 1082447/06-30-17/Q.C. (LIFETIME)

PTR No.9264688/01-08-2020/QC



ORTIGAS AVENUE, PASIG CITY
0300 PHILIPPINES
Republic of the Philippines }
Pasig City } S.S.

ANNEX " K-3 "

AFFIDAVIT OF POSTING

I, **EDELIZA T. LIM**, Filipino, of legal age, with office address at Marketing, 11th Floor, Lopez Building, Ortigas Avenue, Barangay Ugong, Pasig City, Metro Manila, after having been sworn to in accordance with law, hereby depose and state: THAT -

1. I am the Senior Assistant Vice-President and Head of Marketing of the Manila Electric Company (MERALCO).
2. I have caused the posting of an Invitation to Bid, including the terms of reference of the proposal of 1,800 MW, at the MERALCO's website at <https://company.meralco.com.ph/news-and-advisories/invitation-to-bid> on 1 October 2020, a print out copy of which is hereto attached and marked as **Annex "A"**.
3. I am executing this Affidavit to attest to the truth of the foregoing.

IN WITNESS WHEREOF, I have hereunto affixed my signature this ~~MAR 01 2021~~ at Pasig City, Philippines.


EDELIZA T. LIM
Affiant

SUBSCRIBED AND SWORN TO before me this MAR 01 2021 at Pasig City, affiant exhibiting to me her Social Security System ID bearing the number 3328990983.

Doc. No. 375;
Page No. 76;
Book No. N;
Series of 2021



Annex "A"



Home » News & Advisories » CSP EOI Deadline Extension

Invitation to Bid

Contract Capacity of 1,800 MW (net), COD 2024-2025
(as of October 1, 2020)



CSP EOI Deadline Extension



INVITATION TO BID
CONTRACT CAPACITY OF 1,800 MW (NET), COD 2024-2025

(BIDDING) RULES
Bidding has been extended to accommodate parties affected by Typhoon Marlet. For more information, please check the Supplemental Notice 1 tab below.

PLEASE VISIT THE BIDDING WEBSITE AT: [BIDDING WEBSITE](#)

- 1. Invitation to Bid
- 2. Bidding Documents
- 3. Bidding Documents Clarification
- 4. Bidding and Opening
- 5. Bidding and Award
- 6. Supplemental Notice 1 (as amended)

Bids and Notices

Details

Demand
(MW)
Energy
Contract
Period

DU

Contract
Period

DU CSP Stage

Date
Posted

Supplemental Bid Bulletin

1. 1800 MW Bids 1 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%201%20FINAL.pdf>; 2. 1800 MW Bids 2 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%202%20FINAL.pdf>; 3. 1800 MW Bids 3 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%203%20FINAL.pdf>; 4. 1800 MW Bids 4 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%204%20FINAL.pdf>; 5. 1800 MW Bids 5 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%205%20FINAL.pdf>; 6. 1800 MW Bids 6 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%206%20FINAL.pdf>; 7. 1800 MW Bids 7 FINAL.pdf <https://www.doe.gov/bids/default.aspx?cid=1800%20MW%20Bids%207%20FINAL.pdf>

Opening of Bid Prices

1800
MW

20 years

Opening of Bid
Prices

February
8, 2021

Submission and Opening of Bids

1800
MW

20 years

Submission
and Opening of
Bids

January
20, 2021

Pre-Bid Conference

1800
MW

20 years

Pre-Bid
Conference

December
14, 2020

Notice of Discontinuation of Bidding

Notice of
Discontinuation
of Bidding

April 13,
2020

Invitation to Bid

1200
MW

20 Years
from
September
2024

Invitation to Bid

July 18,
2019

Invitation To Bid

500 MW

5 Years

Invitation to Bid

July 17,
2019

Invitation to Bid

1200
MW

10 Years

Invitation to Bid

July 17,
2019

PSPP

Details

Date Posted

2020- 2029_MERALCO_PSPP	https://www.doe.gov/bids/default.aspx?cid=2020%202029%20MERALCO%20PSPP.pdf	September 22, 2020
2019- 2028_MERALCO_PSPP	https://www.doe.gov/bids/default.aspx?cid=2019%202028%20MERALCO%20PSPP.pdf	July 12, 2019



BIDDING
CONTRACT CAPACITY OF 1,800 MW (NET), COD 2024-2025

BID BULLETIN NO. 4

To all Interested Bidders:

1. The Third Party Bids and Awards Committee (TPBAC) and MERALCO received a letter from the Department of Energy (DOE) dated 23 December 2020 which enjoins MERALCO to amend the “Tariff Structure” provision of the Terms of Reference (TOR) of the on-going competitive selection process (CSP) for 1,800 MW (net) COD 2024-2025, particularly to change the reference year on the fuel price forecasts to 2021 instead of the average of 2022 to 2023.

To reflect this change, a matrix showing the amendments to the: (i) TOR/Invitation to Bid (published on 1 and 8 October 2020); (ii) Bid Requirements (posted on 1 October 2020); and (iii) Instructions to Prospective Bidders (dated 1 October 2020) (IPB) are set out in **ANNEX A**.

2. The same matrix (Annex A) also shows additional clarificatory amendments to the: (i) Bid Requirements (posted on 1 October 2020) and (ii) IPB, in response to the previous queries of Interested Bidders.

For your guidance and information.

Issued on 5 January 2021.

Third Party Bids and Awards Committee (TPBAC)
Manila Electric Company

(sgd)
Atty. Ferdinand A. Domingo
Chairman

AMENDMENTS TO THE INVITATION TO BID / TERMS OF REFERENCE (TOR) (published 1 and 8 October 2020)

Item	Reference / Subject Matter of Amendment	Amendments
1	Tariff Structure p.2 to 3	<div>[...]</div> <div><ul style="list-style-type: none">The Bidder shall provide a quarterly fuel price forecast for the third first quarter of 2021 2022 until second fourth quarter of 2021 2023, in USD/MMBtu. The simple average of this quarterly fuel price forecast shall be used as the reference price (F_0).For Contract Years 1 to 10 implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor and shall serve as the Quarterly Fuel Price Cap. The adjustment factor for a given calendar quarter shall be equal to the ratio of P_n to P_0, as defined below. Expressed in formula,<div>$Quarterly\ Fuel\ Price\ Cap_{Contract\ Years\ 1\ to\ 10} = F_0 \times \left(\frac{P_n}{P_0}\right)$</div></div> <div>Where:</div> <div><p>F_0 is the simple average of the quarterly fuel price forecast for the four quarters beginning third first quarter of 2021 2022 as submitted by the Bidder, in USD/MMBtu</p><p>P_0 is the simple average of the actual quarterly fuel price for the four quarters beginning third first quarter of 2021 2022, in USD/MMBtu</p><p>P_n is the simple average of the actual quarterly fuel prices from the preceding four calendar quarters, in USD/MMBtu.</p><p>For clarity, the calendar quarters are defined by the following dates:</p></div> <div>[...]</div>

AMENDMENTS TO THE BID REQUIREMENTS (posted on 1 October 2020)

Item	Reference / Subject Matter of Amendment	Amendments
1	Bid Price and Bid Security, item (a) 2. pp. 10-11	<p>[...]</p> <p>2. The Bidder shall provide a quarterly fuel price forecast for the third <u>first</u> quarter of <u>2021</u> 2022 until second <u>fourth</u> quarter of <u>2021</u> 2023, in USD/MMBtu. The simple average of this quarterly fuel price forecast shall be used as the reference price (F_0).</p> <p>For Contract Years 1 to 10 implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor and shall serve as the Quarterly Fuel Price Cap. The adjustment factor for a given calendar quarter shall be equal to the ratio of P_n to P_0, as defined below. Expressed in formula,</p> $Quarterly\ Fuel\ Price\ Cap_{Contract\ Years\ 1\ to\ 10} = F_0 \times \left(\frac{P_n}{P_0} \right)$ <p>Where:</p> <p>F_0 is the simple average of the quarterly fuel price forecast for the four quarters beginning third <u>first</u> quarter of <u>2021</u> 2022 as submitted by the Bidder, in USD/MMBtu</p> <p>P_0 is the simple average of the actual quarterly fuel price for the four quarters beginning third <u>first</u> quarter of <u>2021</u> 2022, in USD/MMBtu</p> <p>P_n is the simple average of the actual quarterly fuel prices from the preceding four calendar quarters, in USD/MMBtu.</p> <p>For clarity, the calendar quarters are defined by the following dates:</p> <p>[...]</p>
2	Legal Qualification Requirements • Unsatisfactory Performance pp. 3-5	<p>1. Legal Qualification Requirements</p> <p>[...]</p> <p>(c) The Bidder and any of its Affiliates engaged in power generation must have no record of Unsatisfactory Performance. For this purpose, “Unsatisfactory Performance” means any of the following:</p> <p>(a) In relation to any project or contract power supply or off take agreements with Meralco and/or its Affiliates engaged in power generation, distribution, and supply (the list of Meralco’s Affiliates are provided in the IPB) that was commenced or in the process of implementation within the last five (5) years prior to</p>

Item	Reference / Subject Matter of Amendment	Amendments
		<p>the Bid Submission Deadline (as defined below) by the Bidder –</p> <p>(i) a record of failure by the Bidder or any of its Affiliates engaged in power generation to satisfactorily perform any of its material obligations for any such <u>power supply or off take agreements</u> project or contract, (such as, but not limited to, Power Supply Agreements, financing documents, etc.) within the last five (5) years. It also includes a record of failure to timely pay or comply with its material obligations in any of its finance documents with creditors entered into in connection with the development and implementation of the said <u>power supply or off take agreements</u>.</p> <p>The Bidder shall submit notarized certifications issued by Meralco and/or its Affiliates engaged power generation, distribution, and supply attesting that within the last five (5) years the Bidder or any of its Affiliates engaged in power generation has no previous record of failure to perform any of its material obligations for such <u>power supply or off take agreements</u> project or contract. For this purpose only (i.e. submission of notarized certifications), the financial lender/s of the Bidder or any of its Affiliates engaged in power generation of any such <u>power supply or off take agreements</u> project or contract need not issue the said certification but their identities must be declared or disclosed;</p> <p>(ii) the expulsion of the Bidder or any of its Affiliates engaged in power generation from any such <u>power supply or off take agreements</u> project or contract;</p> <p>(iii) the termination or suspension of any such <u>power supply or off take agreements</u> project or contract due to the willful breach of its obligations by the Bidder or any of its Affiliates engaged in power generation;</p> <p>(iv) the material violation of laws and/or regulations by the Bidder or any of its Affiliates engaged in power generation applicable to any such <u>power supply or off take agreements</u> project or contract, including but not limited to environmental, health, safety, labor and social welfare laws and regulations, as evidenced by findings of the relevant competent authority; or</p> <p>(b) Inclusion in a blacklist issued by any governmental agency of the Philippines or in the Debarred and Cross-Debarred Firms & Individuals list posted in the World Bank website (www.worldbank.org/debar), whether</p>

Item	Reference / Subject Matter of Amendment	Amendments
		as an individual contractor, partnership or corporation or as a member of a joint venture or consortium;
		[...]

AMENDMENTS TO THE INSTRUCTIONS TO PROSPECTIVE BIDDERS (dated 1 October 2020)

Item	Reference / Subject Matter of Amendment	Amendments
1	Section 3.3 (d) (2) pp. 26-27	<p>[...]</p> <p>2. The Bidder shall provide a quarterly fuel price forecast for the third first quarter of 2021 2022 until second fourth quarter of 2021 2023, in USD/MMBtu. The simple average of this quarterly fuel price forecast shall be used as the reference price (F_0).</p> <p>For Contract Years 1 to 10 implementation, the reference price (F_0) shall be adjusted on a quarterly basis using an adjustment factor and shall serve as the Quarterly Fuel Price Cap. The adjustment factor for a given calendar quarter shall be equal to the ratio of P_n to P_0, as defined below. Expressed in formula,</p> $\text{Quarterly Fuel Price Cap}_{\text{Contract Years 1 to 10}} = F_0 \times \left(\frac{P_n}{P_0}\right)$ <p>Where:</p> <p>F_0 is the simple average of the quarterly fuel price forecast for the four quarters beginning third first quarter of 2021 2022 as submitted by the Bidder, in USD/MMBtu</p> <p>P_0 is the simple average of the actual quarterly fuel price for the four quarters beginning third first quarter of 2021 2022, in USD/MMBtu</p> <p>P_n is the simple average of the actual quarterly fuel prices from the preceding four calendar quarters, in USD/MMBtu. For clarity, the calendar quarters are defined by the following dates:</p> <p>[...]</p>
2	Section 9.71	<p>9.71 “Unsatisfactory Performance” means any of the following:</p> <p>(a) In relation to any power supply or off take agreements project or contract with Meralco and/or its Affiliates engaged in power generation, distribution, and supply (the list of Meralco’s Affiliates are provided in Schedule 2) that was commenced or in the process of implementation within the last five (5) years prior to the Bid Submission Deadline (as defined below) by the Bidder –</p>

Item	Reference / Subject Matter of Amendment	Amendments
		<p>(i) a record of failure by the Bidder or any of its Affiliates engaged in power generation to satisfactorily perform any of its material obligations for any such power supply or off take agreements project or contract, (such as, but not limited to, Power Supply Agreements, financing documents, etc.) within the last five (5) years. It also includes a record of failure to timely pay or comply with its material obligations in any of its finance documents with creditors entered into in connection with the development and implementation of the said power supply or off take agreements project or contract.</p> <p>The Bidder shall submit notarized certifications issued by Meralco and/or its Affiliates engaged power generation, distribution, and supply attesting that within the last five (5) years the Bidder or any of its Affiliates engaged in power generation has no previous record of failure to perform any of its material obligations for such power supply or off take agreements project or contract. For this purpose only (i.e. submission of notarized certifications), the financial lender/s of the Bidder or any of its Affiliates engaged in power generation of any such power supply or off take agreements project or contract need not issue the said certification but their identities must be declared or disclosed;</p> <p>(ii) the expulsion of the Bidder or any of its Affiliates engaged in power generation from any such power supply or off take agreements project or contract;</p> <p>(iii) the termination or suspension of any such power supply or off take agreements project or contract due to the willful breach of its obligations by the Bidder or any of its Affiliates engaged in power generation;</p> <p>(iv) the material violation of laws and/or regulations by the Bidder or any of its Affiliates engaged in power generation applicable to any such power supply or off take agreements project or contract, including but not limited to environmental, health, safety, labor and social welfare laws and regulations, as evidenced by findings of the relevant competent authority; or</p> <p>[...]</p>

Item	Reference / Subject Matter of Amendment	Amendments
3	Section 2.7 Language and Foreign Documents	<p>2.7. LANGUAGE AND FOREIGN DOCUMENTS</p> <p>(a) The Document Submissions and all correspondence and documents relating to the Bidding Documents and the Bidding, shall be prepared and written in the English language.</p> <p>(b) All documents issued or executed in a foreign country must be authenticated before a Philippine consular official at the relevant Philippine consulate or apostilled pursuant to the Apostille Convention to which the Republic of the Philippines is a party, as applicable.</p> <p>(c) If the document was issued by a foreign authority, the Bidder may submit the original or a certified true copy of such document issued by such foreign authority, in each case authenticated by the Philippine consular official or apostilled, referred to in Section 2.7(b).</p> <p>(d) If the document is written in a foreign language, the Bidder should also submit an accurate English translation of such document, accompanied by a notarized certification by the Bidder or the translator of the document that such translation is accurate, which certification, if executed abroad, shall be authenticated by the Philippine consular official or apostilled, as referred to in Section 2.7(b). In case of conflict, the English translation shall prevail.</p> <p><u>(e) In consideration of the coronavirus disease (COVID-19) pandemic, all documents required in this Section to be authenticated by the Philippine consular official or apostilled may be submitted by the Bidder during the Bid Submission Deadline unauthenticated or non-apostilled, provided the document is an original copy and provided further that the authenticated or apostilled copy must be submitted no later than Post-Qualification (i.e. within seven (7) days from the Notification of Best Bid) if the said Bidder is the recipient of a Notification of Best Bid. Failure to submit the said authenticated or apostilled copy during Post-Qualification shall be sufficient cause to "fail" in the Post-Qualification; to have the Bidder's Bid Security forfeited in favor of Meralco; and to allow the TPBAC to proceed to the Next Best Bid.</u></p>
4	Section 3.3.2	3.3.2 FORFEITURE OF BID SECURITY

Item	Reference / Subject Matter of Amendment	Amendments
		<p>The Bid Security shall be subject to forfeiture in its entirety in favor of Merakco upon the occurrence of any of the following events: [...]</p> <p><u>(k) a Bidder with the Best Bid failed to submit the authenticated or apostilled documents required in Section 2.7 (e.) during Post-Qualification.</u></p>



BIDDING
CONTRACT CAPACITY OF 1,800 MW (NET), COD 2024-2025

NOTICE OF AWARD

MASINLOC POWER PARTNERS CO. LTD.
19F San Miguel Properties Center
No. 7 St. Francis St.
Mandaluyong City

We write in relation to the Competitive Selection Process for Contract Capacity of for 1,800 MW (net), COD 2024-2025, published last 1 and 8 October 2020, and the Notification of Best Bid issued in your favor last 19 February 2021.

After the Third Party Bids and Awards Committee (TPBAC) conducted the Post-Qualification (pursuant to Section 5 of the Instructions to Prospective Bidders), we are pleased to inform you that your bid of **600 MW Contract Capacity** for this bidding process at the **Headline Rate (VAT Inclusive) of 3.6846 PhP/kWh and Computed LCOE Rate (VAT Inclusive) of 4.2605 PhP/kWh**, has satisfactorily passed Post-Qualification evaluation, thus, the TPBAC hereby issues a Notice of Award to **MASINLOC POWER PARTNERS CO. LTD.**

The Manila Electric Company (Meralco) Power Supply Agreement (PSA) team shall coordinate with you for the signing and execution of the PSA in counterparts, taking into consideration the health and safety guidelines of the government.

After the signing of the PSA, the TPBAC enjoins you to fully cooperate with the Meralco PSA team with respect to the preparation of pre-filing/filing documents for the Joint Application for Approval of the PSA with the Energy Regulatory Commission (ERC) (the "Joint Application").

In this connection, please coordinate with the Meralco PSA team and furnish all documents that the ERC may require in connection with the Joint Application and any other review or examination conducted by the ERC with respect to the PSA.

Thank you for participating in this bidding and we look forward to the implementation of the PSA for the benefit of Meralco's customers.

Issued on 26 February 2021 at Pasig City.

Very truly yours,

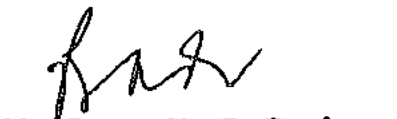
**Third Party Bids and Awards Committee
Manila Electric Company**


Atty. Ferdinand A. Domingo
Chairman


Engr. Froilan J. Savet
Vice-Chairman


Atty. Adrian S. Cristobal, Jr.
Member


Ms. Maria Luisa V. Alvendia
Member


Ms. Bennette D. Bachoco
Member

Witnesses

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
 Masinloc Power Facility
 Masinloc Coal-Fired Thermal Power Plant
 Barangay Banl, Masinloc
 Zambales, 2211 Philippines

tel 047 307 4000

fax 047 307 4003

24 February 2021

Energy Regulatory Commission
 Pacific Center Building, San Miguel Avenue,
 Ortigas Center, 1600, Pasig City,
 Metro Manila, Philippines

Subject: Pre-Filing Requirements to the Application for Approval of the Power Supply Agreement between Masinloc Power Partners Co. Ltd. and Manila Electric Company

Gentlemen:

On behalf of Masinloc Power Partners Co. Ltd. ("MPPCL"), one of the joint applicants in the Application for Approval of the Power Supply Agreement between MPPCL and Manila Electric Company ("Meralco"), we hereby state that the following pre-filing requirements are not applicable to MPPCL as explained below:

i. Articles of Incorporation and By-Laws of the Generation Company (GenCo)

As a partnership, MPPCL has articles of partnership instead of articles of incorporation. A copy of its most recent Amended Articles of Partnership dated 24 June 2020 which was approved by the SEC on 01 December 2020 is provided. MPPCL being a partnership also has no by-laws.

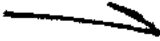
ii. List of Shareholders (Latest GIS of GenCo- SEC Form)

As a partnership, MPPCL is not required by the SEC to file General Information Sheet ("GIS"). A GIS is only required by the SEC from SEC-registered corporations. In lieu of this requirement, the list of the existing partners (not shareholders) of MPPCL are provided below and is reflected in its most recent Amended Articles of Partnership dated 24 June 2020 which was approved by the SEC on 01 December 2020:

Partner	Partnership Interest
General Partner: SMCGP Masinloc Power Company Limited	78.53%
Limited Partner: Power Ventures Generation Corporation	0.04%
Limited Partner: SMC Global Power Holdings Corp.	21.43%

For and on behalf of Masinloc Power Partners Co. Ltd.

By:


 Paul Bernard D. Causon
 Authorized Representative



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

ANNEX "L-1"

COMPANY REG. NO. PL200709834
COMPANY TIN 006-786-124

TO ALL TO WHOM THESE PRESENTS MAY COME, GREETINGS:

WHEREAS, the Articles of Partnership of

MASINLOC POWER PARTNERS CO. LTD.

executed under and in accordance with the Civil Code of the Philippines (R.A. 386), approved on June 18, 1949, and the Foreign Investments Act of 1991 (Republic Act No. 7042, as amended) approved on June 13, 1991, were presented for filing at 4:28 o'clock in the afternoon of the 21st day of June, 2007, according to Entry No. 50602 of Volume X, of the Day Book and duly recorded in Folio 30 Leaf No. 98602 Inscription No. (1), Volume 1780 of the Book of Partnership of the Securities and Exchange Commission, and a copy of said Articles is hereto attached;

NOW, THEREFORE, by virtue of the powers and duties vested in me by law, I do hereby certify that the said Articles of Partnership, after due examination to determine whether the same are in accordance with law, duly registered and recorded in this Commission.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of this Commission to be affixed at Mandaluyong City, Metro Manila, Philippines, this 25th day of June, Two Thousand Seven.

p/m_lsecexpress

BENITO A. CATARAN
Director

Company Registration and Monitoring Department

For SEC use only:
E&M (P&C AS reserved)

CERTIFIED TRUE COPY

Page 1 of 2

1

2007



Republic of the Philippines
DEPARTMENT OF FINANCE
SECURITIES & EXCHANGE COMMISSION
SEC Building, EDSA, Greenhills
City of Mandalayong, 1554



PAYMENT ASSESSMENT FORM

No. 06212007-348952

[illegible]

COVER SHEET

M. Turado

6-8-07

0-1-07
S.E.C. Registration Number

MASINLOC POWER PARTNERS
CO. LTD.

(Company's Full Name)

105 PASEO DE ROXAS
MAKATI CITY

(Business Address: No. Street City / Town / Province)

KRISTINE N. P. LACON- EVANGELISTA

Contact Person

8179811

Company Telephone Number

Month Day
Fiscal Year

FORM TYPE

Month Day
Annual Meeting

Secondary License Type, if Applicable

Dept. Requiring this Doc.

Amended Articles Number/Section

Total No. of Stockholders

Securities Exchange Commission
Total Amount of Borrowings
Domestic Foreign

File Number

20070622-36
Document I.D.

LCU
of legal personality
Cashier

DOE, upon request
6-08-07

08:30:47 AM 01/05/2021

STAMPS

Remarks = pls. use black ink for scanning purposes

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Page 3 of 3
JAN 06 2021

S.E.C. FORM No. F-105
For New Partnership with
Foreign Equity

**APPLICATION TO DO BUSINESS UNDER THE
FOREIGN INVESTMENTS ACT OF 1991**

MASINLOC POWER PARTNERS CO. LTD.
(Name of Partnership)

hereby applies for authority to do business under the Foreign Investments Act of 1991 (RA 7042, as amended) and submits the following statements and accompanying documents:

1. That the applicant is a partnership in the process of registration with this Commission and intends to operate a

- (x) domestic market enterprise *
() export market enterprise *

2. That the purpose(s) of said partnership is

to invest in, acquire, finance, complete, construct, develop, improve, operate, maintain and hold power production and electrical generating facilities in the Philippines (the "Project"), and other property incidental thereto, for the production and sale of electricity, to sell or otherwise dispose of the Project and such other property.

(Please use additional sheet if necessary) and
**Securities
Exchange
Commission**
3. That the business address of the company is in 105
Paseo de Roxas, Manila City.
(Specific Address) PHILIPPINES

4. That the capital of the applicant is Nine Million One Hundred Twenty Four Thousand Pesos (P9,124,000.00).

5. That One Hundred percent (100%) of capital is contributed by non-Philippine nationals.

* domestic market enterprise - an enterprise which produces goods for sale, or renders services or otherwise engages in any business in the Philippines. This requires minimum contributed capital equivalent of US\$200,000.00

** export market enterprise - an enterprise wherein a manufacturer, processor or service including tourism enterprise exports sixty percent (60%) or more of its output, or wherein a trader purchases products domestically and exports sixty percent (60%) or more of such purchase. Minimum contributed capital required is P3,000.00

CERTIFIED TRUE COPY

Page 4 of 5
JAN 06 2021

6. That the alien partner(s) of the applicant who are stockholders/partners of an existing corporation/partnership in the Philippines which is engaged in the same line of business as that of the applicant are as follows: NOT APPLICABLE

NAME	NAME OF CORPORATION/ PARTNERSHIP	PERCENTAGE OF SHAREHOLDINGS	NO. OF DIRECTORS/ PARTNERS

(Please use additional sheet if necessary)

7. That the applicant undertakes to export at least 60% of its total output as indicated hereunder and commits to submit report of such export to the Board of Investments as required by the Implementing Rules of RA 7042 as amended: NOT APPLICABLE

YEAR	PRODUCTS	TOTAL PROJECTED SALES VOLUME/VALUE***	DOMESTIC SALES	EXPORT SALES	EXPORT %

*** Please use value in case of products of different kinds and characteristics as well as to those of the same kind but with various categories using different unit of measurement, volume in case of products of the same kind or category using a common unit of measurement.

8. That we hereby authorize the Securities and Exchange Commission and the Bangko Sentral ng Pilipinas to examine and verify the deposit in the Hongkong and Shanghai Banking Corporation Ltd.

in the name of Manila Electric Co., Inc. in the amount of US\$220,000.00 which is equivalent to Nine Million One Hundred Twenty Four Thousand Pesos (P9,124,000.00) at the current rate of exchange, representing the actual remittance of the applicant. This authority is valid and inspection of said deposit may be made even after the issuance of the license of the company.

9. That we manifest our willingness to change our partnership name in the event another person, firm or entity has acquired a prior right to the use thereof or such name is deceptively or confusingly similar to one which has prior right.

CERTIFIED TRUE COPY

5 - 13 JAN 06 2021

IN WITNESS WHEREOF, I, the authorized representative of the applicant, hereby signed this application this 7th day of June 2007 in Makati City.

By:


Yari Miralao

SUBSCRIBED AND SWORN TO before me, this 7th day of June 2007 affiant exhibiting to me his Passport No. 88038838 issued at Philippines on Jan. 7, 2006.


NOTARY PUBLIC
JAN OLIVE C. ABANO
Notary Public for Makati City
Appointment No. 588 until Dec. 31, 2007
Roll of Attorney No. 52083
PTR No. 0328881; 01/21/07; Makati City
BFP No. 883399; 01/09/07; Makati Chapter
BSHG Law Centre, 106 Paseo de Roxas
Makati City, 1226 Metro Manila
Philippines

Doc. No. 107;
Page No. 23;
Book No. III;
Series of 200 7.

NOTE:

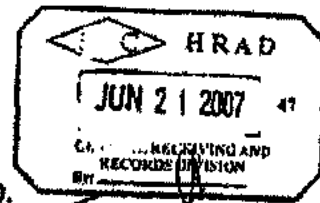
- Only applications with complete supporting documents including proper indorsements from appropriate government agencies shall be accepted.
- All documents executed abroad should be authenticated by the Philippine Embassy or Consulate in the country where executed.
- Submit six (6) copies.
- **List of Requirements:**
 - 1) Application Form
 - 2) Name Verification Slip
 - 3) Articles of Partnership
 - 4) Bank Certificate of Deposit
 - 5) Proof of Inward Remittance such as bank certificate of inward remittance
 - 6) Registration Data Sheet

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Proc. 4 at 07 Jan 06 2021

ARTICLES OF LIMITED PARTNERSHIP
OF
MASINLOC POWER PARTNERS CO. LTD.



These Articles of Partnership are made and entered into as of June 7, 2007 by and among:

Masin-AES Pte. Ltd., a corporation organized and existing under the laws of Singapore and licensed to do business in the Philippines, with principal office at 105 Paseo de Roxas, Makati City, represented herein by its President, Yari Miralao;

AES Great Britain Holdings B.V., a corporation organized and existing under the laws of Netherlands with principal office at 3016 BC Rotterdam, Parklaan 32, Amsterdam, Netherlands, represented herein by its President, Yogesh Tiwari.

1. **Formation**

The Partners hereby agree to form a limited partnership under the laws of the Philippines.

2. **Name**

The name of the Partnership shall be MASINLOC POWER PARTNERS CO. LTD.

3. **Business Purpose**

The business of the Partnership shall be to invest in, acquire, finance, complete, construct, develop, improve, operate, maintain and hold power production and electrical generating facilities in the Philippines (the "Project"), and other property incidental thereto, for the production and sale of electricity, to sell or otherwise dispose of the Project and such other property.

4. **Place of Business**

The principal place of business of the Partnership is in 105 Paseo de Roxas, Makati City. The Partnership may maintain such other offices and places of business as it may deem advisable.

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5. **General & Limited Partners**

Masin-AES Pte. Ltd. shall be a general partner (the "General Partner") and AES Great Britain Holdings B.V. shall be a limited partner.

6. **Term**

The Partnership shall dissolve, and its affairs shall be wound up, on the 50th anniversary of the date of execution of these Articles of Partnership, or at such earlier time as (a) all of the Partners approve in writing, (b) the Partnership sells or otherwise disposes of its interest in all or substantially all of the Project or (c) the bankruptcy or other withdrawal of the General Partner.

7. **Capital Contributions**

The Partners have contributed the following amounts in cash, and no other property, to the Partnership:

Partners	Contributions
<u>General Partner</u>	
Masin-AES Pte. Ltd.	US\$200,000.00
<u>Limited Partner</u>	
AES Great Britain Holdings B.V.	US\$100.00
TOTAL	US\$200,100.00

8. **Additional Contribution**

Any additional capital contribution to the Partnership shall require the approval of all the Partners.

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Exchange
Commission
PHILIPPINES

9. **Allocation of Profits and Losses**

Partnership profits and losses shall be allocated in proportion to the capital contributions of the Partners, provided, however, that a Limited Partner shall not be liable for losses beyond its capital contribution.

10. **Management**

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The Partnership shall be managed by the General Partner, Masin-AES Pte. Ltd., which is hereby appointed as managing partner to act on behalf of the Partnership in all matters affecting the management of the Project, including but without limitation, the power and authority to incur long term and short

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6 of 13 JAN 06 2021

term indebtedness, to sign notes, to pledge the assets of the Partnership and in general to sign any document required by the financing entities, to assign duties, to disburse funds for Partnership purposes, purchase general liability, casualty or other insurance, execute for and on behalf of the Partnership with respect to the Project all applications for permits and licenses necessary and advisable, perform all acts and duties related to the payment of all indebtedness and other obligations, due or to become due with regard to the Project, give and receive notices, reports and other communications arising from or in connection with the Project, and perform such other acts as may be properly designated by the Partners, provided, however, that the foregoing management powers of the General Partner shall in no way interfere with the rights of a Limited Partner to:

- (a) inspect and copy any and all Partnership books of account required under Philippine law;
- (b) have, upon reasonable and written demand, true and full information of all things concerning the Partnership insofar as such things relate to a Limited Partner's interest as a limited partner;
- (c) to have a full and formal account of Partnership affairs on a quarterly basis, within sixty (60) days after the end of each quarter of each financial year of the Partnership; and
- (d) to have the Partnership dissolved and wound up by decree of court.

11. **Units**

Each Partner shall have the amount of units set forth in Exhibit A attached hereto, which expresses the entire ownership interest of the Partners at any particular time.

12. **Certificate**

The ownership interest in the Partnership shall be evidenced by certificates containing, among other things, the amount of units of each Partner. Subject to the consent of the General Partner required by Article 13 herein, a Partner may convey, sell, assign or otherwise transfer (each such transaction being a "conveyance"), in whole or in part, its interest in the Partnership. A conveyance by a General Partner or a Limited Partner of its interest shall entitle the assignee, during the continuance of the Partnership, to the rights of the General Partner or a Limited Partner, as the case may be, under these Articles.

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**Securities and
Exchange
Commission**

PHILIPPINES

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13. **Conveyance**

No Partner may convey all or any part of its interest in the Partnership without the consent of the General Partner. No Partner shall have any right to grant an assignee or transferee of its interest in the Partnership the right to become a substituted partner, except with the consent of the General Partner which consent may be withheld in its sole discretion. In the event the General Partner undertakes a conveyance of all or part of its general partnership interest in the Partnership, the Limited Partner shall have the right to require the General Partner to convey its interest in the Partnership together with the General Partner's interest in the Partnership at a price for each partnership unit no less favorable than the market value of such interest.

14. **Additional Partners**

The Partners may admit additional partners to the Partnership but only if the majority in interest of the Partners have provided advance written consent to such admission.

15. **Non-Dissolution**

(1) The admission of additional partners into the Partnership subject to Article 14 shall not result in or cause the dissolution of the Partnership.

(2) The Partnership will terminate upon the bankruptcy of the General Partner unless a majority in interest of the remaining Partners agree to continue the Partnership at that time.

16. **Applicable Law**

This Agreement shall be construed and enforced in accordance with the laws of the Philippines.

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Commission
PHILIPPINES

17. **Counterparts**

This Agreement may be executed in several counterparts, all of which together shall constitute one agreement binding upon all parties hereto, notwithstanding that all of the parties have not signed the same counterpart.

18. **Amendment**
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This Agreement may be amended only with the consent of all Partners.

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(1) - 10/10/2021

19. **Fiscal Year**

The fiscal year of the Partnership shall commence on the first day of January each year and shall close on the last day of December in the same year.

20. **Entire Agreement**

This Agreement constitutes the entire understanding, between the parties with respect to the subject matter hereof, superseding all negotiations, prior discussions and previous agreements or understanding, written or oral.

21. **Partnership Name**

That the Partnership manifests its willingness to change its partnership name in the event another person, firm or entity has acquired a prior right to use the said firm name or one deceptively or confusingly similar to it.

IN WITNESS WHEREOF, the undersigned have executed this Articles of Partnership as of the date first written above.

MASIN-AES PTE. LTD.

AES GREAT BRITAIN HOLDINGS B.V.

By:

Yogesh Tiwari

Yogesh Tiwari
President

By:

Yari Miralao

Yari Miralao
President



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Exchange
Commission
PHILIPPINES

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2021

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

Before me, a notary public in and for the city named above, personally appeared:

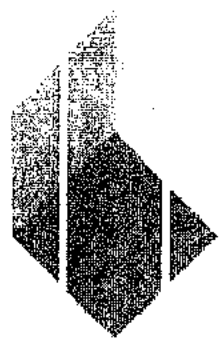
Name	Passport/CTC No	Date/Place Issued
Yari Miralao	RR 038 933	Philis. / Jan. 7, 2007
Yogesh Tiwari	E1003278	Australia / March 8, 2007

who are personally known to me and to me known to be the same persons who presented the foregoing instrument and signed the same in my presence and who took an oath before me as to such instrument.

Witness my hand and seal this 7th day of June 2007.

Doc. No. 104;
Page No. 22;
Book No. II;
Series of 2007.

[Signature]
JAN CARLOS C. ARANO
Notary Public for Makati City
Appointment No. SEC until Dec. 31, 2007
Roll of Attorney No. 52063
PTR No. 0328894; 04/21/07; Makati City
IBP No. 893388; 01/09/07; Makati Chapter
BOTHG Law Centre, 105 Paseo de Roxas
Makati City, 1226 Metro Manila
Philippines



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Commission
PHILIPPINES

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Page 12 / 1 JAN 06 2021

EXHIBIT A

The Partnership interests of the partners are as follows:

<u>Partners</u>	<u>Percentage</u>	<u>No. of Units</u>
General Partner Masin-AES Pte. Ltd.	99.95%	99.95
Limited Partner AES Great Britain Holdings B.V.	0.05	0.05
Total	100%	100



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Page 12 of 13 pages
JAN 06 2021

"ENVELOPE 1-QD-ORIGINAL"

Republic of the Philippines
SECURITIES and EXCHANGE COMMISSION

1

I hereby certify that (a) this is a true copy of the document stored in the SEC I-View facility to which proper security measures were employed to ensure data integrity, consisting of THIRTEEN (13) page(s); and (b) at all material times, the SEC I-View Facility was operating in a manner that did not affect the integrity of the electronic document.

Masinloc Power Partners Co., Ltd.

Verified by: DORY ABAD

O.R.No.: 1451067

Fees Php ML

Dated

paid under

JAN 06 2021



**Documentary
Stamp Tax
PAID**


ROMEO B. CAMANO
SEC Administrative Officer IV
Electronic Records Management Division
Information and Communication Technology Department



REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
Ground Floor, Secretariat Building, PICC
City of Pasay, Metro Manila

ANNEX ⁶⁶ L-2 ⁹⁹

COMPANY REG. NO. PL200709834

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the annexed

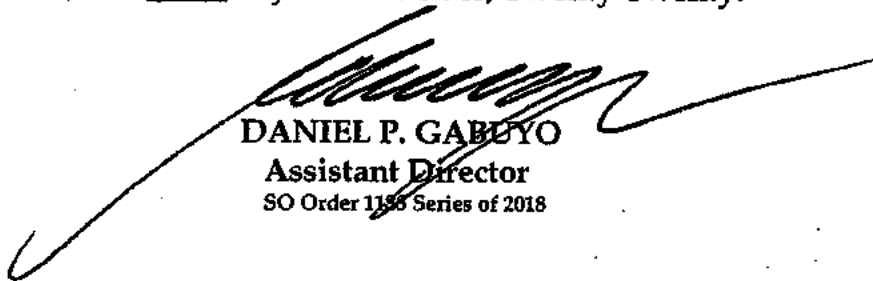
Amended Articles of Partnership of:

MASINLOC POWER PARTNERS CO. LTD.

executed under and in accordance with the Civil Code of the Philippines (RA 386), approved on June 18, 1949 and the Foreign Investments Act of 1991 (Republic Act No. 7042, as amended) approved on June 13, 1991 were presented for filing at 2:06 o'clock in the afternoon of the 4th day of November, 2020 according to Entry No. 204541 of Volume XXI, of the Day Book and duly recorded in Folio 80 Leaf No. 90602 Inscription No. (10) Volume No. 1788 of the Book of Partnership of the Securities and Exchange Commission and a copy of said Amended Articles is hereto attached;

NOW, THEREFORE, by virtue of the powers and duties vested in me by law, I do hereby certify that the said Amended Articles of Partnership, after due examination to determine whether they are in accordance with law, duly registered and recorded in this Commission.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of this Commission to be affixed to this Certificate at Pasay City, Metro Manila, Philippines, this 18th day of December, Twenty Twenty.


DANIEL P. GABUYO
Assistant Director
SO Order 1155 Series of 2018

JS/lea

COVER SHEET

For Applications at

COMPANY REGISTRATION AND MONITORING DEPARTMENT

Nature of Application

Amendment of the Amended Articles of Limited Partnership

S. E. C. Registration Number

P L 2 0 0 7 0 9 8 3 4

Company Name

M A S I N L O C P O W E R
P A R T N E R S C O . L T D .

AMENDED TO:

New Company Name

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

M a s i n l o c C o a l - F i r e d
T h e r m a l P o w e r P l a n t
B a r a n g a y B a n i
M a s i n l o c , Z a m b a l e s

Company Telephone Number

(632) 8702-4601

Contact Person

Atty. Julie Ann B. Domino-Pablo

Contact Person's Telephone Number

(632) 8702-4510

Contact Person's Address

19th Floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City

To be accomplished by CRMD Personnel

Date

Signature

Assigned Processor _____

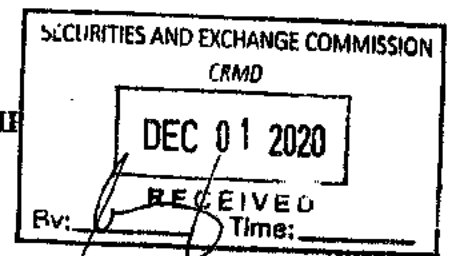
Document I.D.

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	_____	_____

**AMENDED ARTICLES OF LIMITED PARTNERSHIP
OF
MASINLOC POWER PARTNERS CO. LTD.**



These Amended Articles of Limited Partnership are made and entered into as of 24 June 2020 by and among:

SMCGP Masinloc Power Company Limited (formerly, Masinloc AES Power Company Limited), a limited partnership organized and existing under the laws of the Philippines, with principal office at the Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc Zambales, represented herein by **Paul Bernard D. Causon**;

and

Power Ventures Generation Corporation¹, a corporation organized and existing under the laws of the Philippines with principal office at 19th Floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City, represented herein by its authorized representatives, **Ferdinand K. Constantino and Sergio G. Edeza**.

and

SMC Global Power Holdings Corp.², a corporation organized and existing under the laws of the Philippines, with address at 155 EDSA, Barangay Wack-Wack, Mandaluyong City represented herein by its authorized representatives, **Joseph N. Pineda and Aurora T. Calderon**,

1. Formation

The Partners hereby agree to amend a limited partnership under the laws of the Philippines (the "Limited Partnership").

2. Name

The name of the Limited Partnership shall be **MASINLOC POWER PARTNERS CO. LTD.**

3. Business Purpose

The business of the Limited Partnership shall be to invest in, acquire, finance, complete, construct, develop, improve, operate, maintain and hold power production and electrical generating facilities in the Philippines (the "Project"), and other property incidental thereto, for the production and sale of electricity, to sell or otherwise dispose of the Project and such other property.

¹ On 15 July 2019, the limited partnership interest of Transpower Holdings B.V. in the Limited Partnership was transferred to Power Ventures Generation Corporation pursuant to a Deed of Absolute Sale between Transpower Holdings B.V. and Power Ventures Generation Corporation dated 15 July 2019.

² On 24 June 2020, SMC Global Power Holdings Corp. was admitted as a limited partner in the Partnership after infusion of the amount of Seventy-Five Million Dollars (USD \$75,000,000.00) as its Capital Contribution to the Limited Partnership.

4. **Place of Business**

The principal place of business of the Limited Partnership is at the Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales. The Limited Partnership may maintain such other offices and places of business as it may deem advisable.

5. **General & Limited Partners**

SMCGP Masinloc Power Company Limited shall be a general partner (the "General Partner") and Power Ventures Generation Corporation³ and SMC Global Power Holdings Corp.⁴ shall be limited partners (the "Limited Partners") and together with the General Partner, the "Partners").

6. **Term**

The Limited Partnership shall dissolve, and its affairs shall be wound up, on the 50th anniversary of the date of execution of these Amended Articles of Limited Partnership, or at such earlier time as (a) all of the Partners approve in writing, (b) the Limited Partnership sells or otherwise disposes of its interest in all or substantially all of the Project or (c) the bankruptcy or other withdrawal of the General Partner.

7. **Capital Contributions**

The Partners or their predecessors in interest have contributed the following amounts in cash, and no other property, to the Limited Partnership:

Partners	Contributions
General Partner	
SMCGP Masinloc Power Company Limited	
June 7, 2007	US\$ 200,000.00
April 4, 2008	US\$ 252,536,063.00
April 15, 2008	US\$ 22,126,437.00
Total	US\$ 274,862,500.00
<u>Limited Partners</u>	
Power Ventures Generation Corporation ⁵	
June 2, 2007	US\$100.00
April 4, 2008	US\$137,400.00
Total	US\$137,500.00

³ On 15 July 2019, the limited partnership interest of Transpower Holdings B.V. in the Limited Partnership was transferred to Power Ventures Generation Corporation pursuant to a Deed of Absolute Sale between Transpower Holdings B.V. and Power Ventures Generation Corporation dated 15 July 2019.

⁴ On 24 June 2020, SMC Global Power Holdings Corp. was admitted as a limited partner in the Partnership after infusion of the amount of Seventy-Five Million Dollars (USD \$75,000,000.00) as its Capital Contribution to the Limited Partnership.

⁵ On 15 July 2019, the limited partnership interest of Transpower Holdings B.V. in the Limited Partnership was transferred to Power Ventures Generation Corporation pursuant to a Deed of Absolute Sale between Transpower Holdings B.V. and Power Ventures Generation Corporation dated 15 July 2019.

SMC Global Power Holdings Corp.⁶

June 24, 2020

US\$52,500,000.00

June 24, 2020

US\$22,500,000.00

Total

US\$75,000,000.00

Total

US\$350,000,000.00

The total contribution of the Partners is equivalent to Php15,207,001,304.00

8. Additional Contribution

Any additional capital contribution to the Limited Partnership shall require the approval of all the Partners.

9. Allocation of Profits and Losses

Partnership profits and losses shall be allocated in proportion to the capital contributions of the Partners, provided however, that the Limited Partners shall not be liable for losses beyond its capital contribution.

10. Management

The Limited Partnership shall be managed by the General Partner, SMCGP Masinloc Power Company Limited, which is hereby appointed as managing partner to act on behalf of the Limited Partnership in all matters affecting the management of the Project, including but without limitation, the power and authority to incur long term and short term indebtedness, to sign notes, to pledge the assets of the Limited Partnership and in general to sign any document required by the financing entities, to assign duties, to disburse funds for Limited Partnership purposes, purchase general liability, casualty or other insurance, execute for and on behalf of the Limited Partnership with respect to the Project all applications for permits and licenses necessary and advisable, perform all acts and duties related to the payment of all indebtedness and other obligations, due or to become due with regard to the Project, give and receive notices, reports and other communications arising from or in connection with the Project, and perform such other acts as may be properly designated by the Partners, provided, however, that the foregoing management powers of the General Partner shall in no way interfere with the rights of a Limited Partner to:

- (a) inspect and copy any and all Limited Partnership books of account required under Philippine law;
- (b) have, upon reasonable and written demand, true and full information of all things concerning the Limited Partnership insofar as such things relate to a Limited Partner's interest as a limited partner;

⁶ On 24 June 2020, SMC Global Power Holdings Corp. was admitted as a limited partner in the Partnership after infusion of the amount of Seventy-Five Million Dollars (USD \$75,000,000.00) as its Capital Contribution to the Limited Partnership.

(c) to have a full and formal account of Limited Partnership affairs on a quarterly basis, within sixty (60) days after the end of each quarter of each financial year of the Partnership; and

(d) to have the Limited Partnership dissolved and wound up by decree of court.

11. Units and Sharing Ratios

Each Partner shall have the amount of units and Sharing Ratios as set forth in Exhibit A attached hereto, which expresses the entire ownership interest of the Partners at any particular time.

12. Certificates

The ownership interest in the Limited Partnership shall be evidenced by certificates containing, among other things, the amount of units of each Partner. Subject to the consent of the General Partner required by Article 13 herein, a Partner may convey, sell, assign or otherwise transfer (each such transaction being a "conveyance"), in whole or in part, its interest in the Limited Partnership. A conveyance by a General Partner or a Limited Partner of its interest shall entitle the assignee, during the continuance of the Limited Partnership, to the rights of the General Partner or a Limited Partner, as the case may be, under these Amended Articles of Limited Partnership.

13. Conveyance

No Partner may convey all or any part of its interest in the Limited Partnership without the consent of the General Partner. No Partner shall have any right to grant an assignee or transferee of its interest in the Limited Partnership the right to become a substituted partner, except with the consent of the General Partner which consent may be withheld in its sole discretion. In the event the General Partner undertakes a conveyance of all or part of its general partnership interest in the Limited Partnership, the Limited Partners shall have the right to require the General Partner to convey its interest in the Limited Partnership together with the General Partner's interest in the Limited Partnership at a price for each partnership unit no less favorable than the market value of such interest.

14. Additional Partners

The Partners may admit additional partners to the Limited Partnership but only if the majority in interest of the Partners have provided advance written consent to such admission.

15. Non-Dissolution

(a) The admission of additional partners into the Limited Partnership subject to Article 14 shall not result in or cause the dissolution of the Limited Partnership.

(b) The Limited Partnership will terminate upon the bankruptcy of the General Partner unless a majority in interest of the remaining Partners agree to continue the Limited Partnership at that time.

(c) The withdrawal of a Limited Partner shall not result in or cause the dissolution of the Limited Partnership; provided, all of the remaining Partners agree to continue the Limited Partnership at that time.

16. Applicable Law

These Amended Articles of Limited Partnership shall be construed and enforced in accordance with the laws of the Philippines

17. Counterparts

These Amended Articles of Limited Partnership may be executed in several counterparts, all of which together shall constitute one agreement bidding upon all parties hereto, notwithstanding that all of the parties have not signed the same counterpart.

18. Amendment

These Amended Articles of Limited Partnership may be amended only with the consent of all Partners.

19. Entire Agreement

These Amended Articles of Limited Partnership constitute the entire understanding between the parties with respect to the subject matter hereof, superseding all negotiations, prior discussions and previous agreement or understanding, written or oral.

IN WITNESS WHEREOF, the undersigned have executed the foregoing Amended Articles of Limited Partnership as of the date first above written.

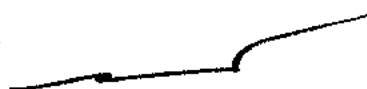
SMCGP MASINLOC POWER COMPANY LIMITED

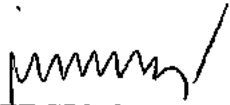
By:


Paul Bernard D. Causon
Authorized Representative
TIN: 210-026-183

POWER VENTURES GENERATION CORPORATION

By:


FERDINAND K. CONSTANTINO
Authorized Representative
TIN: 119-123-901



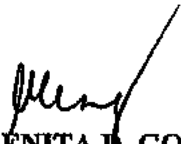
SERGIO G. EDEZA
Authorized Representative
TIN: 135-913-329

SMC GLOBAL POWER HOLDINGS CORP.

By:



JOSEPH N. PINEDA
Authorized Representative
TIN: 106-905-782



ELENITA D. GO
Authorized Representative
TIN: 123-077-200

ACKNOWLEDGMENT

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

Before me personally appeared on JUL 09 2020 at Mandaluyong City, the following persons:

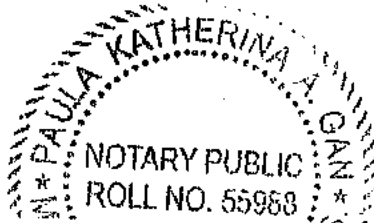
Name	Competent I.D. No.	Date and Place Issued
SMCGP MASINLOC POWER COMPANY LIMITED Represented by: Paul Bernard D. Causon	 Passport No. P8120059A	 27 July 2018/DFA NCR East
POWER VENTURES GENERATION CORPORATION Represented by: Ferdinand K. Constantino Sergio G. Edeza	 Passport No. P0341304A Passport No. P4727551B	 22 Sep. 2016/DFA NCR East 20 Feb. 2020/DFA NCR East
<u>SMC GLOBAL POWER HOLDINGS CORP.</u> Represented by: <u>Joseph N. Pineda</u> <u>Elenita D. Go</u>	 Passport No. P7419331A Passport No. P1876103B	 June 3, 2018/DFA NCR South July 7, 2019 / DFA NCR East

known to me to be the same person/s who executed the foregoing Amended Articles of Limited Partnership, and who acknowledged that the same is their free and voluntary deed and of the entity they respectively represent/s.

These Amended Articles of Limited Partnership, consisting of six (6) pages, including the page where this Acknowledgement is written, has been signed by the Parties and the witnesses on each and every page.

Witness my hand and seal, at the date and place first above written.

Doc No. 238 ;
Page No. 49 ;
Book No. IV ;
Series of 2020.




PAULA KATHERINA A. GAM
Commission No. 0308-19
Notary Public for Mandaluyong City
Until December 31, 2020
Mandaluyong City

EXHIBIT A

The Partnership interest of the partners are as of follows;

Partners	Sharing Ratio	Units
General Partners		
SMCGP MASINLOC POWER COMPANY LIMITED	<u>78.53%</u>	<u>78.53</u>
Limited Partners		
POWER VENTURES GENERATION CORPORATION	<u>0.04%</u>	<u>0.04</u>
<u>SMC GLOBAL POWER HOLDINGS CORP.⁷</u>	<u>21.43%</u>	<u>21.43</u>
Total	100%	100

⁷ On 24 June 2020, SMC Global Power Holdings Corp. was admitted as a limited partner in the Partnership after infusion of the amount of Seventy-Five Million Dollars (USD \$75,000,000.00) as its Capital Contribution to the Limited Partnership.

Republic of the Philippines)
) SS.

PARTNER'S CERTIFICATE

I, **PAUL BERNARD D. CAUSON**, Filipino, of legal age, the Authorized Representative of **SMCGP Masinloc Power Company Limited**, the General Partner of **MASINLOC POWER PARTNERS CO. LTD.**, a limited partnership duly organized and existing in accordance with the laws of the Philippines, with principal place of business at the Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales (the "Partnership") hereby certify under oath that the Partnership adopted and approved the following resolutions on 15 May 2020:

"**RESOLVED**, that the Partnership is hereby authorized to admit **SMC Global Power Holdings Corp.** as a limited partner of the Partnership upon its infusion of the amount of United States Dollars: Seventy-Five Million (US \$75,000,000.00) or its Philippine Peso equivalent as partnership interest (the "Additional Partnership Interest"), subject to such conditions as may be imposed by the Partnership;

"**RESOLVED, FURTHER**, that the revised partnership sharing ratio of the partners based on capital contributions after the infusion of the Additional Partnership Interest shall be as follows:

Partners	Sharing Ratio	Contributions (in USD)
SMCGP Masinloc Power Company Limited	78.53%	274,862,500.00
Power Ventures Generation Partnership	0.04%	137,500.00
SMC Global Power Holdings Corp.	21.43%	75,000,000.00
Total	100	350,000,000.00

"**RESOLVED, FURTHER**, that as a consequence of the foregoing, the Partnership hereby approves the amendment of the Amended Articles of Partnership to reflect **SMC Global Power Holdings Corp.** as a limited partner of the Partnership; and

"**RESOLVED, FINALLY**, that the officers and authorized representatives of the Partnership be authorized and directed to file the necessary certifications and relevant documents with the SEC and other government agencies, and to do all things necessary, to carry out and effect the foregoing resolutions.

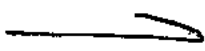
JUL 15 2020

IN WITNESS WHEREOF, I have hereunto signed these presents _____ day of _____

2020.

SMCGP Masinloc Power Company Limited
General Partner

By:


PAUL BERNARD D. CAUSON
Authorized Representative
JUL 15 2020

SUBSCRIBED AND SWORN to before me on _____ at Mandaluyong City,
Document with No. **PR120059A** issued on July 27, 2018 at DFA NCR



OFFICIAL RECEIPT
Republic of the Philippines
DEPARTMENT OF FINANCE
SECURITIES AND EXCHANGE COMMISSION
Secretariat Building, PICC Complex
Roxas Boulevard, Pasay City, 1307



Accountable Form No. 51
Revised 2006

ORIGINAL

DATE

November 04, 2020

No.

1937083

PAYOR

WASINLOC POWER PARTNERS CO. LTD
ZAMBALES

NATURE OF COLLECTION	ACCOUNT CODE	RESPONSIBILITY CENTER	AMOUNT
Amended Partnership	4020102000(606)	GRND	7,505,550.00
Documentary Stamp Tax	4010401000(4010401)		30.00
Legal Research Fee (A0823)	2020103000(131)		75,055.50

TOTAL PHP 7,580,635.50

AMOUNT IN WORDS

SEVEN MILLION FIVE HUNDRED EIGHTY THOUSAND SIX HUNDRED THIRTY FIVE

Received	☐ Cash ☐ Treasury Warrant ☐ Check ☒ Money Order	Received the Amount Stated Above COLLECTING OFFICER
Treasury Warrant, Check, Money Order Number		
Date of Treasury Warrant, Check, Money Order NC-2020-11-03		O.R. No. 1937083

NOTE: Write the number and date of this receipt on the back of treasury warrant, check or money order received.



Machine Validation:

20201028-2714739



Republic of the Philippines
DEPARTMENT OF FINANCE
SECURITIES AND EXCHANGE COMMISSION
Secretariat Building, PICC Complex
Roxas Boulevard, Pasay City, 1307



PAYMENT ASSESSMENT FORM

No. 20201028-2714739

DATE 10/28/2020	RESPONSIBILITY CENTER CRMD
PAYOR: MASINLOC POWER PARTNERS CO. LTD ZAMBALES	

NATURE OF COLLECTION	QUANTITY	ACCOUNT CODE	AMOUNT
Amended Partnership		4020102000 (606)	7,505,550.00
Legal Research Fee (A0823)		2020105000 (131)	75,065.50
Documentary Stamp Tax	1	4010401000 (4010401)	30.00
—NOTHING FOLLOWS—			
TOTAL AMOUNT TO BE PAID			Php 7,580,635.50
Assessed by: jasubido		Amount in words: SEVEN MILLION FIVE HUNDRED EIGHTY THOUSAND SIX HUNDRED THIRTY FIVE PESOS AND 50/100	
Remarks:			

SEC Landbank Accounts

Landbank Region/Area	SEC Clearing Account	SEC Account
Region II, III-A, III-B, IV, Area IV-A, AREA IV-B, and Region VIII	3402-2319-20	Head Office / Tarlac
Region I	3402-2319-36	Baguio
Region V	3402-2319-48	Legaspi
Region VI	3402-2319-54	Iloilo / Bacolod
Region VII	3402-2319-62	Cebu
Region IX	3402-2319-70	Zamboanga
Region X	3402-2319-69	Cagayan De Oro
Region XI & XII	3402-2319-97	Davao

Breakdown Summary

FUND ACCOUNT	AMOUNT	ACCOUNT #
BTR Account	75,065.50	see SEC clearing accounts
BTR Account - DST only	30.00	see SEC clearing accounts
SEC RCC Current Account	7,505,550.00	3752-1001-43
TOTAL	Php 7,580,635.50	

Notes:

- This form is valid for forty-five (45) calendar days from the date of Payment Assessment Form.
- Accepted modes of payment at SEC Main Office, Pasay City:
1. Cash 2. Manager's/Cashier's Check 3. Postal Money Order
- Accepted mode of payment at selected Landbank branches:
1. Cash 2. Manager's/Cashier's Check payable to the Securities and Exchange Commission
- For check payment, please prepare separate checks per fund account as indicated on the breakdown summary. All checks must be payable to Securities and Exchange Commission
- For over the counter payment at LandBank, preparation of oncall payment or deposit slip shall be per fund account as indicated on the breakdown summary.
If fund code is BTR, use an oncall payment slip.
If fund code is SRC or RCC, use a regular deposit slip.
Send through email the copy of the machine-validated oncall payment slip / deposit slip to the issuer of this PAF to confirm that payment has been made.
- ANY ALTERATIONS WILL INVALIDATE THIS FORM

For National Capital Region (NCR), payments are only allowed thru the ff. Landbank branches:

Name of Branch	SEC Clearing Account
Edsa Greenhills	3402-2319-20
Edsa Congressional	
Araneta E.O.	
YMCA	
DOTC	
Ortigas E.O.	
Muntinlupa	
North Avenue	

ACCOUNT No.

000800000033

MANAGER'S CHECK

VALID FOR 6 MONTHS FROM THE DATE OF ISSUE

CHECK No.

0002153215

01044

BRSTH

01044

0472

PAYEE'S ACCT. ONLY

DATE

11 November 02

PAY TO THE ORDER OF ***SECURITIES AND EXCHANGE COMMISSION***

PHP SEVEN MILLION FIVE HUNDRED EIGHTY THOUSAND SIX HUNDRED THIRTY FIVE AND 50/100 ONLY***

P 447,500.635.5000

PESOS

I / We allow the electronic clearing of this check and hereby waive the presentation for payment of this original to Bank of Commerce

Bank of Commerce

An affiliate of San Miguel Corporation



MAIN OFFICE - SAN MIGUEL BRANCH
G/F SAN MIGUEL PROPERTIES CENTRE, #78T. FRANCIS ST
ORTIGAS CENTER, MANDALUYONG CITY

[Signature]

[Signature]

⑆0002153215⑆01044⑆0472⑆000800000033⑆000

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
tel 047 307 4000
fax 047 307 4003

24 February 2021

Energy Regulatory Commission
Pacific Center Building, San Miguel Avenue,
Ortigas Center, 1600, Pasig City,
Metro Manila, Philippines

Subject: Shareholders' Agreement as a Pre-Filing Requirement to the Application for Approval of the Power Supply Agreement between Masinloc Power Partners Co. Ltd. and Manila Electric Company

Gentlemen:

On behalf of Masinloc Power Partners Co. Ltd. ("MPPCL"), one of the joint applicants in the Application for Approval of the Power Supply Agreement between MPPCL and Manila Electric Company ("Meralco"), we hereby state that the requirement of a Shareholders' Agreement among partners/shareholders of MPPCL is not applicable because the current partners of MPPCL, aside from SMC Global Power Holdings Corp. ("SMC Global Power"), are wholly owned subsidiaries of SMC Global Power. Hence, MPPCL is effectively a wholly owned subsidiary of SMC Global Power.

Thank you.

24 February 2021, Mandaluyong City.

For and on behalf of Masinloc Power Partners Co. Ltd.
By:


Paul Bernard D. Causon
Authorized Representative



ANNEX "N"

REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
Ground Floor, Secretariat Building, PICC
City of Pasay, Metro Manila

COMPANY REG. NO. PL200709834

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the annexed

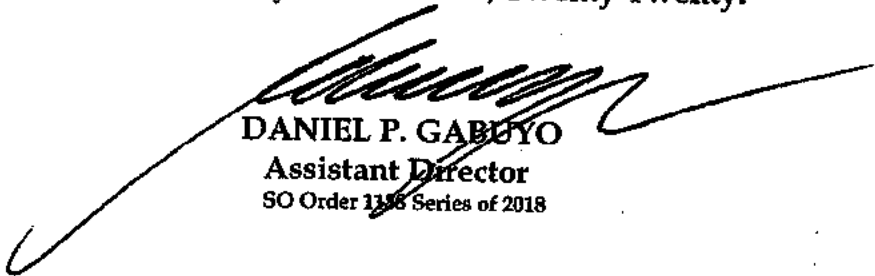
Amended Articles of Partnership of:

MASINLOC POWER PARTNERS CO. LTD.

executed under and in accordance with the Civil Code of the Philippines (RA 386), approved on June 18, 1949 and the Foreign Investments Act of 1991 (Republic Act No. 7042, as amended) approved on June 13, 1991 were presented for filing at 2:06 o'clock in the afternoon of the 4th day of November, 2020 according to Entry No. 204541 of Volume XXI, of the Day Book and duly recorded in Folio 80 Leaf No. 90602 Inscription No. (10) Volume No. 1788 of the Book of Partnership of the Securities and Exchange Commission and a copy of said Amended Articles is hereto attached;

NOW, THEREFORE, by virtue of the powers and duties vested in me by law, I do hereby certify that the said Amended Articles of Partnership, after due examination to determine whether they are in accordance with law, duly registered and recorded in this Commission.

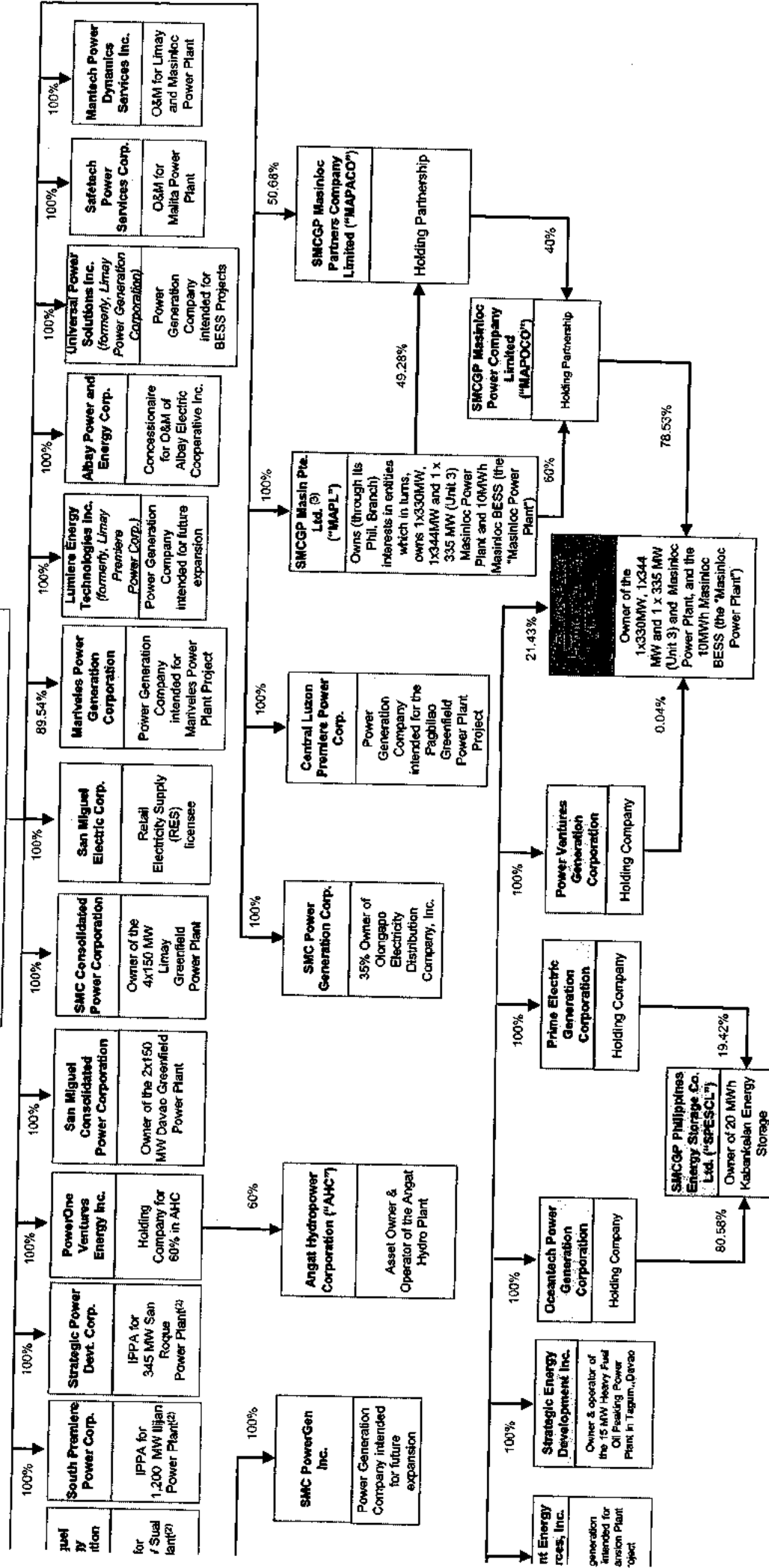
IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the seal of this Commission to be affixed to this Certificate at Pasay City, Metro Manila, Philippines, this 18th day of December, Twenty Twenty.


DANIEL P. GABUYO

Assistant Director
SO Order 1118 Series of 2018

JS/lea

SMC Global Power Holdings Corp.



Republic of the Philippines)
City of Mandaluyong) S.S.

ANNEX " P "

CERTIFICATION
ANNEX QD-2(e)

I, **JULIE ANN B. DOMINO-PABLO**, of legal age, Filipino and with office address at the 19th floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City 1550, after being duly sworn in accordance with the law, hereby certifies as follows:

1. I am the Corporate Secretary of **MASINLOC POWER PARTNERS CO. LTD.**, a partnership incorporated under the laws of the Republic of the Philippines, whose registered office is at Masinloc Coal-Fired Thermal Power Plant, Brgy. Bani, Masinloc, Zambales, (the "Partnership").
2. The attached copy of the application for registration of the 2x350MW Coal-Fired Thermal Power Plant (Units 4 and 5) of the Partnership with the Board of Investments (BOI) dated 17 December 2020, duly stamped received by the BOI and consisting of 20 pages, is the complete, true and faithful reproduction of the original document.
3. I am executing this Certification to attest to the truth of the foregoing and in compliance of requirements under the Instructions to Prospective Bidders issued by Manila Electric Company for the 1800MW (net) Contract Capacity.

For and on behalf of **MASINLOC POWER PARTNERS CO. LTD.**


JULIE ANN B. DOMINO-PABLO
Corporate Secretary

SUBSCRIBED AND SWORN TO before me this 20th day of January 2021 at Mandaluyong City, affiant exhibiting to me her Philippine Passport No. P3581210A issued in DFA Manila on 5 July 2017.

Doc. No. SB ;
Page No. 13 ;
Book No. 11 ;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0671-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
Lifetime IBP No. 835229; 10/06/2010; Quezon City Chapter
Compliance No. VI-0018687; 02/18/2019; Pasig City

APPLICATION NO.:
DATE ACCEPTED :
LAW: E.O. No. 226:
R.A. No. 9513:

APPLICATION FOR REGISTRATION

RECEIVED

BY:

DATE:

TIME	11	12	13	14	15	16	17	18	19	20	21	22	23	24
------	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Name of Entity	Masinloc Power Partners Co., Ltd.		
Office Address	Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales		
Telephone No	8459-2600	Fax No.	8459-2695
SEC/Registration	No: PL200709834	Date: 06/25/2007	TIN No. : 006-786-124
Ownership	100 % Filipino	% Foreign	(Nationality)
Authorized Capital	PhP		

CURRENT STOCKHOLDERS' PROFILE:

Name	Nationality	Check if Director	Position or Designation in the Enterprise	Capital Stock (PhP)		(%) Ownership
				Subscribed	Paid-up	
SMCGP Masinloc Power Co. Ltd.	Philippines				\$274,862,500	78.53%
Power Ventures Generation Corp.	Philippines				\$137,500	0.04%
SMC Global Power Holdings Corp.	Philippines				\$75,000,000	21.43%
	Total				\$350,000,000	100.00%

Indicate in the Nationality if naturalized Filipino

Indicate in the Nationality if naturalized Filipino

Schedule 2: CONTACT DETAILS

AUTHORIZED REPRESENTATIVE TO BOI:

Name : Ramon U. Agay Position : Authorized Representative

E-Mail Address : ragayjr@smcgp.ph

Landline/Cellphone No. : +639178300242 Fax No. : 8459-2695

F-RBIS-PERD-002/BO/07.01.2010

Schedule 3: PROJECT PROFILE:

Name of Project : 315MW Super Critical Pulverized Coal Thermal Power Plant (Unit 4)
 Project Location : Brgy. Bani, Masinloc, Zambales
 IPP Year: 2020 Category : Preferred Activities Special Laws Export Activities

Activity as Listed in the IPP : Energy

Specific Products/Services:

Power Generation

Product /Service 2

Product /Service 3

Capacity for BOI Registration:

315 MW

(Maximum Annual Production Capacity, except for power generation activities which should be in MW/kW)

PROJECT DESCRIPTION:

The development and construction of the 1x315 MW Super Critical Pulverized Coal Thermal Power Plant (Unit 4 or the "Power Plant") will be undertaken by MPPCL, with support from the SMCGP group, through its various contractors and its in-house staff. The Project is to be located on the existing site in Barangay Bani, Municipality of Masinloc, Province of Zambales.

Given the country's rapidly growing economy, demand for power will outpace supply in the Philippines in the coming years. The proposed Masinloc Unit 4 power project will help augment the demand for reliable and affordable baseload power supply. The proposed power plant will not only supply enough electricity to Filipino households and businesses but will also contribute to national development.

Moreover, the proposed project will be able to contribute to the country's power requirement with an additional 315 MW (net) capacity by Year 2024, supporting the projected Capacity Additions to the Philippine grid outlined in the Philippine Energy Plan (PEP) of the Department of Energy (DOE).

Schedule 4-A: TYPE OF PROJECT & STATUS (IF APPLICATION IS UNDER E.O. NO. 226)

New: X

Expansion:

Modernization:

% Increase in Capacity:

STATUS:

Pioneer

x

Non-Pioneer

Masinloc Unit 4 will be established as a new complete line with new investment in fixed assets and working capital. It aims to contribute to the country's power requirement with an additional 315 MW (net) capacity by Year 2024, supporting the projected capacity additions to the Philippine grid outlined in the Philippine Energy Plan of the Department of Energy. The roads and administrative buildings are shared with the existing facilities, but the machinery and equipment of Unit 4 will be completely separate from the existing units including the proposed unit 5. Likewise, it has a separate interconnection facility to the grid and separate metering will be used.

ENERGY SOURCE:

Biomass

Hydro

Wind

Oil

Geothermal

Solar

X

Coal

Others

(Specify)

Schedule 6: Project Financing

"ENVELOPE 1-OF-ORIGINAL"

	(BWP)	Percentage
Equity	9,320,025,517	30%
Loan	21,746,726,205	70%
Total²	(B) 31,066,751,722	100%

¹ Total financing should tally with Total Project Cost in Schedule 5

Status of Loan: Not yet drawn

Schedule 7: Projected Production and Sales Schedule (should be consistent with the Projected Income Statements)
(Y1 is first 12 months of commercial operation)

A. For Non-Power Applications, e.g., bio-fuels, etc.

	Production Volume	Sales Volume		Average Selling Price per unit	
		Domestic	Export	Domestic (BWP)	Export (US\$)
Y1					
Y2					
Y3					
Y4					
Y5					

³ Indicate unit of measure (e.g., metric tons, liters, etc.)
Note: Projected annual production volume should not exceed the production capacity per year being applied for BOI registration

Assumptions Used in the Projections:

- Total number of shifts per day : _____
- Total number of operating days per year : _____
- Total number of capacity determinant machine : _____

B. For Power Applications

Y1	2,419,200,000	2,419,200,000	4.8000
Y2	2,419,200,000	2,419,200,000	4.8000
Y3	2,419,200,000	2,419,200,000	4.8000
Y4	2,199,960,000	2,199,960,000	4.8000
Y5	2,419,200,000	2,419,200,000	4.8000

Formula for the Total Rated Capacity (MW): No. of Units x Capacity in MW

Formula for the Production (kWh): Installed Capacity x 24 hours x [365 days - 45 regular outage days]

Formula for the Sales (kWh): Contracted Capacity x 24 hours x [365 days - 30 regular outage days]

C. Carbon Emission Reductions (CERs)

Y1		
Y2		
Y3		
Y4		
Y5		

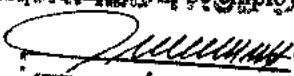
Schedule 8: Jobs Generation

	Y1	Y2	Y3	Y4	Y5
Direct Labor	33	33	33	33	33
Indirect Labor	14	14	14	14	14
Selling/Admin	1	1	1	1	1
Total	48	48	48	48	48

(Y1 is first 12 months of commercial operation)

Note: During construction phase, an estimated of 500 personnel will be employed by the selected EPC contractor.

F-RBIS-PERD-002/RO/07-01-2019

By: 
Date: 11/21/21

Page 4 of 6

A. For New and Expansion Projects

Description / Item of Machine	Check 1			Country/Source	End-use	No. of units	Unit Cost (Php)
	Applied	Not Applied	Not Applicable				
A. Main Plant and Auxiliaries			●		Generate Electricity	1 lot	18,170,125,600
1 Boiler and Auxiliaries				Taiwan/Japan/Korea			
2 Electric Facilities, Material and Instruments				Asia/Europe			
3 Ash and Gas Treatment Facilities				Asia/Europe/USA			
4 Turbine Generator and Auxiliaries				Japan/Germany			
5 Environmental Equipment Facilities				Asia/Europe/USA			
6 Fuel Handling System				Asia			
7 Miscellaneous				Asia/Europe/USA			
B. 500KV facility and connection asset			●		Deliver power to the grid	1 lot	2,191,142,800
GIS Breaker (Breaker and a half scheme)				Asia/Europe/USA			
Underground interconnection cable				Asia/Europe/USA			
Required communication and protection interface				Asia/Europe/USA			
Transmission Interconnection				Asia/Europe/USA			
C. Others			●		Miscellaneous	1 lot	544,239,426
Total: 20,905,507,826							(A)

¹ Application or manufacturing stage where the equipment will be used

Schedule 10: Financial Projections (10 Years) - (submit also electronic copy in Excel or word format)

- Projected Income Statements should include Itemized Cost of Sales and Operating Expenses, assuming 30% Corporate Tax Rate
- Should be consistent with Schedule 7 of Form 501;
- Should Include the following in the projections: (a) Government share for RE projects (i.e., 1% of Gross Income); (b) ER 1-94 Contribution (i.e., PhP 0.01 per kWh of the electricity sales); (c) Real Property Tax; (d) Interest on Loans; (e) Insurance premiums (if any); (f) Permits, Licenses; (g) Other applicable taxes, and other benefits to the government, etc.
- Assumption: Without ITH

Please refer to the Financial Projections herein attached as "Annex 1" assuming the Company is under ITH and "Annex 2" assuming the Company is not under ITH.

Schedule 11: List and Breakdown of Cost of Raw Materials

A. For New and Expansion Projects (IF APPLICATION IS UNDER E.O. NO. 226)

a. Local Raw Materials and Direct Labor Cost (Variable O&M)	342,998,189
<i>Sub-Total</i>	342,998,189
b. Imported Raw Materials	3,499,223,323

Sub-Total	3,499,223,323
Total	3,842,221,512
c. Total Overhead Cost	-0-
d. Total Production Cost (a+ b+c)	3,842,221,512

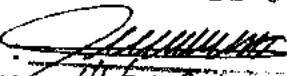
(Provide additional sheet if necessary)
(Y1 is first 12 months of commercial operation)
Note: Assumption is Y1 is under Income Tax Holiday.

Schedule 13: APPLICABLE ONLY TO ENTERPRISES WITH EXISTING OPERATIONS

Actual Production and Sales Schedule (Volume and Value) - Past Three (3) Years Operations*
A. For Power Applications

Year	No. of Generators (MW)	Capacity (MW)	Operating Hours per Year	Production (MWh)	Sales (MWh)	Selling Price (P/ MWh)	Sales Value (P)
2019	2	300	600	15,394	4,599,229	5,817,252	P 4,419 25,707,030,017
2018	2	300	600	14,779	4,270,867	4,773,980	P 5,046 24,093,783,788
2017	2	300	600	15,950	4,475,104	4,834,916	P 4,706 22,753,563,075

*2020 Figures are still being finalized and not yet available as of this filing.

CERTIFIED TRUE COPY
By: 
Date: 11 Jan 21

Done in the City of Mandaluyong this DEC 17 2020 day of December 2020.

REPUBLIC OF THE PHILIPPINES
CITY OF MANDALUYONG

SUBSCRIBED AND SWORN to before me this DEC 17 2020 day of January 2019 affiant exhibiting to me his Passport No. P2129014A issued on March 04, 2017 at DFA Manila, Philippines.

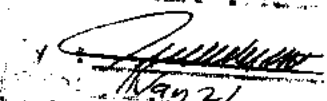
MARILEN S. VIZCO-ADRIANO
 Appointment No. 0671-20
 Notary Public for Mandaluyong City
 Until December 31, 2021
 No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
 Roll No. 52532
 PTR No. 4326920; 01/06/20; Mandaluyong City
 IBP Lifetime IBP No. 835229; 10/08/2016; Quezon City Chapter
 MCLE Compliance No. VI-0018667; 02/18/2019; Quezon City

100-443886-100

Projected Income Statement (Php Mn)	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10
Revenue	11,612,160	11,612,160	11,612,160	10,559,808	11,612,160	11,612,160	11,612,160	10,559,808	11,612,160	11,612,160
Average realization	4.8000	4.8000	4.8000	4.8000	4.8000	4.8000	4.8000	4.8000	4.8000	4.8000
Cost of Sales										
Fuel expense	(3,499,228)	(3,507,425)	(3,514,560)	(3,254,239)	(3,519,666)	(3,505,216)	(3,518,676)	(3,254,162)	(3,532,889)	(3,528,892)
Variable O&M	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)	(342,998)
Power Purchases										
Gross Contribution	7,769,938	7,761,736	7,754,602	6,962,571	7,749,496	7,763,943	7,753,586	6,962,548	7,736,273	7,743,565
Margin	67%	67%	67%	66%	67%	67%	67%	66%	67%	67%
Fixed O&M	(609,514)	(609,514)	(609,514)	(741,220)	(609,514)	(609,514)	(609,514)	(741,220)	(609,514)	(609,514)
Salaries and wages	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)	(4,085)
Insurance premiums	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)	(107,535)
Other operating expenses	(497,893)	(497,893)	(497,893)	(829,599)	(497,893)	(497,893)	(497,893)	(829,599)	(497,893)	(497,893)
Taxes and Licenses	(314,490)	(340,804)	(329,804)	(316,811)	(302,940)	(297,401)	(286,601)	(273,607)	(259,757)	(254,196)
Local Business Tax	(23,146)	(58,061)	(58,061)	(58,061)	(52,799)	(58,061)	(58,061)	(58,061)	(52,799)	(58,061)
Real Property Tax	(266,419)	(255,618)	(244,817)	(234,016)	(223,218)	(212,415)	(201,614)	(190,813)	(180,013)	(169,212)
ER 1-94	(24,192)	(24,192)	(24,192)	(22,060)	(24,192)	(24,192)	(24,192)	(22,060)	(24,192)	(24,192)
Others	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)	(2,734)
EBITDA	6,845,834	6,811,818	6,815,284	5,904,541	6,837,062	6,837,080	6,838,472	5,847,821	6,867,821	6,876,831
Margin	59%	59%	59%	56%	59%	59%	59%	56%	59%	59%
Depreciation and amortization	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)	(1,125,079)
EBIT	5,720,885	5,686,539	5,690,205	4,779,462	5,711,983	5,711,983	5,713,393	4,722,442	5,742,442	5,751,754
Financing Expenses	(1,515,195)	(1,474,700)	(1,429,032)	(1,364,335)	(1,259,679)	(1,095,084)	(881,014)	(595,588)	(190,284)	-
EBT	4,205,720	4,211,839	4,261,173	3,415,127	4,452,304	4,616,899	4,832,378	4,226,853	5,552,158	5,751,754
Income Tax	(1,281,716)	(1,268,552)	(1,278,352)	(1,024,538)	(1,335,685)	(1,391,000)	(1,458,014)	(1,268,056)	(1,665,648)	(1,725,532)
Margin	23%	25%	26%	23%	27%	28%	23%	20%	33%	35%

APPROVED
[Signature]
11 Jan 21

Projected Balance Sheet (Pkg 00)	0	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
		-4	-4	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Assets																
Current Assets																
Cash and Cash Equivalents	10,000	1,042,917	4,551,301	2,056,479	321,591	4,814,358	8,004,141	10,796,997	15,491,797	17,009,000	10,883,649	10,112,848	10,347,481	10,194,373	10,345,093	
Notes and/or Accounts Receivable	-	-	-	-	1,040,753	1,040,753	8,940,753	1,040,753	8,940,753	1,040,753	1,040,753	1,040,753	1,040,753	1,040,753	1,040,753	
Inventory	-	-	-	-	113,130	113,130	113,130	113,130	113,130	113,130	113,130	113,130	113,130	113,130	113,130	
Prepaid Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Current Assets	27,460	1,022,172	1,848,576	2,785,045	2,823,887	1,783,806	804,540	48,122	-	-	-	-	-	-	-	
Total Current Assets	64,920	2,065,089	6,399,877	4,841,424	4,106,471	7,652,488	13,559,524	18,941,909	24,441,777	26,052,883	12,038,532	11,266,711	11,461,644	11,358,386	11,468,983	
Property, Plant, and Equipment	22,403	2,095,094	6,399,877	4,841,424	4,106,471	7,652,488	13,559,524	18,941,909	24,441,777	26,052,883	12,038,532	11,266,711	11,461,644	11,358,386	11,468,983	
Total Assets	87,323	4,160,183	12,799,754	9,682,848	8,212,942	15,304,976	27,119,048	37,883,818	48,883,554	52,105,766	24,077,064	22,533,422	22,923,288	22,716,772	22,937,966	
Liabilities																
Current Liabilities																
Notes and/or Accounts Payable (short-term debt)	10,000	-	-	-	340,771	341,581	342,100	342,908	343,777	344,565	345,025	345,551	346,177	346,897	347,385	
Income Tax Payable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Current Portion of Long-term Debt	-	-	-	-	414,935	415,001	415,135	415,287	415,459	415,641	415,833	416,035	416,247	416,469	416,691	
Total Current Liabilities	10,000	-	-	-	755,706	756,582	757,235	758,195	759,236	760,206	760,858	761,586	762,324	763,066	763,876	
Long-term Liabilities																
Long-term Loans Payable	-	2,174,673	11,848,899	21,145,735	21,311,792	20,488,396	19,486,354	18,447,818	17,463,429	16,609,171	10,228,961	5,184,647	(0)	(0)	(0)	
Other Long-term Liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Long-term Liabilities	-	2,174,673	11,848,899	21,145,735	21,311,792	20,488,396	19,486,354	18,447,818	17,463,429	16,609,171	10,228,961	5,184,647	(0)	(0)	(0)	
Total Liabilities	10,000	2,174,673	11,848,899	21,145,735	22,063,587	21,234,992	20,632,709	19,895,613	18,912,665	17,818,380	20,457,819	15,373,235	11,461,644	11,358,386	11,468,983	
Stockholders' Equity																
Capital Stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Preferred	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Common	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Reserves	561,873	8,890,516	9,870,624	9,220,018	9,816,024	9,820,024	9,820,024	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	
Retained Earnings																
Balance, Beginning	-	-	(5,267)	(175,150)	(418,241)	642,895	1,546,899	6,535,186	9,516,008	11,901,898	15,025,125	18,177,002	21,608,247	24,817,164	28,518,439	
Add: Net Income After Tax	-	(5,267)	(175,150)	(277,104)	1,059,125	1,344,004	2,948,287	1,042,821	2,948,287	1,042,821	2,948,287	1,042,821	2,948,287	1,042,821	2,948,287	
Less: Dividends	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Balance, Ending	-	(5,267)	(175,150)	(418,241)	642,895	1,546,899	6,535,186	9,516,008	11,901,898	15,025,125	18,177,002	21,608,247	24,817,164	28,518,439	32,986,917	
Total Stockholders' Equity	561,873	8,890,516	9,870,624	9,220,018	9,816,024	9,820,024	9,820,024	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	9,810,028	
Total Liabilities and Stockholders' Equity	87,323	4,160,183	12,799,754	9,682,848	8,212,942	15,304,976	27,119,048	37,883,818	48,883,554	52,105,766	24,077,064	22,533,422	22,923,288	22,716,772	22,937,966	


 Jan 21

Projected Cash Flow Statement (PFC) (M\$)	0	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estimated Cash Receipts																			
From Operating Activities																			
Net Income After Tax																			
Add back:																			
Depreciation																			
Interest Expense																			
Amortization of Pre-Operating Expense																			
Increases (Decreases) in Current Liabilities																			
Decreases (Increases) in Non-cash Current Assets																			
Total Estimated Cash Receipts from Operating Activities																			
From Other Sources																			
Increases in Capital Stocks																			
Dividends																			
Reserve(s) for Future Stock Subscription																			
Increases (Decreases) in Long-term Loans(s)																			
Proceeds from Bank Loans(s)																			
Sale of Non-current Assets																			
Land																			
Building																			
Machinery, Equipment, and Supplies																			
Other Non-current Assets																			
Total																			
Total Estimated Cash Receipts from Other Sources																			
Total Estimated Cash Receipts																			
Estimated Cash Disbursements																			
Capital Expenditures (Investing Activities)																			
Supplemental Power Plant																			
Additional Facility																			
Connection Asset																			
Taxes, Import Duties and Permits																			
Site Development and Piling Works																			
Others																			
Total Capital Expenditures																			
Other Disbursements (i.e., for Research Activities)																			
Payment of Long-term Loans																			
Payment of Interest																			
Payment of Dividends																			
Total Cash Disbursements																			
Net Increase (Decrease) in Cash and Cash Equivalents																			
Add Cash at Beginning of Year																			
Cash Balance at End of Year																			

11/15/21



APPLICATION FOR REGISTRATION ENERGY & ENERGY RELATED PROJECTS

APPLICATION NO.:

DATE ACCEPTED :

LAW: E.O. No. 226:

R.A. No. 9513:

Note: The applicant enterprise hereby elects to be governed by the provisions of the law indicated above, cognizant that such election once made shall be FINAL pursuant to the Memorandum of Agreement entered into in January 2010 between the Department of Energy and the Board of Investments

BOARD OF INVESTMENTS
RESOURCE-BASED INDUSTRIES SERVICE
PROJECT EVALUATION AND REGISTRATION DIVISION
(INDUSTRY DEVELOPMENT SERVICES)

APPLICATION FOR REGISTRATION

RECEIVED

STUDY PROPOSANT

Name of Entity	Masinloc Power Partners Co. Ltd.	
Office Address	Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales	
Telephone No	8459-2600	Fax No. : 8459-2695
SEC/Registration	No: PL200709834	Date: 06/25/2007
Ownership	100 % Filipino	TIN No. : 006-786-124
Authorized Capital	Php	(Nationality)

CURRENT STOCKHOLDERS' PROFILE:

Name	Nationality	Check if Director	Position or Designation in the Enterprise	Capital Stock (PhP)		(%)
				Subscribed	Paid-up	Ownership
SMCGP Masinloc Power Co. Ltd.	Philippines				\$274,862,500	78.53%
Power Ventures Generation Corp.	Philippines				\$137,500	0.04%
SMC Global Power Holdings Corp.	Philippines				\$75,000,000	21.43%
	Total				\$350,000,000	100.00%

Indicate in the Nationality column whether the stockholder is a resident alien, foreigner, or domestic corporation.

Indicate in the Nationality if naturalized Filipino

Schedule 2 CONTACT DETAILS

AUTHORIZED REPRESENTATIVE TO BOI:

Name : Ramon U. Agay **Position :** Authorized Representative

E-Mail Address : ragavin@smcnpb.sanmiguel.com.ph

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By : R. Llesol
Date: 11 V 97

Landline/Cellphone No. : +639178300242

8459-2695

PROJECT PROFILE

Name of Project : 315MW Super Critical Pulverized Coal Thermal Power Plant (Unit 5)
Project Location : Brgy. Bani, Masinloc, Zambales
IPP Year: 2020 Category : Preferred Activities Special Laws Export Activities

Activity as Listed in the IPP : Energy

Specific Products/Services:

Power Generation

Product /Service 2

Product /Service 3

Capacity for BOI Registration:

315 MW

(Maximum Annual Production Capacity, except for power generation activities which should be in MW/kW)

PROJECT DESCRIPTION:

The development and construction of the 1x315 MW Super Critical Pulverized Coal Thermal Power Plant (Unit 5 or the "Power Plant") will be undertaken by MPPCL, with support from the SMCGP group, through its various contractors and its in-house staff. The Project is to be located on the existing site in Barangay Bani, Municipality of Masinloc, Province of Zambales.

Given the country's rapidly growing economy, demand for power will outpace supply in the Philippines in the coming years. The proposed Masinloc Unit 5 power project will help augment the demand for reliable and affordable baseload power supply. The proposed power plant will not only supply enough electricity to Filipino households and businesses but will also contribute to national development.

Moreover, the proposed project will be able to contribute to the country's power requirement with an additional 315 MW (net) capacity by Year 2025, supporting the projected Capacity Additions to the Philippine grid outlined in the Philippine Energy Plan (PEP) of the Department of Energy (DOE).

STATUS OF PROJECT AND APPLICATIONS UNDER DO NO. 06-2016

New: ☒ Expansion: ☐ Modernization: ☐
% Increase in Capacity: ☐

STATUS: Pioneer ☒ Non-Pioneer ☐

Masinloc Unit 5 will be established as a new complete line with new investment in fixed assets and working capital. It aims to contribute to the country's power requirement with an additional 315 MW (net) capacity by Year 2025, supporting the projected capacity additions to the Philippine grid outlined in the Philippine Energy Plan of the Department of Energy. The roads and administrative buildings are shared, but the machinery and equipment of Unit 5 will be completely separate from the existing units including the proposed Unit 4. Likewise, it has a separate interconnection facility to the grid and separate metering will be used.

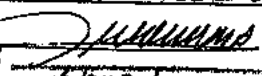
ENERGY SOURCE:

Biomass ☐ Hydro ☐ Wind ☐ Oil ☐
Geothermal ☐ Solar ☒ Coal ☐ Others (Specify) ☐

TYPE OF INVESTMENT:

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By: 
Date: Jan 21

Schedule 5: Project Timetable and Cost (Php)

Activity	Schedule (Month/Year)	Related Expenses	Cost (in Php)
Obtaining licenses, permits, registration	Apr 2020 – Mar 2021	Pre-operating expense	33,662,500
Project site preparation and development <ul style="list-style-type: none">Hiring of contractorsCivil works	Mar 2021-Feb 2023	Land	
		Land improvements	201,928,401
		Building	6,429,867,950
		Leaschold improvements	
		Other expenses	2,656,299,408
Acquisition and installation of machinery & equipment	Mar 2021 – Dec 2023	Machinery & equipment	26,137,428,000
Trial Run	Dec 2023 – Oct 2024	Others	255,099,456
Start of commercial operation	Nov 2024	Working capital (months) ¹	7,900,186,453
Total Project Cost			43,614,472,170

¹ Normally covers the first three (3) to four (4) months of operations.

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By: 

Date: 11 Jan 21

Schedule 6: Project Financing

"ENVELOPE 1-QD-ORIGINAL"

	(Pkr)	Percent (%)
Equity	13,084,341,651	30%
Loan	30,530,130,519	70%
Total	(B) 43,614,472,170	100%

² Total financing should tally with Total Project Cost in Schedule 5

Status of Loan: Not yet drawn

Schedule 7: Projected Production and Sales Schedule (should be consistent with the Projected Income Statements)
(Y1 is first 12 months of commercial operation)

A. For Non-Power Applications, e.g., bio-fuels, etc.

	Production Volume	Sales Volume		Average Selling Price per Unit	
		Domestic	Export	Domestic (Pkr)	Export (US\$)
Y1					
Y2					
Y3					
Y4					
Y5					

³ Indicate unit of measure (e.g., metric tons, liters, etc.)
Note: Projected annual production volume should not exceed the production capacity per year being applied for BOI registration

Assumptions Used in the Projections:

- Total number of shifts per day : _____
- Total number of operating days per year : _____
- Total number of capacity determinant machine : _____

B. For Power Applications

	Capacity (MW)	Production (kWh)	Sales (kWh)	Price (Pkr/kWh)
Y1	2,419,200,000	2,419,200,000		4.8000
Y2	2,419,200,000	2,419,200,000		4.8000
Y3	2,419,200,000	2,419,200,000		4.8000
Y4	2,313,360,000	2,313,360,000		4.8000
Y5	2,305,800,000	2,305,800,000		4.8000

Formula for the Total Rated Capacity (MW): No. of Units x Capacity in MW

Formula for the Production (kWh): Installed Capacity x 24 hours x [365 days - 45 regular outage days]

Formula for the Sales (kWh): Contracted Capacity x 24 hours x [365 days - 30 regular outage days]

C. Carbon Emission Reductions (CERs)

	Carbon Emission Reductions (CERs) (tCO ₂ e)
Y1	
Y2	
Y3	
Y4	
Y5	

Schedule 8: Jobs Generation

	Direct Labor	Indirect Labor	Selling/Admin	Total
Y1	49	14	1	64
Y2	49	14	1	64
Y3	49	14	1	64
Y4	49	14	1	64
Y5	49	14	1	64

(Y1 is first 12 months of commercial operation)

Note : During construction phase, an estimated of 500 personnel will be employed by the selected EPC contractor.

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By: *[Signature]*
Date: *11 Jan 21*

A. For New and Expansion Projects

Description of the Machinery/ Equipment	Spec. II			Country/Source	End-use	Qty or Lot	Unit Cost (P/p)
	Year acquired	Year installed	Year production				
A. Main Plant and Auxiliaries			*	Taiwan/Japan/Korea/ Asia/Europe/USA/ Germany	Generate Electricity	1 lot	22,592,020,000
B. 500KV facility and connection asset			*	Asia/Europe/USA	Deliver power to the grid	1 lot	454,608,000
C. Coal Handling System and Auxiliaries			*	Asia/Europe	Receive and Supply Coal	1 lot	3,090,800,000
D. Others			*		Miscellaneous	1 lot	255,099,456
Total: 26,392,527,456							(A)

* Application or manufacturing stage where the equipment will be used

Schedule 10: Financial Projections (10 Years) - (submit also electronic copy in Excel or word format)

- Projected Income Statements should include Itemized Cost of Sales and Operating Expenses), assuming 30% Corporate Tax Rate
- Should be consistent with Schedule 7 of Form 501;
- Should include the following in the projections: (a) Government share for RE projects (i.e., 1% of Gross Income); (b) ER 1-94 Contribution (i.e., Php 0.01 per kWh of the electricity sales); (c) Real Property Tax; (d) Interest on Loans; (e) Insurance premiums (if any); (f) Permits, Licenses; (g) Other applicable taxes, and other benefits to the government, etc.
- Assumption: Without ITH

Please refer to the Financial Projections herein attached as "Annex 1" assuming the Company is under ITH and "Annex 2" assuming the Company is not under ITH.

Schedule 11: List and Breakdown of Cost of Raw Materials

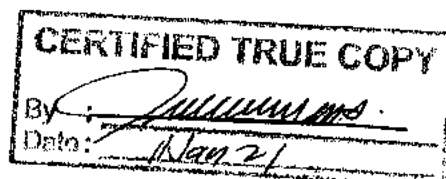
A. For New and Expansion Projects (IF APPLICATION IS UNDER E.O. NO. 226)

a. Local Raw Materials and Direct Labor Cost (Variable O&M)	342,998,189
Sub-Total	342,998,189
b. Imported Raw Materials	3,497,562,779
Sub-Total	3,497,562,779
Total	3,840,560,968
c. Total Overhead Cost	-0-
d. Total Production Cost (a+ b+c)	3,840,560,968

(Provide additional sheet if necessary)

(Y1 is first 12 months of commercial operation)

Note: Assumption is Y1 is under Income Tax Holiday.



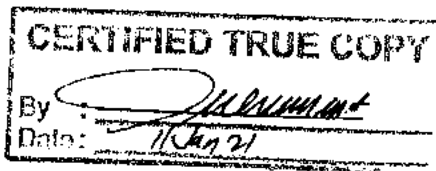
Schedule 13: APPLICABLE ONLY TO ENTERPRISES WITH EXISTING OPERATIONS

"ENVELOPE 1-QD-ORIGII

Actual Production and Sales Schedule (Volume and Value) - Past Three (3) Years Operations*
A. For Power Applications

Year	No. of Generators	Rated Capacity (MW)	Rated Output (MW)	Operating Hours per Year	Production (MWh)	Sales (MWh)	Rate (¢/kWh)	Sales Value (MWh)
2019	2	300	600	15,394	4,599,229	5,817,252	P 4,419	25,707,030,017
2018	2	300	600	14,779	4,270,867	4,773,980	P 5,046	24,093,788,788
2017	2	300	600	15,950	4,475,104	4,834,916	P 4,706	22,753,568,075

*2020 Figures are still being finalized and not yet available as of this filing.



The applicant has read the Omnibus Investment Code of 1987 and the Rules and Regulations adopted by the BOI and commit itself to abide by the provisions thereof.

DEC 17 2020

Done in the City of Mandaluyong this ____ day of December 2020.


RAMON U. AGAY
(Name of Affiant)

REPUBLIC OF THE PHILIPPINES
CITY OF MANDALUYONG

DEC 17 2020

SUBSCRIBED AND SWORN to before me this ____ day of January 2019 affiant exhibiting to me his Passport No. P2129014A issued on March 04, 2017 at DFA Manila, Philippines.

Doc No. : 488
Page No. : 81
Book No. : 1
Series of : 2020


MARIEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4326920; 01/06/20; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLE Compliance No. VI-0018667; 02/18/2019; Pasig City

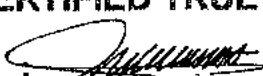
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By 
Date: 17 Jan 21

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Prepared Cash Flow Statement (Pp. 10)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Estimated Cash Receipts:															
From Operating Activities															
Net Income After Tax															
Add back:															
Depreciation															
Interest Expense															
Amortization of Pre-Operating Expense															
Increase (Decrease) in Current Liabilities															
Decrease (Increase) in Non-cash Current Assets															
Total Estimated Cash Receipts from Operating Activities															
From Other Sources:															
Increase in Capital Stock:															
Common															
Preferred															
Total															
Proceeds for Future Stock Subscriptions															
Increase (Decrease) in Long-term Assets															
Proceeds from Bank Loans															
Sale of Non-current Assets:															
Land															
Building															
Machinery, Equipment, and Supplies															
Other Non-current Assets															
Total															
Total Estimated Cash Receipts from Other Sources															
Total Estimated Cash Receipts															
Estimated Cash Disbursements:															
Capital Expenditures (Investing Activities)															
Superconducting Power Plant															
Construction Assets															
Coal Transport and Conveying System															
Taxes, Import Duties and Permit															
Site Development and Filling Works															
Sub Fund															
Others															
Total Capital Expenditures															
Other Disbursements (e.g., for financing activities)															
Payment of Long-term Loans															
Payment of Dividends															
Total Other Disbursements															
Net Increase (Decrease) in Cash and Cash Equivalents															
Add Cash at Beginning of Year															
Cash Balance at End of Year															

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By: *[Signature]*
Date: *1/10/21*

	(0)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Projected Balance Sheet (P/B-BS)		-4	-9	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11
Assets																	
Current Assets																	
Cash and Cash Equivalents		30,000	30,000	2,965,318	918,991	30,000	8,366,160	7,354,088	11,343,596	18,817,415	17,507,303	20,567,140	23,182,446	25,816,808	27,827,122	27,732,817	
Notes and/or Accounts Receivable		-	-	-	-	1,040,758	1,040,758	1,040,758	8,810,753	818,991	1,040,758	1,040,758	1,040,758	818,991	1,040,758	1,040,758	
Inventory		-	-	-	-	818,110	313,927	314,515	815,339	160,274	815,305	314,562	515,170	180,228	316,836	814,641	
Prepaid Expenses		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Current Assets		300	250,873	2,364,816	5,044,916	4,337,278	8,177,825	2,475,414	1,561,878	739,579	40,368	-	-	-	-	-	
Total Current Assets		30,300	250,873	2,965,318	918,991	4,337,278	8,177,825	2,475,414	1,561,878	739,579	40,368	-	-	-	-	-	
Property, Plant, and Equipment		10,190	948,971	4,453,481	3,091,488	5,501,137	6,090,664	11,838,715	34,180,418	16,790,413	38,003,150	31,923,336	24,346,460	26,833,021	38,884,710	29,087,760	
Total Assets		40,490	948,971	2,965,318	918,991	4,337,278	8,177,825	2,475,414	1,561,878	739,579	40,368	-	-	-	-	-	
Liabilities																	
Current Liabilities																	
Notes and/or Accounts Payable (short-term debt)		10,000	16,106	-	-	1,378,317	341,338	342,180	842,300	207,895	341,656	842,018	842,881	207,885	844,457	842,302	
Current Tax Payable		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Current Portion of Long-Term Debt		-	-	-	-	395,201	810,622	728,091	703,319	637,741	819,304	1,378,854	1,378,854	2,372,444	2,000,362	-	
Total Current Liabilities		10,000	16,106	-	-	1,378,317	841,960	1,070,271	1,545,619	1,045,636	1,160,960	1,378,854	1,378,854	2,372,444	2,000,362	-	
Long-Term Liabilities		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Long-Term Liabilities Payable		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other Long-Term Liabilities		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Long-Term Liabilities		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Liabilities		10,000	16,106	-	-	1,378,317	841,960	1,070,271	1,545,619	1,045,636	1,160,960	1,378,854	1,378,854	2,372,444	2,000,362	-	
Stockholders' Equity																	
Capital Stock																	
Preferred																	
Common																	
Reserves																	
Retained Earnings																	
Balance, Beginning		-	-	(6,805)	(106,969)	(797,081)	14,791	2,055,741	4,082,301	6,147,583	2,844,341	8,778,749	11,993,120	14,276,078	16,828,077	18,457,444	
Add: Net Income After Tax		-	(6,108)	(106,797)	(298,173)	471,871	3,030,452	3,036,857	3,064,866	1,797,148	1,628,436	1,628,436	2,377,856	2,645,000	2,337,407	2,578,061	
Less: Dividends		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Balance, Ending		-	(6,108)	(106,902)	(298,173)	471,871	3,030,452	3,036,857	3,064,866	1,797,148	1,628,436	1,628,436	2,377,856	2,645,000	2,337,407	2,578,061	
Total Stockholders' Equity		30,490	932,865	2,965,318	918,991	4,337,278	8,177,825	2,475,414	1,561,878	739,579	40,368	-	-	-	-	-	
Total Liabilities and Stockholders' Equity		40,490	948,971	2,965,318	918,991	4,337,278	8,177,825	2,475,414	1,561,878	739,579	40,368	-	-	-	-	-	

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By: 

Date: 11 Jan 21

Projected Balance Sheet (Figs in)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Assets															
Current Assets															
Cash and Cash Equivalents	30,000	10,000	2,045,836	916,993	10,000	3,365,350	7,254,000	11,762,586	15,307,625	17,907,003	20,567,140	23,182,444	25,846,806	28,507,120	31,172,877
Notes and/or Accounts Receivable	-	-	-	-	1,046,753	1,046,753	2,046,753	3,046,753	4,046,753	5,046,753	6,046,753	7,046,753	8,046,753	9,046,753	10,046,753
Inventory	-	-	-	-	313,110	313,110	313,110	313,110	313,110	313,110	313,110	313,110	313,110	313,110	313,110
Prepaid Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Current Assets	100	100	2,346,885	3,064,816	4,132,225	5,777,825	7,415,414	9,053,003	10,690,592	12,328,181	13,965,770	15,603,359	17,240,948	18,878,537	20,516,126
Total Current Assets	30,100	10,100	4,392,721	3,981,809	15,355,078	27,595,038	38,594,863	50,188,962	62,984,080	76,233,259	89,992,432	103,751,605	117,510,778	131,269,951	145,029,124
Property, Plant, and Equipment	30,800	30,800	4,452,411	5,968,498	5,301,137	8,905,884	11,116,713	14,380,419	16,790,419	19,200,419	21,610,419	24,020,419	26,430,419	28,840,419	31,250,419
Total Assets	60,900	40,900	8,845,132	9,950,307	20,656,215	36,500,922	49,705,576	64,569,381	79,774,499	95,433,678	111,602,851	128,182,024	143,941,197	160,110,370	176,279,547
Liabilities															
Current Liabilities															
Notes and/or Accounts Payable (short-term debt)	10,000	14,104	-	-	1,275,517	841,388	841,388	841,388	841,388	841,388	841,388	841,388	841,388	841,388	841,388
Income Tax Payable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current Portion of Long-term Debt	-	-	-	-	305,801	610,802	715,802	715,802	715,802	715,802	715,802	715,802	715,802	715,802	715,802
Total Current Liabilities	10,000	14,104	-	-	1,581,318	1,452,190	1,557,190	1,557,190	1,557,190	1,557,190	1,557,190	1,557,190	1,557,190	1,557,190	1,557,190
Long-term Liabilities															
Long-term Debt Payable	-	-	12,112,052	18,918,081	30,234,825	39,614,127	49,993,429	59,372,731	68,752,033	78,131,335	87,510,637	96,889,939	106,269,241	115,648,543	125,027,845
Other Long-term Liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Long-term Liabilities	-	-	12,112,052	18,918,081	30,234,825	39,614,127	49,993,429	59,372,731	68,752,033	78,131,335	87,510,637	96,889,939	106,269,241	115,648,543	125,027,845
Total Liabilities	10,000	14,104	12,112,052	18,918,081	31,819,143	49,228,317	60,546,617	70,920,920	81,295,223	91,669,526	102,043,829	112,418,132	122,792,435	133,166,738	143,541,041
Stockholders' Equity	50,900	26,796	26,733,080	26,733,080	18,837,072	27,272,605	38,968,259	49,648,461	59,489,276	69,330,093	79,170,910	89,011,727	98,852,544	108,693,361	118,534,178
Capital Stock															
Preferred	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common	50,900	26,796	26,733,080	26,733,080	18,837,072	27,272,605	38,968,259	49,648,461	59,489,276	69,330,093	79,170,910	89,011,727	98,852,544	108,693,361	118,534,178
Retained Earnings															
Balance, Beginning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Add: Net Income after Tax	-	-	14,300	146,902	137,091	34,791	2,053,349	4,081,200	6,147,163	7,644,833	9,773,749	11,902,665	14,031,581	16,160,497	18,289,413
Less: Dividends	-	-	(6,300)	(100,797)	(190,119)	(213,872)	(1,050,452)	(2,028,937)	(2,968,966)	(3,908,995)	(4,848,924)	(5,788,853)	(6,728,782)	(7,668,711)	(8,608,640)
Balance, Ending	50,900	26,796	17,977,480	16,739,185	18,837,072	27,272,605	38,968,259	49,648,461	59,489,276	69,330,093	79,170,910	89,011,727	98,852,544	108,693,361	118,534,178
Total Stockholders' Equity	50,900	26,796	26,733,080	26,733,080	18,837,072	27,272,605	38,968,259	49,648,461	59,489,276	69,330,093	79,170,910	89,011,727	98,852,544	108,693,361	118,534,178
Total Liabilities and Stockholders' Equity	60,900	40,900	43,845,132	45,651,387	50,495,287	76,773,527	109,515,085	140,174,341	169,263,775	195,463,771	221,664,769	248,194,161	274,723,551	301,252,941	327,782,335

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By: [Signature]

Date: 11 Jan 21

**ANNEX QD-2(e)
Explanation**

20 January 2021

Manila Electric Company
Philippines

Subject: **Commercial Operations Date of the Nominated Power Plant**

Gentlemen:

On behalf of Masinloc Power Partners Co. Ltd. (the "Company"), we note that the commercial operations dates of the Nominated Power Plant (Unit 4 and Unit 5) of the Company as stated in its applications filed with the Board of Investments (BOI) are different from the target completion date stated in Annex QD-1A.

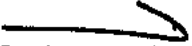
This difference is not relevant considering that the BOI will reckon the commencement of the incentives to be granted to the Company from either the dates indicated in the applications or actual start of commercial operations, whichever is earlier. Hence, once the Nominated Power Plant commences commercial operations on the target completion date indicated in Annex QD-1A submitted to the Third Party Bids and Awards Committee, the Company may commence availment of the incentives granted by the BOI.

Thank you.

20 January 2021, Mandaluyong City.

For and on behalf of Masinloc Power Partners Co. Ltd.

By:


Paul Bernard D. Causon
Authorized Representative

CERTIFICATION
Attachment (10) to ANNEX TP-1

ANNEX " Q "

I, **JULIE ANN B. DOMINO-PABLO**, of legal age, Filipino and with office address at the 19th floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City 1550, after being duly sworn in accordance with the law, hereby certifies as follows:

1. I am the corporate secretary of **MASINLOC POWER PARTNERS CO. LTD.**, a partnership incorporated under the laws of the Republic of the Philippines, whose registered office is at Masinloc Coal-Fired Thermal Power Plant, Brgy. Bani, Masinloc, Zambales, (the "Partnership").
2. The attached copy of the Partnership's application for an Environmental Compliance Certificate with the Department of Environment and Natural Resources (DENR) for the Nominated Power Plant, duly received by the DENR on 28 December 2020 pursuant to the Acceptance to Proceed with the Substantive Review issued by the DENR, and consisting of thirty-one (31) pages is the complete, true and faithful reproduction of the original document.
3. We are executing this Certification to attest to the truth of the foregoing and in compliance of requirements under the Instructions to Prospective Bidders issued by Manila Electric Company for the 1800MW (net) Contract Capacity.

For and on behalf of **MASINLOC POWER PARTNERS CO. LTD.**


JULIE ANN B. DOMINO-PABLO
Corporate Secretary

SUBSCRIBED AND SWORN TO before me this 20th day of January 2021 at Mandaluyong City, affiant exhibiting to me her Philippine Passport No. P3581210A issued in DFA Manila on 5 July 2017.

Doc. No. 131;
Page No. 28;
Book No. 11;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLC Compliance No. VI-0018687; 02/18/2019; Pasig City



December 28, 2020

MR. MAR TUAZON
Plant Manager
Masinloc Power Partners Co. Ltd.
19th Floor San Miguel Properties Center
No. 7 St. Francis Ave., Mandaluyong City, Metro Manila
mrtuazon@mppcl.sanmiguel.com.ph

Subject : Acceptance to Proceed with the Substantive Review of the Environmental Performance Report and Management Plan (EPRMP) of the Masinloc Power Plant (Unit 4 Increase in Capacity and Unit 5) Expansion Project

Dear Mr. Tuazon:

Please be informed that the Environmental Performance Report and Management Plan (EPRMP) submitted for procedural screening for the Masinloc Power Plant Project (Unit 4 Increase in Capacity and Unit 5) Expansion Project has been accepted for Environmental Impact Assessment (EIA) substantive review.

Hence, you are advised to pay the EIA review support fund (ERSF) and processing fees pursuant to the revised Procedural Manual for DENR Administrative Order 2003-30. The proponent shall shoulder the cost related to the review of the EIS through a Memorandum of Agreement (MOA) with the UP Planning and Development Research Foundation, Inc. (UP PLANADES), the EMB Fund Manager. Attached as ANNEX A is the Estimated Review Support Fund (ERSF) and the draft UP PLANADES MOA. Please contact Ms. Ruby Gunabe at 0926 032 2234 or (02) 8927 4797 of the UP PLANADES for the processing of the document. The photocopy of the UP PLANADES Official Receipt shall be submitted to the EIAMD, this Office for the issuance of the Order of Payment for the processing fee to be paid at the Cashier, this Office.

The following is the proposed schedule of the EIA Substantive Review Process as per MC 2010-14 which covers the forty (40) working days processing period on the assumption that the project proponent will provide the necessary information within the specified period, otherwise will cause the automatic return of the application as provided in the DAO:

Proposed/Tentative Schedules	Activities
Day 1	Payment of ERSF, EMB Processing Fees and submission of EPRMP for review
Day 5	1st EIARC Meeting thru Video Conference
Day 10	Proponent submission of Additional Information and EPRMP
	Posting of EIA document for comments/feedback from general public
	<i>Note: Failure to submit AI within the five (5) working days period shall cause automatic RETURN of ECC application</i>

Proposed/Tentative Schedules	Activities
Day 25	Conduct of Public Hearing (following the Interim Guidelines for the alternative modes of Public Participation)
Day 26	Proponent submission Public Hearing Proceedings
Day 30	2nd EIARC/Final Meeting with Recommendation via Video Conference
Day 33	Submission of EIARC Chairman' Report
Day 35	Preparation of Complete Staff Works
Day 38	EMB Director Endorsement of ECC Application to DENR Secretary
Day 40	Decision on the ECC application upon issuance of Clearance from the DENR Secretary
	Release of ECC upon signing of the Accountability Statement

For clarification and guidance, you may coordinate with the project case handlers Engr. Dexter Tabada (dexter_tabada@emb.gov.ph) and Engr. Joel Polintan (joel_polintan@emb.gov.ph) through email or telephone nos. 8920-2240 to 41.

For information and guidance.

Very truly yours,


ENGR. WILLIAM P. CUÑADO
OIC-Director

Cc: For. Ryan Filiberio Botengan – botenganryan@gmail.com
RHR Consult Services, Inc. – jess.addawe@gmail.com



IIS No.: CO-2020-038885

Protect the environment... Protect life...

"ENVELOPE 2-TP-ORIGINAL"
EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ☐ th Screening

Date Submitted for Screening: December 18, 2020
 Form of Submission: ☐ Hard ☐ Digital
 Project Title: Masinloc Power Plant Project (Unit 4 Increase In Capacity and Unit 5 Expansion)
 Project Location: Brgy. Bani, Masinloc, Zambales
 Project Proponent: Masinloc Power Partners Co. Ltd.
 Authorized Representative: Mar Tuazon
 Address: 19th Floor San Miguel Properties Center, No. 7 St. Francis Ave., Mandaluyong City, Metro Manila
 Contact No: +6347 3074033 Fax No: mrtaazon@mppcl.sanmiguel.com.ph Contact Person:
 EIS Consultant: RHR Consult Services, Inc
 Address: Unit 606, FSS Bldg. II, 18 Scout Tuason cor. Scout Castor, Brgy. Laging Handa, Diliman, Quezon City
 Contact No: 798-0020 Fax No: botenganryan@gmail.com Contact Person: Ryan Filiberto P. Botengan
 Project Category & Type (based on Annex A of MC 2014-005 Guidelines): Category A: Thermal Power Plant
 Project Size (use parameter in Annex A of MC 2014-005 Guidelines): 1578 MW

Project Status (Please Check):

☐ New Project

☒ Existing Year of Establishment:

With Previous ECC? (Please check) ☒ Yes ☐ No

If with Previous ECC, Date/s of Issuance and Reference Code/s: *(List in chronological order)*

Date/s of Issuance:	Reference Code/s:
<u>April 23, 2012</u>	<u>ECC-CO-1111-0020</u>
<u>December 18, 1992</u>	<u>ECC-CO-9009-049-206</u>

Date of Technical Scoping: December 4, 2020

Venue of Technical Scoping: Video conference via Microsoft Teams

Table 1. Checklist of Documentary Requirements

Boxes and blanks in the first column are to be filled-up during scoping and the rest, upon submission of EIS for screening

	Acceptable?		Screening Officers' Remarks
	Yes	No	
Check required EIA Report ¹ ☐ Environmental Impact Statement (EIS) ☒ Environmental Performance Report and Management Plan (EPRMP) <i>(include photographs or plates of project site, impact/affected areas and communities and land-use plan showing compatibility of the proposed project)</i>	✓		
Proof of Authority over the Project Site ☐ TCT ☒ Lease Agreement ☒ Others: Resiliency Compliance Plan	✓		
Accountability Statements of Preparers & Proponent (see Annexes 2-21 & 2-22 of Revised Procedural Manual for DAO 2003-30)			
Duly Accomplished Project Environmental Monitoring & Audit Prioritization Scheme (PEMAPS) Questionnaire (see Annex 2-7d of Revised Procedural Manual for DAO 2003-30)	✓		
For EPRMP, Copy of previous ECC	✓		
For EPRMP, Proof of compliance in the submission of monitoring reports for the past 3 years (SMR, CMR, CMVR)	✓		

¹ Please refer to attached checklist of EIS/EPRMP Contents

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ____th Screening

--	--	--	--

ACTION TAKEN: (Please check to indicate corresponding action taken)

- ☒ Document accepted; please submit ____ copies
- ☐ Document not accepted


Dexter Tabada
Screening Officer
Division

NOTED BY: 
Engr. Regina Paula Eugenio, EnP / Engr. Esperanza Sajul
Section/Division Chief

EMB Office
Screening Office

Date: December 22, 2020

75

**EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)**

☐ 1st ☐ 2nd ☐ 3rd ____th Screening

Table 2. EIS/EPRMP Annotated Outline

Sections / Subsections	Content	Page #	Acceptable?	REMARKS
Executive Summary (maximum of 10 pages)				
Project Fact Sheet	Summary of Project Description (For EPRMP, include comparative matrix of the existing project components vis-à-vis the proposed changes)		Yes	
Process Documentation	Documentation of the process undertaken in the conduct of EIA (EIA Team, EIA Study Schedule & Area, description of key EIA Methodologies including sampling and measurement plan, Scoping and Public Participation)		Yes	
EIA Summary	<ul style="list-style-type: none"> Summary of alternatives considered in terms of siting, technology selection/operation processes and design Concise integrated summary of the main impacts and residual effects after applying mitigation Risks and uncertainties relating to the findings and implications for decision making 		Yes	
1. Project Description Include as an introduction, basic information about the project and project proponent				
1.1 Project Location and Area <i>For EPRMP, discussions should be in the context of the proposed modification/changes</i>	a) Map showing sitio, barangay, municipality, province, region boundaries, vicinity, proposed buffers surrounding the area and Primary & secondary impact areas		Yes	
	b) Geographic coordinates (shape file data) of project area (use WGS 84 datum - GPS setting)		Yes	
	c. Describe the vicinity and the accessibility of the project site/area		Yes	
1.2. Project Rationale <i>For EPRMP, discussions should be in the context of the proposed modification/changes</i>	<ul style="list-style-type: none"> Cite and focus on the need for the project based on national and regional/local economic development in terms of contribution to sustainable development agenda or current development thrusts. Describe the justification for the Project with particular reference made to the economic and social benefits, including employment and associate economic development, which the project may provide. The status of the project should be discussed in a regional and national context. 		Yes	
1.3. Project Alternatives <i>For EPRMP, discussions should be in the context of the proposed modification/changes</i>	<p>a) Cite criteria used in determining options for facility siting, development design, process/technology selection, resource utilization and discuss how the decisions on preferred options were made.</p> <p><u>Siting</u>: Alternative project locations including factors significant to the selection such as severity of impacts, perception of affected communities with regards to project, ancestral domain issues, land classification, etc. Discuss other options on the siting of major components of the project within the project area. Discuss alternative location of haul roads/access roads.</p> <p><u>Technology Selection/Operation Processes and design</u></p> <p><u>Selection for storage</u>: Alternative technologies, operation processes, and measures to minimize wastes, prevent adverse impacts such as air and water pollution, groundwater and land contamination, and for the prevention/control of emergency events (eg. fire, explosion, leaks, spills) including factors significant to the selection.</p>		Yes	

76

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ____th Screening

Sections / Subsections	Content	Page #	Acceptable?	REMARKS
	Resources: Alternative sources of power, water, raw materials and other resources needed including factors significant to the selection such as supply sustainability and climate change projections <i>Likewise contextualize the determination of preliminary options in terms of project site factors significant to the selection such as supply sustainability and susceptibility to:</i> <ul style="list-style-type: none">• Liquefaction, Ground Shaking, Ground Rupture, Earthquake induced Landslides Volcanic eruptions, tsunami (PHIVOLCS)• Rain-induced landslide and flooding (MGB)• Storm surge, and flooding as well as extreme climatologic conditions (PAGASA)			
	b.) Summarize and discuss the comparison of environmental impacts of each alternative for facility siting, development design, process/technology selection, resource utilization		Yes	
	c) Discuss the consequences of not proceeding with the project or no project option		Yes	
1.4 Project Components <i>For EPRMP, discussions should be in the context of the proposed modification/changes; boundaries of current project area should be delineated from the proposed expansion area, if any</i>	a) General layout of facilities;		Yes	
	b) Maps showing in particular, the location and boundaries of project area, location and footprint of main facilities, storage and support facilities, and proposed buffers.		Yes	
	c) Identification of major components including technical details such as specifications, capacity, number, etc.), including the cooling water system <ul style="list-style-type: none">• Specify the operations and process		Yes	
	d) Identification and description of support facilities and infrastructure requirements such as energy/power generating facility (if any) or energy source, water supply/storage, storm water drainage, sewerage, telecommunications, safety devices/emergency facilities, accommodation and similar facilities		Yes	
	e) Identification and description of pollution control devices and waste management system for the waste materials: wastewater, air emissions, domestic wastes, toxic and hazardous wastes, non toxic and non hazardous wastes, etc. Engr. Del Socorro: Please identify list of components of APSI and/or if with APCD to be used in tabulation form. (for apple-apple approach) Please discuss selection of APSI &APCD technology and advantages.		Yes	
1.5. Process/ Technology <i>For EPRMP, include discussion/comparison of existing and proposed</i>	a) Technology Description and Performance Specifications <ul style="list-style-type: none">o Include process flow-sheets for the operations and the anticipated rates of inputs, wastes and recycle streams		Yes	
	c) Description of the pollution control devices and waste management system		Yes	

77

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ___th Screening

Sections / Subsections	Content	Page #	Acceptable?	REMARKS
modifications or expansion	d) Description of the operations and maintenance of facility		Yes	
1.6. Project Size For EPRMP, include discussion/comparison of existing and proposed modifications or expansion	a) Total power generating capacity, filter plant capacity, and port capacity and dimension		Yes	
	b) Total Project Area in sq.m. or hectares		Yes	
1.7. Development Plan, Description of Project Phases and Corresponding Timeframes For EPRMP, discussions should be in the context of the proposed modification/changes	<p>Phases to be described in terms identifying specific activities (w/ special attention on those with significant environmental impacts as well as climate change adaptation options relevant to the project and project activities) and corresponding projected implementation timeframes:</p> <ul style="list-style-type: none"> • Pre-construction (e.g. planning, acquisition of rights to use land, etc.) • Construction (e.g. land/site clearing, temporary housing, transport of materials, health and other services for the workforce, discussion of temporary facilities including the progress of works/milestones and the number workers required per milestones) <p>For construction and operations phase: Identify List of Combustion (eg. Super Critical PC Boiler) and Non-Combustion (eg. Silo, Conveyors, Stock Yards, etc.) Air Pollution Source Equipment as Sources of Dust and Gaseous Emission from the based on Spatial construction and operation schedule.</p> <p>Geotag areas of air pollution sources, APCD (eg. ESP) and stack projected in Maps such as Google Earth in UTM coordinates E.g. Stack, etc. - Engr. Del Socorro</p> <ul style="list-style-type: none"> • Operation (projected period of start-up/commissioning/full operation of various project components) include discussion on the operation of various components (as identified above) in terms of raw materials, fuel requirements, waste management and infrastructure requirements • Decommissioning/Abandonment/Rehabilitation <ul style="list-style-type: none"> - projected life of the project and alternatives for the future use of the project area which should be consistent with long term zoning and land use development plan of the municipality; - Abandonment Plan (general) to include management plan for the projected cumulative/long term project impacts such as remediation of contaminated soil and water resources, land restoration, proper dismantling/abandonment of facilities/ equipment and other necessary activities 		Yes	
1.8. Manpower	<p>Tabulate the following per project phase (pre-construction, construction, operation and maintenance):</p> <ul style="list-style-type: none"> • manpower requirements; • expertise/skills needed; • nature & estimated number of jobs available for men, women, and indigenous peoples (if in IP ancestral land); • scheme for sourcing locally from host and neighboring LGUs 		Yes	

78

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ____th Screening

Sections / Subsections	Content	Page #	Acceptable?	REMARKS												
1.9. Project Cost	Indicative Project Investment Cost (Philippine Peso)		Yes													
2. Assessment of Environmental Impacts	<p>See Table 3 for the list of key environmental impacts which shall be subjected to assessment. The assessment shall done using the prescribed approach/method and in relation to the corresponding baseline characterization in the primary and secondary impact areas (as determined using the Guidelines in Annex 2-2 of the Revised Procedural Manual (RPM) for DAO 2003-30 or succeeding issuances). The sampling and measurement plan used shall be discussed. Likewise, the assessment should be done for the various phases of development (i.e. pre-construction, construction and operation) and should consider climate change projections and disaster risks based on existing natural hazard information. <u>For all maps</u>, include overlays of project area footprint, show sensitive/critical receptors and sampling points for baseline data (indicate geographical coordinates). In conclusion, the residual and cumulative impacts shall be assessed.</p> <p>For EPRMP, the result of the proponent's monitoring shall be used as baseline. The assessment of environmental impacts of proposed modification shall be discussed in relation to the actual impacts of existing project operations which shall be presented from a summary of the results of compliance monitoring (in matrix and graphical form) as described in 6.1.</p>															
3. Environmental Management Plan	<p>Appropriate mitigation/management measures should be specified for each of the identified key impacts (Table 3). Appropriate climate change adaptation and disaster risk reduction measures/options shall likewise be thoroughly discussed. The impact management plan should be summarized using at the minimum, the format in Annex 2-17 of RPM for DAO 2003-30</p> <p>For EPRMP, the proposed impact management plan to be discussed shall consider review of performance of existing project based on the Environmental Quality Performance Levels (EQPLs) set. Also include change in adaptation measures / options and remediation of contaminated soil and water resources, land restoration proper dismantling, if any.</p> <p>IMP Include all aspects of Air Pollution Sources (Point, Area, Volume, Line, etc.) Preventive maintenance schedule, activity & frequency per APCD as part of the discussion of mitigating measures. E.g. frequency of replacement of filter bags, etc. Mitigation, sequestration program, dust and gaseous control, vegetation (quantify area, number of trees). Consider contingency, realistic Survival Rate of vegetation. -Engr. Del Socorro</p> <table border="1"><thead><tr><th>Project Activities</th><th>Potential Impacts</th><th>Proposed Mitigating Measures</th><th>Performance / Target Efficiency</th></tr></thead><tbody><tr><td>Construction</td><td></td><td></td><td></td></tr><tr><td>Operation</td><td></td><td></td><td></td></tr></tbody></table>	Project Activities	Potential Impacts	Proposed Mitigating Measures	Performance / Target Efficiency	Construction				Operation					Yes	
Project Activities	Potential Impacts	Proposed Mitigating Measures	Performance / Target Efficiency													
Construction																
Operation																
4. Environmental Risk Assessment (ERA) & Emergency Response Policy and Guidelines	<p>The level of coverage and type of document required shall first be determined based on Annex 2-7e of RPM for DAO 2003-30.</p> <p>For EPRMP, discuss status of implementation of the safety policies/guidelines and any proposed changes. Include last three (3) years of safety statistics. Also include incidence such as spills, near spills and similar incidents such as accidents and emergency. Discuss actions taken.</p>			79												

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

"ENVELOPE 2-TP-ORIGINAL"

☐ 1st ☐ 2nd ☐ 3rd ____th Screening

Sections / Subsections	Content	Page #	Acceptable?	REMARKS
See Table 4 for details				
5. Social Development Program/Framework (SDP) and IEC Framework For EPRMP, discussion should focus on the status of implementation of SDP and IEC commitments. Discuss adjustments that should be undertaken.				
5.1 Social Development Program (SDP)	Community development or livelihood programs/activities, projected beneficiaries, partner institutions, timeframe of implementation as well as source and amount allotted per activity/component (See Annex 2-18 of RPM for DAO 2003-30)		Yes	
5.2. Information and Education Campaign (IEC)	Target sector, key messages, scheme/strategy/methods, information medium, timelines and frequency, cost (See Annex 2-19 of RPM for DAO 2003-30)		Yes	
6. Environmental Compliance Monitoring				
6.1 Environmental Performance (for EPRMP only)	<ul style="list-style-type: none"> • Results of compliance monitoring in matrix and graphical form showing and explaining the trend in environmental conditions • Analyze performance based on the Environmental Quality Performance Levels (EQPLs) set • Discuss compliance to ECC conditions and performance against the originally approved Environmental Management and Monitoring Plan, MMT requirements/commitments, third party audits (if any) • Discuss implementation of appropriate and effective environmental impact remedial actions in case of exceedances • Discuss operationalization of complaints management system 		Yes	
6.2. Self-Monitoring Plan	The monitoring plan shall be summarized using Annex 2-20 of RPM for DAO 2003-30 or succeeding issuances as template. For EPRMP, the original and proposed additional/changes in sampling sites/stations shall be discussed and shown in map/s. Proposed reduction in or additional parameters especially for air and water shall likewise be identified. The proposed changes in parameters and/or sampling stations which shall be based on the results of the impact assessment reported in Chapter 2 shall be discussed in this section.		Yes	
6.3. Multi-Sectoral Monitoring Framework	Discussion on the necessity of creating a Multi-Partite Monitoring Team (MMT). Describe the proposed scope of MMT responsibilities and activities and tabulate the list of proposed stakeholder-members of the MMT, basis of selection and proposed role. (See Annex 3-4 of the RPM for DAO 2003-30).		Yes	

80

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

☐ 1st ☐ 2nd ☐ 3rd ___th Screening

Sections / Subsections	Content	Page #	Acceptable?	REMARKS
6.4 Environmental Guarantee and Monitoring Fund Commitments	<ul style="list-style-type: none">• Discussion on the necessity of putting up an EGF. Present a proposed amount of EGF indicating the basis for the estimate (per guidelines in annex 3-6 of RPM for DAO 2003-30)• Present a proposed amount of EMF (based on a draft AWWP in following the format in Annex 3-4 and consistent with guidelines in Annex 3-5 of RPM for DAO 2003-30);		Yes	
7. Decommissioning / Abandonment / Rehabilitation Policy	<p>Statement on Proponent's policies to implement the abandonment plan described in Item 1.7 and to formulate and submit procedures for Rehabilitation/ Decommissioning/Abandonment within a timeframe specified in the ECC.</p> <p>For EPRMP, present approved plan/program, if any, and proposed changes.</p>		Yes	
8. Institutional Plan for EMP Implementation	<p>Present the organizational scheme of the proponent including line of command and reporting procedures as well as manpower complement and relationships with other operating departments.</p> <p>For EPRMP, discuss status of implementation and any proposed changes in the plan to cover modification/expansion if any.</p>		Yes	

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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Table 3. Key Environmental Impacts to be included in the Assessment and Formulation of Management and Monitoring Plan to be reflected in the EIS/EPRMP

List of Key Impacts		Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	✓ For completeness during procedural screening; page numbers should be provided upon submission of the EIS/EPRMP				Remarks	
				Baseline Conditions	Impact Analysis	Mgmt. Plan	Monitoring Plan		
				Page	Page	Page	Page		
I. Land									
1.1. Land Use and Classification									
1.1.1 Impact in terms of compatibility with existing land use		Description & Map showing the project area in relation to existing land use.	Assessment of the compatibility of the proposed project vis-a-vis actual land use and the approved comprehensive land use plan/zoning classification, ECA Classification and/or the coastal resource management plan of the LGU if any.						Acceptable
1.1.2 Impact on compatibility with classification as an Environmentally Critical Area (ECA)		Identify ECA where the project is located or near the project area. Identify areas vulnerable/susceptible to natural hazards where the project is located or near the project area (include map/s).							Acceptable
1.1.3 Impact in existing land tenure issue/s		Determine if the project area is under CAPP or with CADCI / CADI / CALCI / CALT, with IFMA/CBFMA, within COC, within MPSC or other tenurial instruments and identify corresponding existing tenure issues including presence of informal settlers.	Identify and assess impact in terms of land tenure issues in relation to project implementation						Acceptable
1.1.4 Impairment of visual aesthetics		Visually significant landscape/structures	Identify and assess impact of the project on these visually significant landscape/structures						Acceptable
1.1.5 Devaluation of land value as a result of improper solid waste management and other related impacts		Existing solid waste management and related land management scheme in the area	Identify and assess impacts of the estimated generation of solid wastes and other related issues on the existing management scheme						Acceptable
1.2 Geology/Geomorphology									

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan	
			Page	✓	Page	✓	Page	✓		
1.2.1 Change in surface landform/geomorphology/ topography/ terrain/slope	Slope and Elevation/Topographic Map;	Identify and assess project impact in terms of the changes in surface landform/topography/terrain/slope including existing hazard as maybe aggravated by climate change as projected by PAGASA							✓	Acceptable
1.2.2 Change in sub-surface geology/underground conditions	Regional/General Geological Map Natural Hazard Map (sub surface)	Identify and assess project impact in terms of the changes in sub-surface geology and inducement of subsidence, liquefaction, landslides, mud/debris flow to the environment including the possibility of aggravating existing natural hazards								
1.2.3 Inducement of subsidence, liquefaction, landslides, mud / debris flow, etc.	Geological Map as needed.; hazard maps (NAMRIA, NDRRMC, MGB, PHIVOLCS, PAGASA)	Discuss and assess the impacts of geologic hazards and planned earthworks on the project facilities (e.g., landslides, mudflows, subsidence, ground shaking from earthquake, liquefaction, flooding, etc.). Note in the discussion how climate change can aggravate the hazards and impacts. The geologic hazards map must consider the hazards/exposure/vulnerability/ risk maps of Section 1.1.2.								
1.3 Pedology										Acceptable
1.3.1 Soil erosion / Loss of topsoil/overburden	<ul style="list-style-type: none">• Summary of Soil Investigation Report on soil type and quality• Soil map showing soil types, sampling stations, topography, streams, built-up areas, and planned project features	<p>Describe capability of the land to accommodate the proposed development with minimal or without soil erosion/loss of topsoil/overburden</p> <p>Describe the physical properties and erodibility potential of the soil, ongoing</p>								

EISEPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping: Unless otherwise specified as agreed during scoping, all items listed are required. Write specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening: page numbers should be provided upon submission of the EISEPRMP						Remarks		
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan	
			Page	✓	Page	✓	Page	✓	Page	✓
	<ul style="list-style-type: none"> • Water and wind erodibility potential • Sediment sources, and • Riverbank stability 	erosion processes and assess the erosional impacts of the project. The Universal Soil Loss Equation (USLE) and its variants may be used in the modeling.								
1.3.2 Change in soil quality/fertility	Laboratory results on soil sample analysis for N, P, K, pH, organic matter, micronutrients and trace metals e. g. Pb, Hg, As, Cd, Cr hexavalent, etc.	Assess the impact of the project activities including the possibility of spills on soil quality and fertility								Acceptable
1.4 Terrestrial Ecology										
1.4.1 Vegetation removal and loss of habitat	<ul style="list-style-type: none"> • Map showing land cover, sampling sites, location of observed important, endangered, and keystone species; ecologically sensitive sites; planned land development works • Flora and fauna species inventory or survey report to cover species listing, abundance, richness, dominance, diversity, evenness, ecological status, and uses; • Historical occurrences of pest infestation, forest/grass fire and/or similar incidences 	To establish baseline, - Use quadrat sampling for flora to cover all land cover types - Use transect walk - mist nets, traps, for fauna - show survey locations in a map Identify and assess project impacts in terms of the the following: 1. Habitat loss or degradation - Land clearing, river damming, etc. will result in the loss of habitat. Some activities may lead to the alteration of habitat composition, structure or function. Some habitats, e.g., wetlands, are critical to ecological processes or endangered species. 2. Habitat fragmentation - This is the break-up of the natural landscape into small patches isolated from one another. It affects the number of species present, movement of							Acceptable	
1.4.2 Threat to existence and/or loss of important local species	Summary of endemicity / conservation status									Acceptable
1.4.3 Threat to abundance, frequency and distribution of important species	<ul style="list-style-type: none"> • Summary of abundance, frequency and distribution • Economic importance and uses of significant flora and fauna 									Acceptable

EISEPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
1.4.4 Hindrance to wildlife access	Survey map in relation to the project site	species, and transfer of materials among habitats. 3. Loss of species – Of special interest are the keystone, endangered, and endemic species. 4. Pollution effects on species – The stressors include dust, noise, chemical/ petrochemical spills, eroded sediment, increased temperature, etc. Relate discussions to estimated GHG emissions and possible carbon sequestration program/s									Acceptable
2. THE WATER											
2.1 Hydrology/Hydrogeology											
2.1.1 Change in drainage morphology / inducement of flooding/ Reduction in stream volumetric flow	Drainage map (also showing local drainage system/infrastructure); Historical flooding/drought occurrences; stream flow measurements/estimates; Delineation of watershed /sub-watersheds/ floodplain; and identification of aquifers if any	Identify and assess project impact on the change in drainage morphology/local drainage system and resulting effects of flooding pattern in the project area and surrounding. Include climate projections effects on flooding. Relate discussions to item 3.1.1									Acceptable
2.1.2 Change in stream, lake water depth	Regional hydrogeological map	Identify and assess project impact in terms of change in stream, lake water depth									Acceptable

EIS/EPMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
2.1.3 Depletion of water resources / competition in water use	Current / projected water use (groundwater/surface water) in the area and adjacent areas Inventory of water supply source including springs and wells(indicate depth of water table) and show location in a map of appropriate scale	Identify and assess project impact on the existing water resources and the resulting competition in the water use using analysis/estimation of water availability. Include discussions taking into consideration the PAGASA medium to long term projections Conduct water balance to determine the increase in the make-up cooling water requirements due to increase capacity of Unit 4 and the operation of new Unit 5. -Engr. Maestrecampo									Acceptable
2.2 Oceanography (applicable to projects with jetty/port and/or subsea structures that will change the bathymetry in the area)											

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
2.2.1 Change/disruption in water circulation pattern, littoral current, coastal erosion and deposition	<ul style="list-style-type: none">Bathymetric survey and mapMeasurement of water currentsAnalysis of available proximate tides dataHydrodynamic modelingParticle dispersion modeling and mapStorm surge hazard, exposure, vulnerability, risk maps	<p>Identify and assess project impact on the degree of change/disruption of circulation pattern and the potential for coastal erosion</p> <p>Build a hydrodynamic model based on the measured bathymetry and currents and tidal analysis and then validate the model. A public domain software like the United States Environmental Protection Agency (EFDG) may be used. Through the validated hydrodynamic model, assess the impacts of the project on water circulation, littoral current, and coastal erosion and deposition. Use the modeling results of Sec. 1.3.1 and 2.1.1. Discuss how the impacts may be affected by climate change especially sea level rise.</p>									Acceptable
2.2.2 Change in bathymetry	Bathymetric map:	<p>USLE / similar modeling when applicable</p> <p>Use the hydrodynamic model to assess the impacts of the bathymetric changes. Discuss how the impacts may be affected by climate change. Compare projected new bathymetry as a result of the project with the existing</p>									

**SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)**

"ENVELOPE 2-TP-ORIGINAL"

☐ 1st ☐ 2nd ☐ 3rd ☐ 4th Screening

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Project Name:

EISEPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping, Unless otherwise specified as agreed during scoping, all items listed are required. Write specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening; page numbers should be provided upon submission of the EISEPRMP									
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
	<div>✓ Oil and Grease</div> <div>✓ BOD</div> <div>✓ Fecal Coliform</div> <div>✓ Ammonia</div> <div>✓ Nitrate</div> <div>✓ Surfactants</div> <div>Others:</div> <div>☒ sampling site map</div> <div>☒ Coordinates (longitude and latitude) of the sampling point and discharge point</div>										
2.4 Freshwater Ecology											
2.4.1 Threat to existence and/or loss of species of important local and habitat	<div>• Summary of endemicity / conservation status</div> <div>• Abundance of ecologically and economically important species (fishes, benthos, planktons);</div> <div>• Presence of pollution indicator species;</div> <div>• sampling site map</div>	Identify and assess project impact in terms of threats to existence/and or loss of species, abundance frequency and distribution species and include discussions on overall impact to freshwater ecology. Relate discussions to air and water									Acceptable
2.4.2 Threat to abundance, frequency and distribution of species		Show in a map, sampling sites for monitoring purposes based on the most significant threats identified. Use a Cumulative Impact Assessment and Management approach. -Engr. Maestrecampo									Acceptable

EIS/EPMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions	Impact Analysis	Mgmt. Plan	Monitoring Plan	Remarks
			Page	✓	Page	✓	
2.5 Marine Ecology (applicable if project involves activities, discharges and structure in marine waters)							
2.5.1 Threat to existence and/or loss of important local species and habitat	• Abundance/densities/distribution of ecologically and economically important species (mangroves, fishes, benthos, planktons, coral reefs, algae, seaweeds, sea grasses); • Presence of pollution indicator species; • Historical occurrences of red-tide, fish kill or any related event • marine resource map • sampling site map	Quadrat, transect, line intercept, spot dive, manta tow, marine resource characterization (e.g. municipal and commercial fisheries data) for baseline gathering.					Acceptable
2.5.2 Threat to abundance, frequency and distribution		Identify and assess project impact in terms of threats to existence, loss of important local species, threat to abundance, frequency and distribution and include discussions on overall impact to marine ecology. Relate discussions to air, water and oceanography Show in a map, sampling sites for monitoring purposes based on the most significant threats identified. Use a Cumulative Impact Assessment and Management approach. -Engr. Maestrecampo					Acceptable
3.0 THE AIR							
3.1 Meteorology/Climatology							
3.1.1 Change in the local micro-climate e.g. local temperature	Monthly average rainfall and temperature of the area; Climatological normals/extremes; Wind rose diagrams; Frequency of Tropical cyclones	Identify and assess project impact in terms of change in the local micro-climate change. Also discuss effects of climate change using PAGASA medium to long term projections					Acceptable

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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			Page	✓	Page	✓	Page	✓	Page	✓	
3.1.2 Contribution in terms of greenhouse gas emissions (or GHG mitigation potential) Note: applicable only for projects with significant GHG emissions	Data on Greenhouse gases (i.e. carbon dioxide, nitrous oxide); GHG Estimates : Scenario 1: Baseline -GHG Original Unit 1: 324 MW; Unit 2: 324 MW ;Unit 3: 300 MW ; Unit 4 : Orig 300 MW ; Scenario 2: GHG from Scenario 1 + Unit 5 315 MW Scenario 3: GHG from New Plant Only Unit 5 315 MW. Conduct GHG estimates (Area, Point, Line, Volume, Buoyant Line Bldg. sources, etc.) for all combustion, process, transport and other sources using IPCC emission factors. Include mitigating measures and GHG sequestration program. Include GHG reduction in using Super critical Technology (eg. Unit 3 & 4) versus previous Subcritical Boiler technology -Engr. Del Socorro	Estimate projected greenhouse gases (GHG) (i.e. carbon dioxide, nitrous oxide) using IPCC guidelines; include mitigation and/or sequestration for both construction and operation phases. Please use AR 4 emission factors in computing GHG emissions. -Ms. Dela Cruz		✓		✓		✓		✓	
3.2 Air Quality (& Noise)											
3.2.1 Degradation of air quality	Characterization of ambient air quality: ✓ TSP ✓ PM ₁₀ ✓ SO ₂	Use DENR standard methods and procedures for sampling and analysis. Relate selection of sampling locations using data collected in 3.1.1 Identification and assessment of impact of the project to the identified									Acceptable

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
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			Page	✓	Page	✓	Page	✓	Page	✓	
	✓ NO ₂ ✓ Trace Metals: Hg, Pb, Cd, Cr, As others: (for sampling methods refer to Clean Air Act) ☑ sampling site map	parameters including VOCs and odor through air dispersion modeling (as may be applicable) Provide air dispersion modeling (include worst case scenario of failure of Air Pollution Control Facility). Present conclusions of modelling on extent of physical and chemical dispersion/trajectory of most relevant parameters and resulting ground level concentrations with increasing distance from the source as basis for deriving buffer zones and delineating the direct impact area from the indirect impact area. Superimpose on the economically and ecologically critical areas/resources and population/significant socio-cultural features Show in a map, sampling sites for monitoring purposes based on the above assessment. Compare changes in air quality over time using statistical tools e.g. across sampling sites over time, and test for significant changes Use guaranteed design Emission for PM, CO, SOx as SO ₂ , NOx as NO ₂ emission based from Actual Stack and CEMS data with RATA (Use Worst Case scenario) Please submit Excel Data of CEMS or Stack Report									

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List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
		before running model. Use as Source input in Dispersion Modeling. Conduct TIER 4 Dispersion Modeling per EMB Dispersion Modeling Guidelines (MC 2008-003) for all applicable Sources Line (Conveyors) & Area Source (Coal Yard or CACo2 yard cfr CFB boiler) , and Point Source (All Slack). Parameters for Modeling: TSP, PM10 , CO, NOx as NO2 and SO2 as SO2 and All Metals listed in the EMOP. Scenario 1 -Old/existing plants Controlled and Uncontrolled Existing Power Plant stack/point, area & line sources(Unit 1: 324 MW; Unit 2: 324 MW ;Unit 3: 300 MW ; Unit 4 : Orig 300 MW ; Scenario 2 Baseline + New Plant Controlled and Uncontrolled: Scenario 1 + New Plant 1(Unit 5) for area , line , volume sources eg. Coal yard, conveyors) Scenario 3 New Plant Only : New Plant 1 only – Controlled and Uncontrolled based on design efficiency of ACPD for Unit 5 only Identify the ff (Parameters for Modeling: TSP, CO, NOx as NO2 and SOX as SO2 and other appropriate parameters) : 1. Hot Spot Areas : Controlled and Uncontrolled Maximum and 98th									

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping, Unless otherwise specified as agreed during scoping, all items listed are required. Write specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening; page numbers should be provided upon submission of the EIS/EPRMP					
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions	Impact Analysis	Mgmt. Plan	Monitoring Plan	Remarks
			Page	Page	Page	Page	
		percentile Ground Level Concentration (GLC max) 1 hr, 24 hr and 8 hr 2. Receptor Areas: Controlled and Uncontrolled Maximum and 98th percentile Ground Level Concentration (GLC max) 1 hr, 24 hr and 8 hr 3. Plant Boundary Receptor Areas: Maximum and 98th percentile Ground Level Concentration (GLC max) 1 hr, 24 hr and 8 hr 4. Identify Receptor locations on the ff as per Section 4.6.1 of MC 2008-003 Size and range of grid The approximate range applicability of plume models is: a. Receptors < 50 m from source / fence line b. Receptors 50 m - 100 m from source / fence line c. Receptors 100 m - 10 km from source / fence line d. Receptors > 10 km from source / fence line 5. Identify domain of Primary & secondary Impact Area. 6. Identify increment Ambient Air Qty. levels of the New Plant vs Baseline Ambient Air Qty. levels. 7. Recommend Air Quality Monitoring 8. Provide individual isopleth Diagrams and Output Files Attach as Annex:					

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping: Unless otherwise specified as agreed during scoping, all items listed are required. Write specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening, page numbers should be provided upon submission of the EIS/EPRMP									
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt. Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
		Please submit SOFT COPIES of the ff for validation prior to model run: 1. Controlled and Uncontrolled Emission Source Pathway input data w/ coordinates 2. Building Downwash BPIP Profile Data 3. Cartesian Domain Data (Domain Size, Center, Spacing, Boundary /Fence line 4. Meteorological Data (eg. Surface and Profile Upper Air) MM5 or WRF data for validation (for other Met requirements refer to default scoping checklist for climate projections etc.) -Engr. Del Socorro									
3.2.2 Increase in ambient noise level	Characterization of ambient noise level sampling site map	Use DENR standard methods and procedures for sampling and measurement. Identification and assessment of impact to ambient noise level using noise attenuation modeling and comparing it with relevant standards. (applicable if estimated total noise level will exceed noise standard).									Acceptable
4.0 THE PEOPLE											
4.1 Displacement of settler/s Displacement / disturbance of properties Change/conflict in land ownership	Demographic data of impact area: - Number of households and household size - Land area, - Population.	Identify and assess project impacts on demography of affected communities. Use assessment in the formulation of SDP/IEC									Acceptable

EIS/EPMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPMP)

List of Key Impacts		Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	✓ For completeness during procedural screening; page numbers should be provided upon submission of the EIS/EPMP						Remarks
				Baseline Conditions	Impact Analysis	Mgmt. Plan	Monitoring Plan			
				Page	Page	Page	Page	Page		
Change/conflict Right of way Impact on Public Access	<ul style="list-style-type: none"> - Population density /growth - gender and age profile, - literacy rate, profile of educational attainment - settlements map 	<p>Assess availability of alternative public access and housing options for displaced settlers</p> <p>For project with displacement/ disturbance of properties/settlers, change/conflict in land ownership and change/conflict right of way, formulate resettlement framework plan or RAP</p>								
4.2 In-migration proliferation of informal settlers	<p>Census of population / property that will be displaced / disturbed</p> <p>Housing ownership profile / availability of housing/ number of informal settlers</p>	<p>Identify and assess project impact due to in-migration patterns including proliferation of informal settlers</p>							Acceptable	
4.3 Cultural/Lifestyle change (especially on Indigenous People, if any)	<p>Demographic data on Indigenous People (if any) and existing Culture/Lifestyle that may be significantly affected</p>	<p>Identify and assess project impact in terms of Culture/Lifestyle that may be affected and/or introduced</p>							Acceptable	
4.4 Impacts on physical cultural resources	<p>Inventory and description of physical cultural resources and landscapes that have archaeological, paleontologic, historical, religious, aesthetic, or cultural significance: Movable or immovable objects, below ground or under water, sites, structures, groups of structures, and natural features</p> <p>Classify cultural interest value/ importance into local, provincial, national, or international level</p> <p>Sources of information: UNESCO, National Museum (NIM), National Historical Commission of the Philippines (NHCP).</p>	<p>Identify all potential project impacts in an integrated manner considering the type, significance, and value/importance of the physical cultural resource/s</p> <p>Identify risks in terms of capacity and commitment in managing the impacts (protocols in handling chance finds shall be implemented)</p>							Acceptable	

"ENVELOPE 2-TR ORIGINAL"
1st 2nd 3rd 4th 5th 6th

96

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping: Unless otherwise specified as agreed during scoping, all items listed are required. While specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening; page numbers should be provided upon submission of the EIS/EPRMP									
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
4.5 Threat to delivery of basic services /resource competition	National Commission for Culture and Arts (NCAA) and the Local Government Units (LGUs) in the project area and other UN or National Publications Availability of public services in terms of: <ul style="list-style-type: none">• Water supply• Power supply• Communications /transportation• peace and order / crime• education facilities• recreational facilities / sports facilities statistical data / information related to public services: <ul style="list-style-type: none">• literacy rate, profile of educational attainment• Crime rate• Food security	Identify and assess project impact in terms of threats to delivery of basic services including potential for resource competition in the area including effects of in-migration									Acceptable
4.6 Threat to public health and safety	Availability of public services in terms of: health resources (Government and Private) Statistical data / information related to public services: <ul style="list-style-type: none">• Mortality and mortality rates (infants and adults - 5-year trend)• Common diseases in the area including endemic diseases; Environmental Health and Sanitation Profile	Identify and assess specific threats to public health and safety due to project impacts. Relate discussions to land, air and water (Item 1 to 3) Analysis of the impact of project implementation on existing disease profile including weather sensitive diseases and impact aggravation as a result of climate change as projected by PAGASA									Acceptable

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping: Unless otherwise specified as agreed during scoping, all items listed are required. Write specific instructions (if any) on the blanks/spaces provided		✓ For completeness during procedural screening; page numbers should be provided upon submission of the EIS/EPRMP									
List of Key Impacts	Baseline Data Parameter Requirements	Required Assessment Methodology/Approach	Baseline Conditions		Impact Analysis		Mgmt Plan		Monitoring Plan		Remarks
			Page	✓	Page	✓	Page	✓	Page	✓	
	Include Performance in Occupational Health and Safety among workers and employees -Dr. Castro			✓		✓		✓		✓	
4.7 Generation of Local Benefits from the project Enhancement of employment and livelihood opportunities Increased business opportunities and associated economic activities Increased revenue of LGUs	Socioeconomic data: • Main sources of Income • Employment rate/ profile • Poverty incidence • sources of livelihood commercial establishments and activities • banking and financial institutions	Identify and assess local benefits of the project in terms of enhancement of employment and livelihood opportunities, increased business opportunities and associated economic activities and increased revenue of LGU Include projects from ER 1-94 from the last 3 years. Differentiate programs from CSR. -Ms. Dela Cruz									Acceptable
4.8 Traffic congestion	Road network/ systems Existing Transportation/traffic situation	Identify and assess project impact on the traffic situation in the area including congestion based on existing capacity of road system									Acceptable

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

Table 4. Environmental Risk Assessment to be included in EIS/EPRMP

During scoping: Check (✓) required/applicable items; items with ✓ are automatically required, write specific instructions (if any) on the blanks/spaces provided.

Level of Coverage & Type of Risks	CONTENTS OF ERA AS PART OF EIS/EPRMP For the identified safety risks in column 1	Remarks/ Specific Scoping Instructions	Present? (✓)				REMARKS
			ERA Page	ERP Page	Monitoring Plan		
					Page	✓	
Level of Coverage: Refer to Annex 2-7e of the RPM for DAO 2003-30 ☒ Level 2 (QRA Required) ☒ Level1 (Emergency Plan based on hazard analysis) ☒ Risk Screening Level	For EPRMP, include HAZOP or QRA for existing facilities and compare with that for the expansion. Also include discussions on safety incidents/records/history (in relation to environmental risks) classified into first aid, medical attention cases, days away from work cases, fatalities (including contractors), record of drills (fire, spills, explosion, among others) and any experience in implementing the ERP For EIS, check type of report to be submitted prior to Operation: ☐ Quantitative Risk Assessment(QRA) ☐ Emergency Plan ☐ Risk Screening	Conduct cumulative QRA (risk associated with the combined effects of the existing and proposed expansion activities). -Engr. Maestrecampo	✓	✓	✓	✓	Acceptable
Safety Risks Type: ☒ Fire ☒ Explosion ☒ Release of toxic substances	☒ Description of conditions, events and circumstances which could be significant in bringing about identified safety risks ☒ Description & assessment of the possible accident scenarios posing risk to the environment ☒ Description of the hazards, both immediate (acute effects) and delayed (chronic effects) for man and the environment posed by the release of toxic substance, as applicable ☒ The safety policy and emergency preparedness guidelines consistent with the regulatory requirements. Emergency Preparedness should also consider natural hazards to the infrastructures and facilities.						Acceptable
☒ Physical Risks (Failure of Structure w/c could endanger life, property and/or the environment)	☒ Description of conditions, events and "trigger" which could be significant in bringing about identified physical risks ☒ Description & assessment of the possible accident scenarios posing risk to the environment						Acceptable

Project Name: 99

EIS/EPRMP SCOPING AND SCREENING FORM FOR THERMAL POWER PLANT PROJECTS
(Requiring EIS or EIS threshold EPRMP)

During scoping: Check (✓) required/applicable items; items with ✓ are automatically required; write specific instructions (if any) on the blanks/spaces provided.		Present? (✓)							
Level of Coverage & Type of Risks	CONTENTS OF ERA AS PART OF EIS/EPRMP For the identified safety risks in column 1	Remarks/ Specific Scoping Instructions	ERA		ERP		Monitoring Plan		REMARKS
			Page	✓	Page	✓	Page	✓	
☒	Description of the hazards both immediate (acute effects) and delayed (chronic effects) for man and the environment posed by the failure of structure, as applicable								

Noted By:	Signature	Signature
Review Committee Members		EMB Representatives
1. Engr. Dodjie Maestrecampo	<i>DS</i>	1. Engr. Dexter Tabada
2. Dr. Nestor Castro		2. Engr. Joel Polintan
3. Mr. Oskar Cruz	<i>OC</i>	
4. Engr. Jundy del Socorro		Project Proponent:
5. Mr. Pablo delos Reyes		Mr. Mar Tuazon
Resources Person		Project Preparer/Consultant:
1. Engr. Joseph Tuburan (WQMS)		For. Ryan Filiberto Botengan
2. Ms. Hershey Dela Cruz (DOE)		
3. Engr. Raldy Pagador (EMB CPD R3)		

☐ 1st ☐ 2nd ☐ 3rd th Screening



Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
DENR Compound, Visayas Avenue, Diliman Quezon City 1116
Telephone Nos.: (632)927-15-17, 928-37-25; Fax No.: (632) 920-22-58
Website: <http://www.emb.gov.ph> / Email: mail@emb.gov.ph

"ENVELOPE 2-TP-ORIGINAL

December 29, 2020

COMMO. CHARLIE Q. RANCES

Commander

PCG District National Capital Region - Central Luzon

Muelle Dela Industria, Farola Compound

Binondo, Manila, Metro Manila

cgssmasinloc@yahoo.com

Subject: Public Hearing of the Proposed Masinloc Power Plant Project (Unit 4 Increase in Capacity and Unit 5 Expansion) of Masinloc Power Partners Co. Ltd.

Dear Commo. Dela Vega:

We are pleased to invite you to attend the **Public Hearing of the Proposed Masinloc Power Plant Project (Unit 4 Increase in Capacity and Unit 5 Expansion)** of the Masinloc Power Partners Co. Ltd. The said hearing is scheduled on:

Date	Time	Zoom Details
14 January 2021 (Thursday)	8:00 AM <i>Registration starts at 7:30 AM</i>	Meeting ID: 832 4841 8565 Passcode: 287432

The Public Hearing will be conducted as part of the requirements of the proponent's application for an Environmental Compliance Certificate. Interested parties will be given the opportunity to express freely their concerns/support/opposition/questions about the project.

Kindly register or submit a concise position paper to this Office via email at eia@emb.gov.ph, three (3) days before the scheduled Public Hearing. Those who are unable to register online or submit position papers may still join the discussion on the day of the hearing.

Attached herewith is the project's Executive Summary for the Public (ESP) for your reference. The project's Environmental Performance Report and Management Plan (EPRMP) is downloadable at our website www.eia.emb.gov.ph. Kindly access the Notice of Public Hearing/ Consultation link found in our web page. The copies of the ESP and EPRMP are available at the following offices:

- **EMB Region III**
Turquoise Street, Ramar Village, San Agustin, City of San Fernando, Pampanga
- **LGU – Masinloc, Zambales**
Municipal Hall, Masinloc, Zambales

Should you have any question, you may contact **Engr. Dexter Tabada** or **Engr. Joel Polintan**, Project Case Handlers, Environmental Impact Assessment and Management Division (EIAMD), at telephone numbers +632 8920-2240 and +632 8920-2241.

Sincerely yours,


ENGR. WILLIAM P. CUÑADO
OIC-Director



Protect the environment... Protect life...

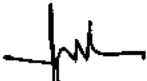
102

**CERTIFICATION
ANNEX TP-1(10)**

I, **JULIE ANN B. DOMINO-PABLO**, of legal age, Filipino and with office address at the 19th floor, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City 1550, after being duly sworn in accordance with the law, hereby certifies as follows:

1. I am the corporate secretary of **MASINLOC POWER PARTNERS CO. LTD.**, a partnership incorporated under the laws of the Republic of the Philippines, whose registered office is at Masinloc Coal-Fired Thermal Power Plant, Brgy. Bani, Masinloc, Zambales, (the "Partnership").
2. The attached copy of the Partnership's clarificatory letter dated 22 January 2021 addressed to and acknowledged through electronic email by the Environmental Management Bureau ("EMB") of the Department of Environment and Natural Resources ("DENR") in relation to the Environmental Compliance Certificate application of the Partnership for the Nominated Power Plant, specifically on the Project Area and the target completion dates of Unit 4 and Unit 5 of the Masinloc Power Plant Project, consisting of two (2) pages is a complete, true and faithful reproduction of the original document.
3. We are executing this Certification to attest to the truth of the foregoing and in compliance of requirements under the Instructions to Prospective Bidders issued by Manila Electric Company for the 1800MW (net) Contract Capacity.

For and on behalf of **MASINLOC POWER PARTNERS CO. LTD.**


JULIE ANN B. DOMINO-PABLO
Corporate Secretary

SUBSCRIBED AND SWORN TO before me this 25th day of January 2021 at Mandaluyong City, affiant exhibiting to me her Philippine Passport No. P3581210A issued in DFA Manila on 5 July 2017.

Doc. No. 203;
Page No. 46;
Book No. II;
Series of 2021.




MARILEN S. VIZCO-ADRIANO
Appointment No. 0571-20
Notary Public for Mandaluyong City
Until December 31, 2021
No. 155 EDSA, Brgy. Wack-Wack, Mandaluyong City
Roll No. 52532
PTR No. 4577721; 01/07/2021; Mandaluyong City
IBP Lifetime IBP No. 835229; 10/08/2010; Quezon City Chapter
MCLE Compliance No. VI-0018687; 02/18/2019; Pasig City

103

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SHC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power
Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel: 047 307 4000
Fax: 047 307 4003

22 January 2021

Environmental Management Bureau (EMB)
Department of Environment and Natural Resources (DENR)
Visayas Avenue, Diliman,
Quezon City 1100

Attention: **DIR. WILLIAM P. CUÑADO**
Director

Subject: **Units 4 and 5 Target Completion Date**

Dear Director Cuñado,

Masinloc Power Partners Co. Ltd. (the "Company") refers to the Environmental Performance Report and Management Plan (EPRMP) dated January 2021 submitted to the Department of Environment and Natural Resources in relation to the Company's application for the amendment of the Environmental Compliance Certificate (the "Application Documents") of the Masinloc Power Plant Expansion Project (Unit 4 Increase in Capacity and Unit 5 Expansion) (the "Masinloc Expansion Project").

Notwithstanding anything stated in the Application Documents to the contrary, we wish to clarify that target completion dates of Unit 4 and Unit 5 of the Masinloc Project is in the 3rd Quarter of 2024, specifically 30 September 2024.

Further, we note that the Project Area of 138.5 hectares indicated in the EPRMP refers to the area occupied by all the power generation units of the Company, which include Units 1 – 5. However, actual project area necessary for Units 4 and 5 is only approximately 477,367 square meters.

We hope we have clarified this information for your future evaluation of the Application Documents for the Masinloc Expansion Project, and we shall reflect this specific information in our succeeding submissions.

Sincerely yours,


MAR TUAZON
Authorized Signatory



ACKNOWLEDGEMENT RECEIPT

January 25, 2021

Greetings!

This is to Acknowledge Receipt of your COMMUNICATION with the Subject :
EMAIL DTD JAN. 22, 2021 FROM Gonzalo B. Julian Jr. , RE: LETTER DTD JAN.
22, 2021 RE: Masinloc Power Partners Co. Ltd. Units 4 and 5 Target Completion
Date. (1 PAGE ONLY), submitted on January 25, 2021, 11:16am.

Your transaction has been tagged as IIS No. CO-2021-003199 with Company ID
EMBR3-341750-298. For follow-ups, you may provide the given details.

For further inquiries, you may contact our designated EMB Office in your area from
Monday to Friday 8:00 a.m. to 5:00 p.m. office hours, or email us at
recordsco@emb.gov.ph.

Please be guided accordingly.

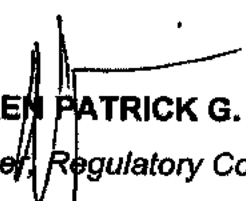
Thank you.

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

**EXPLANATION ON THE NON-AVAILABILITY OF THE CERTIFICATE OF
COMPLIANCE FROM THE ENERGY REGULATORY COMMISSION**

The Company is currently seeking the inclusion of the said units to the Department of Energy's (DOE) Power Development Plan, through its application for a Certificate of Endorsement (COE) from the DOE – a requirement for the Certificate of Compliance (COC). The Company hereby assures the Honorable Commission that the application for a COC will be submitted once all requirements have been completed.


WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

24 February 2021

HON. ALFONSO G. CUSI

Secretary

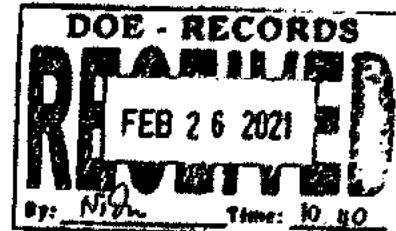
Department of Energy

Energy Center, 34th St., Rizal Drive,
Bonifacio Global City, Taguig

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bari, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

Thru: **Jesus T. Tamang**
Director
Policy and Planning Bureau ("EPPB")

Subject: **Request for Inclusion in the Power Development Plan**



Dear Secretary Cusi:

Masinloc Power Partners Co. Ltd. ("MPPCL") intends to construct and develop its 2 X 350 MW (Gross) or 2 X 315 MW (Net) Supercritical Pulverized Coal-Fired Power Plant ("MPPCL Units 4 & 5"), which will be located in Barangay Bari, Municipality of Masinloc, Zambales.

One of the documents required to be submitted to the Energy Regulatory Commission ("ERC") in relation to the application for a Certificate of Compliance is the endorsement to be issued by the Department of Energy ("DOE") stating that the BCCP is consistent with the Power Development Program of the Philippine Government pursuant to ERC Resolution No. 16, Series of 2014¹.

In view of the foregoing, MPPCL hereby respectfully requests the DOE to include in its current Power Development Plan 2017-2040 (the "PDP 2017-2040") the MPPCL Units 4 & 5 and issue the relevant DOE endorsement for this purpose. The inclusion of the MPPCL Units 4 & 5 in the PDP 2017-2040 is also necessary as it is the nominated power plant of MPPCL for the 600 MW contract capacity to be supplied to the Manila Electric Company ("MERALCO") pursuant to the Power Supply Agreement ("PSA") to be executed between MPPCL and MERALCO. The PSA will be finalized as a result of the recently concluded Competitive Selection Process conducted by MERALCO for the procurement of Contract Capacity of 1,800 MW (NET) COD 2024-2025.

We extend our gratitude for the time and efforts that will be spent in the evaluation of this request. We hope for your usual prompt and favorable response on this request.

Very truly yours,


PAUL BERNARD D. CAUSON
Authorized Representative

¹ A Resolution Adopting the 2014 Revised Rules for the Issuance of Certificates of Compliance for Generation Companies, Qualified End-Users and Entities with Self-Generation Facilities.

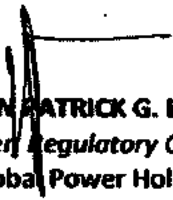
MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

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Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Banl, Masinloc
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Tel.: 047 307 4000
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ANNEX " T "

**CERTIFICATION ON THE NON-APPLICABILITY OF A RENEWABLE ENERGY
SERVICE/OPERATING CONTRACT AND CERTIFICATE OF REGISTRATION OR CERTIFICATE OF
COMMERCIALITY BY AN RE DEVELOPER FROM THE DEPARTMENT OF ENERGY**

These requirements are **NOT APPLICABLE** on this Joint Application since the Masinloc Power Partners Co. Ltd. Units 4 and 5 are not renewable energy plants.


WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

24 February 2021

Energy Regulatory Commission
Pacific Center Building, San Miguel Avenue,
Ortigas Center, 1600, Pasig City,
Metro Manila, Philippines

Subject: Details regarding the transmission projects or grid connection projects, point-to-point limited transmission facilities and Copies of Related Agreements

Gentlemen:

On behalf of Masinloc Power Partners Co. Ltd. (the "Company"), we hereby state that the requirement to provide details on the transmission projects or grid connection projects, point-to-point limited transmission facilities and Transmission Service Agreement necessary to connect the proposed generation facility to the Grid is **not available** as of the date hereof since the proposed Masinloc Coal Fired Thermal Power Plant Units 4 and 5 have yet to be constructed.

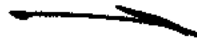
All other related agreements (like Transmission Wheeling Contract, EPC Contract, O&M Contract, etc.) shall be made available to the Honorable Commission as soon as said contracts have been finalized with relevant counterparties.

The Company hereby submits a copy of the Project Feasibility Study on the proposed Masinloc Coal Fired Thermal Power Plant Units 4 and 5 in a sealed envelope and marked as "Confidential".

Thank you.

24 February 2021, Mandaluyong City.

For and on behalf of Masinloc Power Partners Co. Ltd.


Paul Bernard D. Causon
Authorized Representative

ANNEX • U-1 99

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

10 March 2021

ENGR. LEGARIO L. GALANG
OIC-Director, Regulatory Operations Service
Energy Regulatory Commission
Ortigas Center, Pasig City 1600

FILE COPY

Attention: **MS. JASMIN A. ALBUEN**
Pre-filing Evaluator, Regulatory Operations Service

Subject: **SUBMISSION OF CONFIDENTIAL DOCUMENTS OF THE JOINT
APPLICATION FOR THE APPROVAL OF THE PSA BETWEEN MERALCO
AND MPPCL**

Dear OIC-Director Galang:

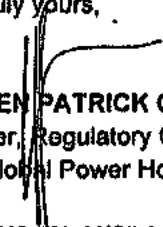
Good day!

We are respectfully submitting the requirements being prayed to be treated as confidential information through the Central Records Division of the Honorable Commission in the attached sealed envelopes for your perusal. Said envelopes contain ANNEX "U-1" (Project Feasibility Study), ANNEX "X-1" (Fuel Supply Plan), and ANNEXES "W and series" and "Y" together flash disk providing soft copies thereof.

For any concerns, please do not hesitate to reach our point-person, Mr. Neill John G. Macuha, Regulatory Analyst at his email nmacuha@smcgph.sanmiguel.com.ph. Please furnish regulatorycompliance@smcgph.sanmiguel.com.ph for records purposes.

Thank you very much and we hope all the best in your endeavors.

Very truly yours,


WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

cc: **MS. MA. LUCILA M. GIRON**, Chief Energy Regulation Officer, Central Records Division, ERC

ERC-RO3


03/10 2:45 PM

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
tel 047 307 4000

ANNEX " ✓ "

CERTIFICATION

Masinloc Power Partners Co., Ltd. (the "Company") hereby certifies that, as of the date hereof, the Company will fund the construction and development of Unit 4 and Unit 5 of the Masinloc Coal-Fired Thermal Power Plant through equity or shareholder advances.

This certification is issued in connection with the application to be jointly filed by the Company and the Manila Electric Company with the Energy Regulatory Commission in relation to their Power Supply Agreement for 600MW contract capacity.

This Certificate is issued on 24 February 2021 at Mandaluyong City, Philippines.

MASINLOC POWER PARTNERS CO. LTD.

By:

PAUL BERNARD D. CAUSON
Chief Finance Officer

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

10 March 2021

ENGR. LEGARIO L. GALANG
OIC-Director, Regulatory Operations Service
Energy Regulatory Commission
Ortigas Center, Pasig City 1600

FILE COPY

Attention: **MS. JASMIN A. ALBUEN**
Pre-filing Evaluator, Regulatory Operations Service

Subject: **SUBMISSION OF CONFIDENTIAL DOCUMENTS OF THE JOINT
APPLICATION FOR THE APPROVAL OF THE PSA BETWEEN MERALCO
AND MPPCL**

Dear OIC-Director Galang:

Good day!

We are respectfully submitting the requirements being prayed to be treated as confidential information through the Central Records Division of the Honorable Commission in the attached sealed envelopes for your perusal. Said envelopes contain ANNEX "U-1" (Project Feasibility Study), ANNEX "X-1" (Fuel Supply Plan), and ANNEXES "W and series" and "Y" together flash disk providing soft copies thereof.

For any concerns, please do not hesitate to reach our point-person, Mr. Neill John G. Macuha, Regulatory Analyst at his email nmacuha@smcgph.sanmiguel.com.ph. Please furnish regulatorycompliance@smcgph.sanmiguel.com.ph for records purposes.

Thank you very much and we hope all the best in your endeavors.

Very truly yours,

WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

cc: **MS. MA. LUCILA M. GIRON**, Chief Energy Regulation Officer, Central Records Division, ERC

ERC-ROS
Jhos Gundo
03/10 09:54

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

24 February 2021

Energy Regulatory Commission
Pacific Center Building, San Miguel Avenue,
Ortigas Center, 1600, Pasig City,
Metro Manila, Philippines

Subject: Details on the Procurement Process of Fuel and Fuel Supply Agreement

Gentlemen:

On behalf of Masinloc Power Partners Co. Ltd. (the “Company”), we hereby state that the requirement to provide details on the procurement process of fuel and the Fuel Supply Agreement is **not available** as of the date hereof since the Company is still negotiating with a potential fuel supplier.

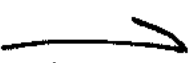
A copy of the Fuel Supply Agreement shall be made available to the Honorable Commission as soon as it is finalized with the fuel supplier.

The Company hereby submits a copy of its Fuel Supply Plan in a sealed envelope and marked as “Confidential”.

Thank you.

24 February 2021, Mandaluyong City.

For and on behalf of Masinloc Power Partners Co. Ltd.


Paul Bernard D. Causon
Authorized Representative

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
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10 March 2021

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OIC-Director, Regulatory Operations Service
Energy Regulatory Commission
Ortigas Center, Pasig City 1600

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Very truly yours,

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Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

cc: **MS. MA. LUCILA M. GIRON**, Chief Energy Regulation Officer, Central Records Division, ERC

ERC-ROS
Judy Glundo
03/10 09:54

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

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Masinloc Power Facility
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10 March 2021

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OIC-Director, Regulatory Operations Service
Energy Regulatory Commission
Ortigas Center, Pasig City 1600

FILE COPY

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Pre-filing Evaluator, Regulatory Operations Service

Subject: **SUBMISSION OF CONFIDENTIAL DOCUMENTS OF THE JOINT
APPLICATION FOR THE APPROVAL OF THE PSA BETWEEN MERALCO
AND MPPCL**

Dear OIC-Director Galang:

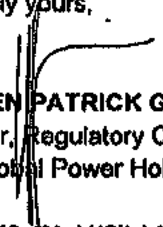
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Very truly yours,


WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

cc: **MS. MA. LUCHA M. GIRON**, Chief Energy Regulation Officer, Central Records Division, ERC

ERC-RDS

03/10 29:54

For

ANNEX " 7 "

AUDITED FINANCIAL STATEMENTS**SEC Registration Number**

P	L	2	0	0	7	0	9	8	3	4
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PARTNERSHIP NAME[illegible]

PRINCIPAL OFFICE (No. / Street / Barangay / City / Town / Province)

[illegible]

Form Type

A A F S

Department requiring the report

S E C

Secondary License Type, if Applicable

PARTNERSHIP INFORMATION

Partnership's email Address

--

Partnership's Telephone Number/s

(63 2) 702 4500

Mobile Number

No. of Stockholders

Annual Meeting (Month / Day)

[illegible]**Fiscal Year (Month / Day)**

December 31

CONTACT PERSON INFORMATION

The designated contact person MUST be an Officer of the Corporation

Name of Contact Person

Mr. Paul Bernard D. Causon

Email Address

pcauson@smcph.sanmiguel.com.ph

Telephone Number/s

(63 2) 702 4500

Mobile Number

© 2004 Blackwell Publishing Ltd

CONTACT PERSON'S ADDRESS

~~15/F, San Miguel Properties Centre, No. 7 St. Francis Street, Mandaluyong City~~

Note 1: In case of death, resignation or cessation of office of the officer designated as contact person, such incidents are to be reported to the Commission within thirty (30) calendar days from the occurrence thereof with information and complete contact details of the new contact person designated.

2. All Boxes must be properly and completely filled up. Failure to do so shall cause the delay in processing the corporation's claim with the Commission and/or nonreceipt of Notice of Deficiencies. Further, nonreceipt of Notice of Deficiencies shall not excuse the corporation from liability for its deficiencies.

est, Mandaluyong City

MASINLOC POWER PARTNERS CO. LTD.

(A Limited Partnership)

**SEPARATE FINANCIAL STATEMENTS
December 31, 2019 and 2018**

With Independent Auditors' Report



R.G. Manabat & Co.
The KPMG Center, 9/F
6787 Ayala Avenue, Makati City
Philippines 1226
Telephone +63 (2) 8885 7000
Fax +63 (2) 8894 1985
Website home.kpmg/ph
Email ph-inquiry@kpmg.com

REPORT OF INDEPENDENT AUDITORS

The Partners
Masinloc Power Partners Co. Ltd.
Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc, Zambales

Report on the Audit of the Separate Financial Statements

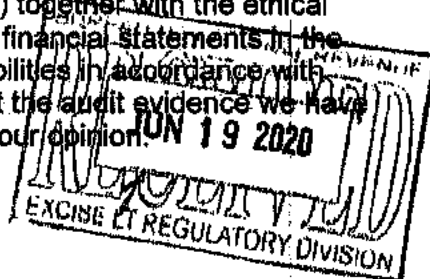
Opinion

We have audited the separate financial statements of Masinloc Power Partners Co. Ltd. (the "Partnership"), which comprise the separate statements of financial position as at December 31, 2019 and 2018, and the separate statements of comprehensive income, separate statements of changes in partners' contribution and separate statements of cash flows for the years then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the unconsolidated financial position of the Partnership as at December 31, 2019 and 2018, and its unconsolidated financial performance and its unconsolidated cash flows for the years then ended in accordance with Philippine Financial Reporting Standards (PFRS).

Basis for Opinion

We conducted our audits in accordance with Philippine Standards on Auditing (PSA). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Separate Financial Statements* section of our report. We are independent of the Partnership in accordance with the Code of Ethics for Professional Accountants in the Philippines (Code of Ethics) together with the ethical requirements that are relevant to our audits of the separate financial statements in the Philippines, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



R.G. Manabat & Co., a Philippine partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

PRO-BOA Registration No. 0003, valid until November 21, 2023
SEC Accreditation No. 3004-PR-5, Group A, valid until November 16, 2020
IC Accreditation No. F-2017010-41, valid until August 28, 2020
ESP - Selected External Auditors, Category A, valid for 3-year audit period (2017 to 2019)

Responsibilities of Management and Those Charged with Governance for the Separate Financial Statements

Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with PFRS, and for such internal control as management determines is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the separate financial statements, management is responsible for assessing the Partnership's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Partnership or to cease operations, or has no realistic alternative but to do so.

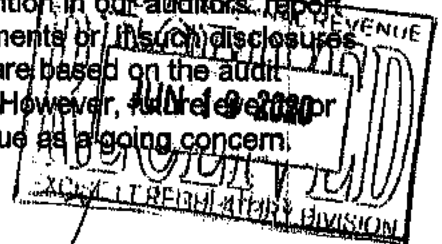
Those charged with governance are responsible for overseeing the Partnership's financial reporting process.

Auditors' Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with PSA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

As part of an audit in accordance with PSA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separate financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Partnership's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Partnership's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Partnership to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on the Supplementary Information Required Under Revenue Regulations No. 15-2010 of the Bureau of Internal Revenue

The supplementary information required for purposes of filing with the Bureau of Internal Revenue is presented by the management of Masinloc Power Partners Co. Ltd. in a separate schedule. Such supplementary information is not a required part of the basic separate financial statements. Our opinion on the basic separate financial statements is not affected by the presentation of the supplementary information in a separate schedule.

R.G. MANABAT & CO.



DARWIN P. VIROCEL

Partner

CPA License No. 0094495

SEC Accreditation No. 1386-AR, Group A, valid until June 14, 2020

Tax Identification No. 912-535-864

BIR Accreditation No. 08-001987-031-2019

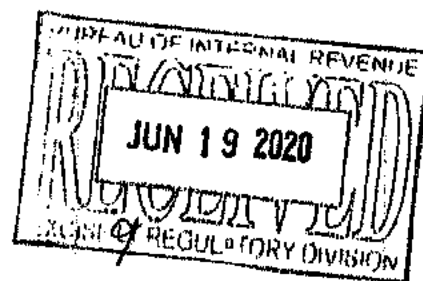
Issued August 7, 2019; valid until August 6, 2022

PTR No. MKT 8116787

Issued January 2, 2020 at Makati City

March 9, 2020

Makati City, Metro Manila



MASINLOC POWER PARTNERS CO. LTD.

(A Limited Partnership)

SEPARATE STATEMENTS OF FINANCIAL POSITION

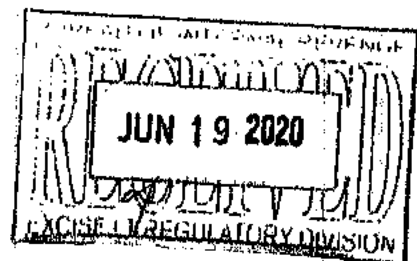
DECEMBER 31, 2019 AND 2018

	<i>Note</i>	2019	2018
ASSETS			
Current Assets			
Cash	7, 26, 27	\$51,458,263	\$32,058,776
Trade receivables - net	4, 8, 26, 27	66,375,914	59,938,619
Due from related parties	4, 23, 27	4,180,033	4,311,738
Inventories	4, 6, 9	37,097,430	32,091,386
Current portion of long-term loan to a related party	23, 26, 27	8,492,150	9,081,839
Prepaid expenses and other current assets	10, 26, 27	53,180,646	27,080,080
Total Current Assets		220,784,436	164,555,438
Noncurrent Assets			
Property, plant and equipment - net	11	1,120,404,216	1,113,773,837
Right-of-use asset	12	16,728,381	-
Goodwill	4, 5	66,243,504	66,243,504
Deferred tax assets	4, 18	13,607,896	11,850,335
Other noncurrent assets	13	82,451,467	50,294,590
Total Noncurrent Assets		1,299,435,463	1,242,162,266
		\$1,520,219,899	\$1,406,717,704

LIABILITIES AND PARTNERS' CONTRIBUTION

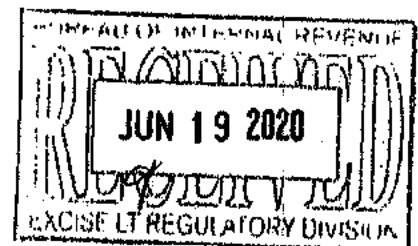
Current Liabilities			
Accounts payable and accrued expenses	14, 26, 27	\$88,108,302	\$79,403,187
Working capital loans payable	16, 26, 27	45,000,000	45,000,000
Current maturities of senior bank loans payable - net of deferred financing cost	16, 26, 27	63,693,330	49,295,055
Income tax payable	18	3,203,257	4,086,747
Due to related parties	23, 26, 27	14,041,117	15,582,801
Other current liabilities	15, 23, 27	23,664,569	14,290,508
Total Current Liabilities		237,610,575	207,658,298

Forward



	Note	2019	2018
Noncurrent Liabilities			
Senior bank loans payable - net of current maturities and deferred financing cost	14, 26, 27	\$668,169,578	\$646,912,247
Other noncurrent liabilities	17, 22, 26	11,779,881	10,047,890
Total Noncurrent Liabilities		679,949,459	656,960,137
Total Liabilities		917,580,034	864,618,433
Partners' Contribution			
Contributed capital	19	275,000,000	275,000,000
Retained earnings		314,342,045	253,611,231
Cumulative translation adjustment		14,563,908	14,563,908
Remeasurement on net defined benefit liabilities	22	-	170,220
Other equity transactions	19	(1,246,088)	(1,246,088)
Total Partners' Contribution		602,659,865	542,099,271
		\$1,520,219,899	\$1,406,717,704

See Notes to the Separate Financial Statements.



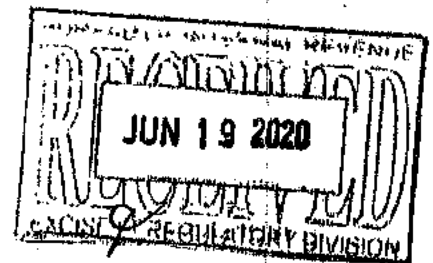
MASINLOC POWER PARTNERS CO. LTD.

(A Limited Partnership)

**SEPARATE STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018**

	<i>Note</i>	2019	2018
SALE OF POWER			
Contract electricity sales	6	\$477,690,304	\$402,256,918
Spot electricity sales	6	27,272,283	58,935,289
		504,962,587	461,192,207
COST OF POWER SOLD			
Coal, fuel oil and other consumables	9, 23	157,818,555	185,959,938
Power purchases	6	156,852,020	50,140,218
Transmission charges, market fees and other costs	20	23,448,541	40,027,083
Depreciation	11	30,238,738	31,592,235
		368,357,852	307,719,474
GROSS PROFIT		136,604,735	153,472,733
OPERATING EXPENSES	21	44,428,980	53,733,488
INCOME FROM OPERATIONS		92,175,755	99,739,245
INTEREST INCOME	7, 23	996,460	952,511
INTEREST EXPENSE AND OTHER FINANCING CHARGES	25	(9,382,896)	(20,621,957)
OTHER INCOME (CHARGES) - Net	11	(1,697,745)	(11,815,229)
INCOME BEFORE INCOME TAX		82,091,574	68,254,570
INCOME TAX EXPENSE	18	21,530,980	14,343,560
NET INCOME		60,560,594	53,911,010
OTHER COMPREHENSIVE INCOME -			
Net of tax			
<i>Item that will not be reclassified to profit or loss</i>			
Remeasurement gain on net retirement benefit liabilities	22	-	441,734
Income tax expense on remeasurement gain	18	-	(132,520)
		-	309,214
TOTAL COMPREHENSIVE INCOME		\$60,560,594	\$54,220,224

See Notes to the Separate Financial Statements.

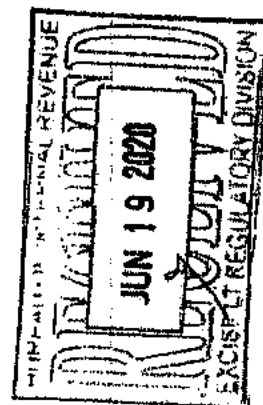


MASINLOC POWER PARTNERS CO. LTD.
(A Limited Partnership)

**SEPARATE STATEMENTS OF CHANGES IN PARTNERS' CONTRIBUTION
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018**

	Contributed Capital	Retained Earnings	Cumulative Translation Adjustments	Remeasurement of Net Defined Benefit Liabilities (Note 22)	Other Equity Transactions Incorporation Expenses (Note 19)	Share-based Payments (Note 19)	Total
As at January 1, 2019	\$275,000,000	\$253,611,231	\$14,563,908	\$170,220	(\$1,246,088)	\$ -	\$542,099,271
Net income for the year	-	60,560,594	-	-	-	-	60,560,594
Reversal of remeasurement of net defined benefit liabilities	-	170,220	-	(170,220)	-	-	-
Total comprehensive income	-	60,730,814	-	(170,220)	-	-	60,560,594
As at December 31, 2019	\$275,000,000	\$314,342,045	\$14,563,908	\$ -	(\$1,246,088)	\$ -	\$602,659,865
As at January 1, 2018	\$275,000,000	\$189,700,221	\$14,563,908	(\$138,994)	(\$1,246,088)	\$793,776	\$488,672,823
Net income for the year	-	53,911,010	-	-	-	-	53,911,010
Remeasurement of net defined benefit liabilities	-	-	-	309,214	-	-	309,214
Reversal of share-based payments	-	-	-	-	-	(793,776)	(793,776)
As at December 31, 2018	-	53,911,010	-	309,214	-	(793,776)	53,426,448
	\$275,000,000	\$253,611,231	\$14,563,908	\$170,220	(\$1,246,088)	\$ -	\$542,099,271

See Notes to the Separate Financial Statements.



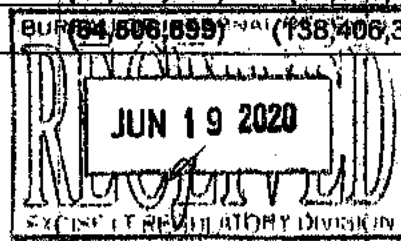
MASINLOC POWER PARTNERS CO. LTD.

(A Limited Partnership)

**SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018**

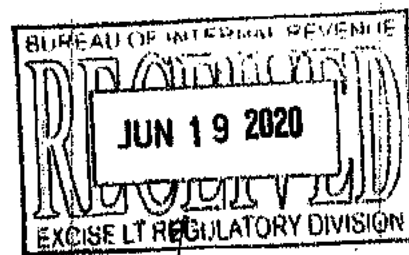
	<i>Note</i>	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Income before income tax		\$82,091,574	\$68,254,570
Adjustments for:			
Depreciation and amortization	11	31,517,364	37,146,597
Interest expense and other financing charges	25	9,382,896	20,621,957
Unrealized foreign exchange losses - net		7,815,920	3,848,321
Impairment loss on property, plant and equipment	11	691,049	1,331,305
Impairment losses on trade receivables	8, 21	271,769	3,053,455
Amortization (reversal) of share-based compensation expenses	18	-	(793,776)
Retirement benefit expense	22	-	498,795
Impairment loss on inventories		-	181
Loss (gain) on retirement of property, plant and equipment		(27,090)	905,073
Interest income	7, 23	(996,460)	(952,511)
Settlement gains	22	(8,766,138)	-
Operating income before working capital changes		121,980,884	133,913,967
Decrease (increase) in:			
Inventories		(5,006,044)	(1,004,411)
Due from related parties		519,498	(880,240)
Trade receivables - net		(7,907,620)	(4,479,552)
Prepaid expenses and other current assets		(25,138,043)	(12,641,203)
Increase (decrease) in:			
Accounts payable and accrued expenses		12,201,821	(64,904,335)
Due to related parties		(1,322,860)	11,602,424
Income tax payable		(7,642,954)	(2,947,173)
Other current liabilities		7,529,974	10,046,895
Cash generated from operations		95,214,656	68,708,372
Income taxes paid		(16,518,781)	(27,904,493)
Net cash flows provided by operating activities		78,695,875	40,801,879
CASH FLOWS FROM INVESTING ACTIVITIES			
Additions to property, plant and equipment	11	(33,478,596)	(122,791,932)
Cash dividends received		852,888	51,350
Interest received		263,539	2,376
Increase in other noncurrent assets	13	(32,144,730)	(15,668,103)
Net cash flows used in investing activities		(64,506,859)	(188,406,309)

Forward



	Note	2019	2018
CASH FLOWS FROM FINANCING ACTIVITIES			
Payments of:			
Interest	16	(\$30,219,146)	(\$33,501,405)
Bank loans	16	(40,642,000)	(38,100,000)
Proceeds from bank loans	16	75,000,000	170,000,000
Net cash flows provided by financing activities		4,138,854	98,398,595
EFFECTS OF EXCHANGE RATE CHANGES ON CASH			
		1,073,657	(1,039,134)
NET INCREASE (DECREASE) IN CASH		19,401,487	(244,969)
CASH AT BEGINNING OF YEAR		32,056,776	32,301,745
CASH AT END OF YEAR	7	\$51,458,263	\$32,056,776

See Notes to the Separate Financial Statements.



MASINLOC POWER PARTNERS CO. LTD.
(A Limited Partnership)
NOTES TO THE SEPARATE FINANCIAL STATEMENTS

1. Reporting Entity

a. Organization

Masinloc Power Partners Co. Ltd. (the "Partnership") is a limited liability partnership registered with the Philippine Securities and Exchange Commission (SEC) on June 25, 2007 primarily to invest in, acquire, finance, complete, construct, develop, improve, operate, maintain and hold electrical generating facilities in the Philippines and other property incidental thereto, for the production and sale of electricity.

On December 20, 2017, the AES Corporation (the "former Parent Company") and Top Frontier Investment Holdings, Inc. (Top Frontier), the ultimate parent entities of the acquired and acquiring entities, respectively, filed their respective Notification Forms with the Philippine Competition Commission (PCC) for approval of the transaction which was obtained on February 23, 2018.

On March 20, 2018, SMC Global, a corporation incorporated in Manila, Philippines, acquired 51% and 49% equity interests in SMCGP Masin Pte. Ltd. from APIPL and GEN, respectively. SMCGP Masin Pte. Ltd. indirectly owns, through its subsidiaries, the Partnership which owns, operates and maintains the 1 x 330 Mega Watt (MW) and 1 x 344 MW coal-fired power plant (Units 1 and 2), the under-construction project expansion of the 335 MW unit (Unit 3; Units 1, 2 and 3 are collectively referred to as the "Masinloc Power Plant"), and the 10 MW battery energy storage project (the "Masinloc BESS"), all located in Masinloc, Zambales, Philippines (collectively, the "MPPCL Assets"). The MPPCL Assets add 684 MW capacity to the existing portfolio of SMC Global and its subsidiaries.

As at December 31, 2018, the Partners are SMCGP Masinloc Power Company Limited (formerly Masinloc AES Power Company Limited), a limited partnership organized in the Philippines, (the "General Partner") and Transpower Holdings B.V. (formerly AES Great Britain Holdings B.V.), a corporation organized in Netherlands, (the "Limited Partner") with 99.95% and 0.05% interests, respectively.

As part of the liquidation process of Transpower Holdings B.V., the latter transferred its minority interest in the Partnership to Power Ventures Generation Corporation (PVGC), a corporation organized in the Philippines, under a share purchase agreement executed by both parties which took effect on July 15, 2019.

As at December 31, 2019, the Partners are SMCGP Masinloc Power Company Limited (formerly Masinloc AES Power Company Limited), a limited partnership organized in the Philippines, (the "General Partner") and Power Ventures Generation Corporation, a corporation organized in the Philippines, (the "Limited Partner") with 99.95% and 0.05% interests, respectively.

The Partnership is an indirect subsidiary of SMC Global through SMC Global Pte. Ltd and subsidiaries. SMC Global is a wholly-owned subsidiary of San Miguel Corporation (SMC). The ultimate parent company is Top Frontier. SMC and Top Frontier are public companies under Section 17.2 of the Securities Regulation Code (SRC) and whose shares are listed in The Philippine Stock Exchange, Inc.

The principal place of business of the Partnership is in Masinloc Coal-Fired Thermal Power Plant, Barangay Bani, Masinloc, Zambales.

b. Masinloc 335 MW Expansion and related Income Tax Holiday (ITH)

On October 12, 2012, the Partnership received the Board of Investments (BOI) approval for the application as expanding operator of Masinloc Coal-fired Thermal Power Plant. The approval embodies the following benefits:

- ITH for three (3) years from December 2018 or actual start of commercial operations, whichever is earlier (but not earlier than the date of registration).
- The ITH is subject to the condition that the Energy Regulatory Commission (ERC) approved generation rate takes into account the ITH such that the income tax due on the revenues derived from power generated is not included in the total generation costs submitted by the enterprise to the ERC in the application for approval of its Power Supply Contract (PSC).
- The enterprise shall submit the list of cost items common to all its projects/activities and the methodology adopted in allocating common cost between the registered activities and nonregistered activities. The methodology to be adopted in depreciation for Fixed Assets particularly the Plant, Property and Equipment account shall be the straight-line depreciation method.
- Furthermore, the interest expense on the enterprise's liabilities shall be appropriately allocated between the registered activities and nonregistered activities.
- For the first five (5) years from date of registration, the enterprise shall be allowed an additional deduction from taxable income of fifty percent (50%) of the wages corresponding to the increment in number of direct labor for skilled and unskilled workers in the year of availment as against the previous year if the project meets the prescribed ratio of capital equipment to the number of workers set by the BOI and provided that this incentive shall not be availed simultaneously with the ITH.
- Importation of consigned equipment for a period of ten (10) years from date of registration, subject to posting of re-export bond.
- Employment of foreign nationals.
- Simplification of customs procedures for the importation of equipment, spare parts, raw materials and supplies.

On June 17, 2015, BOI approved the amendments on the registration, which includes the downgrade of registered capacity from 600 MW to 300 MW.

These changes were noted and confirmed by BOI, through a letter dated July 13, 2017, which includes revisions in the registration's Specific Terms and Conditions (STC) as follows:

- a. STC No. 2 which amended the deadline of capital infusion of at least \$1,500,00 per MW to read as "on or before start of commercial operations to maintain the pioneer status";
- b. STC No. 4 which required the increase in partners' capital to \$175,000,000 which is equivalent to 25% of the total project cost; and
- c. STC No. 5(c) which aligned the project's timetable with the BOI-approved start of commercial operation date.

On July 10, 2015, the AES Corporation's Board of Directors (the former Ultimate Parent) approved the plan to expand Philippine operations by constructing an additional 335 MW facility adjacent to the existing Unit 1 and Unit 2 power generation facilities in Masinloc, Zambales. On December 1, 2015, the Partnership executed a Construction and Supply contracts for the expansion of facilities. The Expansion Plant is a 300 MW net capacity (335 MW gross capacity) with supercritical technology expected to be operational in 2020.

c. 10 MW Battery Energy Storage System (BESS) Facility and related ITH

The BESS Facility provides 10 MW of interconnected capacity and enhances the reliability of the Luzon grid. It will use the Advancion energy storage solution. It will be one of the first advanced energy storage installations in South East Asia and among the largest in all of Asia. The BESS Facility was completed as at December 31, 2016. On September 8, 2017, the Partnership entered into an Ancillary Services Procurement Agreement (ASPA) with the National Grid Corporation of the Philippines (NGCP). On July 2018, the Partnership has commenced its services to NGCP.

On December 21, 2015, the Partnership received the BOI approval for the application as new operator of 10 MW BESS Project. The approval embodies the following benefits:

- ITH for 6 years from December 2018 or actual start of commercial operations, whichever is earlier (but not earlier than the date of registration).
 - The ITH is limited to the revenue generated from the provision of ancillary services to the NGCP.
 - Prior to start of commercial operations, copy of ASPA with NGCP should be submitted, otherwise the registration is subject to automatic cancellation.
- Importation of capital equipment, spare parts, and accessories at 0% duty for 5 years from date of effectivity of Executive Order (EO) No. 57, *Reducing The Rates of Duty on Capital Equipment, Spare Parts and Accessories Imported by Board Of Investments - Registered New and Expanding Enterprises*; and its Implementing Rules and Regulations (IRR) for 5 years from date of registration or until the expiration of EO 57, whichever is earlier.
- Additional deduction from taxable income of 50% of the wages. May be availed of for the first 5 years from date of registration but not simultaneously with ITH (application required).

- Importation of consigned equipment for ten (10) years from date of registration.
 - Employment of foreign nationals.
 - Simplification of customs procedures for the importation of equipment, spare parts, raw materials and supplies.
- d. Retail Electricity Supply (RES) License Granted by the ERC

On July 26, 2016, the ERC approved the renewal of the Partnership's RES License, valid from August 2, 2016 to August 1, 2021.

2. Basis of Preparation

Statement of Compliance

The accompanying separate financial statements have been prepared in compliance with Philippine Financial Reporting Standards (PFRS). PFRS are based on International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). PFRS consist of PFRS, Philippine Accounting Standards (PAS) and Philippine Interpretations issued by the Philippine Financial Reporting Standards Council (FRSC).

The Partnership elects not to present consolidated financial statements and instead prepares separate financial statements as its primary financial statements since it meets all the conditions as set out in paragraph 4(a) of PFRS 10, *Consolidated Financial Statements*.

The Partnership availed of the exemption of presenting consolidated financial statements on the basis that SMC Global presents consolidated financial statements available for public use and is reporting under full PFRS.

The separate financial statements were approved and authorized for issue in accordance with a resolution by the Partnership Management on March 9, 2020.

Basis of Measurement

The separate financial statements of the Partnership have been prepared under the historical cost basis, except for retirement benefits liability which is measured at the present value of the defined benefit obligation.

Functional and Presentation Currency

The separate financial statements are presented in United States dollar (USD or \$), which is the functional currency of the Partnership. All financial information are rounded off to the nearest dollar, except when otherwise indicated.

3. Significant Accounting Policies

The accounting policies set out below have been applied consistently to all periods presented in the separate financial statements, except for the changes in accounting policies as explained below.

Adoption of New and Amended Standards and Interpretation

The FRSC approved the adoption of a number of new and amended standards and interpretation as part of PFRS.

The Partnership has adopted the following PFRS starting January 1, 2019 and accordingly, changed its accounting policies in the following areas:

- PFRS 16, *Leases*, supersedes PAS 17, *Leases*, and the related Philippine Interpretations. The new standard introduces a single lease accounting model for lessees under which all major leases are recognized on-balance sheet, removing the lease classification test. Lease accounting for lessors essentially remains unchanged except for a number of details including the application of the new lease definition, new sale-and-leaseback guidance, new sub-lease guidance and new disclosure requirements.

Practical expedients and targeted reliefs were introduced including an optional lessee exemption for short-term leases (leases with a term of 12 months or less) and low-value items, as well as the permission of portfolio-level accounting instead of applying the requirements to individual leases. New estimates and judgmental thresholds that affect the identification, classification and measurement of lease transactions, as well as requirements to reassess certain key estimates and judgments at each reporting date were also introduced.

The Partnership has adopted PFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognized in retained earnings as at January 1, 2019. Accordingly, the comparative information has not been restated and is presented, as previously reported, under PAS 17 and related Interpretations.

For lease previously classified as finance leases, the Partnership determined the carrying amount of the lease assets and lease liabilities immediately before the transition as the carrying amount of the right-of-use asset and lease liabilities at the date of initial application.

Right-of-use asset and lease liabilities are presented separately in the separate statements of financial position.

The impact of the adoption of PFRS 16 as at January 1, 2019 is as follows:

	Note	Increase (Decrease)
ASSETS		
Property, plant and equipment - net	11	(\$16,728,381)
Right-of-use asset	12	16,728,381
		\$ -

- **Philippine Interpretation of the International Financial Reporting Interpretations Committee (IFRIC) 23, *Uncertainty over Income Tax Treatments*.** The Interpretation clarifies how to apply the recognition and measurement requirements in PAS 12, *Income Taxes*, when there is uncertainty over income tax treatments. Under the interpretation, whether the amounts recorded in the separate financial statements will differ to that in the tax return, and whether the uncertainty is disclosed or reflected in the measurement, depends on whether it is probable that the tax authority will accept the chosen tax treatment. If it is not probable that the tax authority will accept the chosen tax treatment, the uncertainty is reflected using the measure that provides the better prediction of the resolution of the uncertainty - either the most likely amount or the expected value.

The Interpretation also requires the reassessment of judgments and estimates applied if facts and circumstances change - e.g. as a result of examination or action by tax authorities, following changes in tax rules or when a tax authority's right to challenge a treatment expires.

- **Prepayment Features with Negative Compensation (Amendment to PFRS 9).** The amendment covers the following areas:
 - ***Prepayment Features with Negative Compensation.*** The amendment clarifies that a financial asset with a prepayment feature could be eligible for measurement at amortized cost or financial assets at fair value through other comprehensive income (FVOCI) irrespective of the event or circumstance that causes the early termination of the contract, which may be within or beyond the control of the parties, and a party may either pay or receive reasonable compensation for the early termination.
 - ***Modification of Financial Liabilities.*** The amendment to the Basis for Conclusions on PFRS 9 clarifies that the standard provide an adequate basis for an entity to account for modifications and exchanges of financial liabilities that do not result in derecognition and the treatment is consistent with the requirements for adjusting the gross carrying amount of a financial asset when a modification does not result in the derecognition of the financial asset - i.e. the amortized cost of the modified financial liability is recalculated by discounting the modified contractual cash flows using the original effective interest rate and any adjustment is recognized in profit or loss.
- **Plan Amendment, Curtailment or Settlement (Amendments to PAS 19, *Employee Benefits*).** The amendments clarify that on amendment, curtailment or settlement of a defined benefit plan, an entity now uses updated actuarial assumptions to determine its current service cost and net interest for the period. The effect of the asset ceiling is disregarded when calculating the gain or loss on any settlement of the plan and is dealt with separately in other comprehensive income.
- **Annual Improvements to PFRS Cycles 2015 - 2017 contain changes to three standards:**
 - ***Previously Held Interest in a Joint Operation (Amendments to PFRS 3, *Business Combinations*, and PFRS 11, *Joint Arrangements*).*** The amendments clarify how an entity accounts for increasing its interest in a joint operation that meets the definition of a business. If an entity maintains (or obtains) joint control, the previously held interest is not remeasured. If an entity obtains control, the transaction is a business combination achieved in stages and the acquiring entity remeasures the previously held interest at fair value.

- o **Income Tax: Consequences of Payments on Financial Instrument Classified as Equity (Amendments to PAS 12).** The amendments clarify that all income tax consequences of dividends, including payments on financial instruments classified as equity, are recognized consistently with the transactions that generated the distributable profits - i.e., in profit or loss, other comprehensive income or equity.
- o **Borrowing Costs Eligible for Capitalization (Amendments to PAS 23, *Borrowing Costs*).** The amendments clarify that the general borrowings pool used to calculate eligible borrowing costs excludes borrowings that specifically finance qualifying assets that are still under development or construction. Borrowings that were intended to specifically finance qualifying assets that are now ready for their intended use or sale, or any non-qualifying assets, are included in that general pool.

Except as otherwise indicated, the adoption of the new and amended standards and interpretation did not have a material effect on the separate financial statements.

New and Amended Standards and Framework Not Yet Adopted

A number of new and amended standards and framework are effective for annual periods beginning after January 1, 2019 and have not been applied in preparing the separate financial statements. Unless otherwise indicated, none of these is expected to have a significant effect on the separate financial statements.

The Partnership will adopt the following new and amended standards and framework on the respective effective dates:

- **Amendments to References to Conceptual Framework in PFRS** sets out amendments to PFRS, their accompanying documents and PFRS practice statements to reflect the issuance of the revised Conceptual Framework for Financial Reporting in 2018 (2018 Conceptual Framework). The 2018 Conceptual Framework includes: (a) a new chapter on measurement; (b) guidance on reporting financial performance; (c) improved definitions of an asset and a liability, and guidance supporting these definitions; and (d) clarifications in important areas, such as the roles of stewardship, prudence and measurement uncertainty in financial reporting.

Some standards, their accompanying documents and PFRS practice statements contain references to, or quotations from, the International Accounting Standards Committee Framework for the Preparation and Presentation of Financial Statements adopted by the International Accounting Standards Board (IASB) in 2001 or the Conceptual Framework for Financial Reporting issued in 2010. The amendments update some of those references and quotations so that they refer to the 2018 Conceptual Framework, and makes other amendments to clarify which version of the Conceptual Framework is referred to in particular documents.

The amendments are effective for annual periods beginning on or after January 1, 2020.

- **Definition of a Business (Amendments to PFRS 3).** The amendments narrowed and clarified the definition of a business. The amendments also permit a simplified assessment of whether an acquired set of activities and assets is a group of assets rather than a business. The amendments: (a) confirmed that a business must include inputs and a process, and clarified that the process must be substantive and the inputs and process must together significantly contribute to creating outputs; (b) narrowed the definitions of a business by focusing the definition of outputs on goods and services provided to customers and other income from ordinary activities, rather than on providing dividends or other economic benefits directly to investors or lowering costs; and (c) added a test that makes it easier to conclude that a company has acquired a group of assets, rather than a business, if the value of the assets acquired is substantially all concentrated in a single asset or group of similar assets.

The amendments apply to business combinations and asset acquisitions in annual reporting periods beginning on or after January 1, 2020, with early application permitted.

- **Definition of Material (Amendments to PAS 1, *Presentation of Financial Statements* and PAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*).** The amendments refine the definition of what is considered material. The amended definition of what is considered material states that such information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity. The amendments clarify the definition of what is considered material and its application by: (a) raising the threshold at which information becomes material by replacing the term 'could influence' with 'could reasonably be expected to influence'; (b) including the concept of 'obscuring information' alongside the concept of 'omitting' and 'misstating' information in the definition; (c) clarifying that the users to which the definition refers are the primary users of general purpose financial statements referred to in the Conceptual Framework; (d) clarifying the explanatory paragraphs accompanying the definition; and (e) aligning the wording of the definition of what is considered material across PFRS and other publications. The amendments are expected to help entities make better materiality judgments without substantively changing existing requirements.

The amendments apply prospectively for annual periods beginning on or after January 1, 2020, with early application permitted.

Deferral of the local implementation of Amendments to PFRS 10, *Consolidated Financial Statements*, and PAS 28: *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*:

- **Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to PFRS 10 and PAS 28).** The amendments address an inconsistency in the requirements in PFRS 10 and PAS 28 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.

Originally, the amendments apply prospectively for annual periods beginning on or after January 1, 2016, with early adoption permitted. However, on January 13, 2016, the FRSC decided to postpone the effective date until the IASB has completed its broader review of the research project on equity accounting that may result in the simplification of accounting for such transactions and of other aspects of accounting for associates and joint ventures.

Current versus Noncurrent Classification

The Partnership presents assets and liabilities in the separate statements of financial position based on current and noncurrent classification. An asset is current when it is: (a) expected to be realized or intended to be sold or consumed in the normal operating cycle; (b) held primarily for the purpose of trading; (c) expected to be realized within 12 months after the reporting period; or (d) cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

A liability is current when: (a) it is expected to be settled in the normal operating cycle; (b) it is held primarily for trading; (c) it is due to be settled within 12 months after the reporting period; or (d) there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

The Partnership classifies all other assets and liabilities as noncurrent. Deferred tax assets and liabilities are classified as noncurrent.

Financial Instruments

Recognition and Initial Measurement. A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

The Partnership recognizes a financial asset or a financial liability in the separate statements of financial position when it becomes a party to the contractual provisions of the instrument.

A financial asset (unless a trade receivable without a significant financing component) or financial liability is initially measured at the fair value of the consideration given or received. The initial measurement of financial instruments, except for those designated as at fair value through profit or loss (FVPL), includes transaction costs. A trade receivable without a significant financing component is initially measured at the transaction price.

Financial Assets

The Partnership classifies its financial assets, at initial recognition, and subsequently measured at amortized cost, FVOCI and FVPL. The classification depends on the contractual cash flow characteristics of the financial assets and the business model of the Partnership for managing the financial assets.

Subsequent to initial recognition, financial assets are not reclassified unless the Partnership changes the business model for managing financial assets. All affected financial assets are reclassified on the first day of the reporting period following the change in the business model.

The business model refers to how the Partnership manages the financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. The Partnership considers the following information in assessing the objective of the business model in which a financial asset is held at a portfolio level, which reflects the way the business is managed information is provided to the management.

- the stated policies and objectives for the portfolio and the operations of those policies in practice;
- how the performance of the portfolio is evaluated and reported to the Partnership's management;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and how those risks are managed;
- how employees of the business are compensated; and
- the frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

The Partnership considers the contractual terms of the instrument in assessing whether the contractual cash flows are solely payments of principal and interest. For purposes of this assessment, "principal" is defined as the fair value of the financial asset on initial recognition. "Interest" is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin. The assessment includes whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. The Partnership considers the following in making the assessment:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features;
- prepayment and extension features; and
- terms that limit the Partnership's claim to cash flows from specified assets.

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract. Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

For purposes of subsequent measurement, financial assets are classified in the following categories: financial assets at amortized cost, financial assets at FVOCI (with or without recycling of cumulative gains and losses) and financial assets at FVPL.

Financial Assets at Amortized Cost. A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVPL:

- it is held within a business model with the objective of holding financial assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognized in profit or loss when the financial asset is derecognized, modified or impaired.

The Partnership's cash, trade receivables - net, due from related parties, current portion of long-term loan to a related party, other current assets, rent security deposits and restricted cash are included under this category (Notes 7, 8, 10, 13, 26 and 27).

Cash includes cash on hand and in banks which are stated at face value.

Financial Assets at FVOCI. Investment in debt instruments is measured at FVOCI if it meets both of the following conditions and is not designated as at FVPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

At initial recognition of an investment in equity instrument that is not held for trading, the Partnership may irrevocably elect to present subsequent changes in the fair value in other comprehensive income. This election is made on an instrument-by-instrument basis.

Financial assets at FVOCI are subsequently measured at fair value. Changes in fair value are recognized in other comprehensive income.

Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment on investment in debt instruments are recognized in profit or loss. When investment in debt instruments at FVOCI is derecognized, the related accumulated gains or losses previously reported in the separate statements of changes in equity are transferred to and recognized in profit or loss.

Dividends earned on holding an investment in equity instrument are recognized as dividend income in profit or loss when the right to receive the payment has been established, unless the dividend clearly represents a recovery of the part of the cost of the investment. When investment in equity instruments at FVOCI is derecognized, the related accumulated gains or losses previously reported in the separate statements of changes in equity are never reclassified to profit or loss.

The Partnership has no financial assets at FVOCI as at December 31, 2019 and 2018.

Financial Assets at FVPL. All financial assets not classified as measured at amortized cost or FVOCI are measured at FVPL. This includes derivative financial assets that are not designated as cash flow hedge. Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value basis are measured at FVPL.

At initial recognition, the Partnership may irrevocably designate a financial asset as at FVPL if the designation eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on different bases.

The Partnership carries financial assets at FVPL using their fair values. Attributable transaction costs are recognized in profit or loss as incurred. Changes in fair value and realized gains or losses are recognized in profit or loss. Fair value changes from derivatives accounted for as part of an effective cash flow hedge are recognized in other comprehensive income. Any interest earned from investment in debt instrument designated as at FVPL is recognized in profit or loss. Any dividend income from investment in equity instrument is recognized in profit or loss when the right to receive payment has been established, unless the dividend clearly represents a recovery of the part of the cost of the investment.

The Partnership has no financial assets at FVPL as at December 31, 2019 and 2018.

Financial Liabilities

The Partnership determines the classification of its financial liabilities, at initial recognition, in the following categories: financial liabilities at FVPL and other financial liabilities. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings, net of directly attributable transaction costs.

The Partnership has no financial liabilities at FVPL as at December 31, 2019 and 2018.

Other Financial Liabilities. This category pertains to financial liabilities that are not designated or classified as at FVPL. After initial measurement, other financial liabilities are carried at amortized cost using the effective interest method. Amortized cost is calculated by taking into account any premium or discount and any directly attributable transaction costs that are considered an integral part of the effective interest rate of the liability. The effective interest rate amortization is included in "Interest expense and other financing charges" account in the profit or loss. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the amortization process.

Debt issue costs are considered as an adjustment to the effective yield of the related debt and are deferred and amortized using the effective interest method. When a loan is paid, the related unamortized debt issue costs at the date of repayment are recognized in profit or loss.

The Partnership's liabilities arising from its trade or borrowings such as accounts payable and accrued expenses, loans payable, due to related parties, other current liabilities and other noncurrent liabilities are included under this category (Notes 14, 15, 16, 17, 23, 26 and 27).

Derecognition of Financial Assets and Financial Liabilities

Financial Assets. A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized when:

- the rights to receive cash flows from the asset have expired; or
- the Partnership has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay them in full without material delay to a third party under a "pass-through" arrangement; and either: (a) has transferred substantially all the risks and rewards of the asset; or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Partnership has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Partnership continues to recognize the transferred asset to the extent of the Partnership's continuing involvement. In that case, the Partnership also recognizes the associated liability. The transferred asset and the associated liability are measured on the basis that reflects the rights and obligations that the Partnership has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Partnership is required to repay.

Financial Liabilities. A financial liability is derecognized when the obligation under the liability is discharged or cancelled, or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

Impairment of Financial Assets

The Partnership recognizes allowance for expected credit loss (ECL) on financial assets at amortized cost.

ECLs are probability-weighted estimates of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e., the difference between the cash flows due to the Partnership in accordance with the contract and the cash flows that the Partnership expects to receive), discounted at the effective interest rate of the financial asset, and reflects reasonable and supportable information that is available without undue cost or effort about past events, current conditions and forecasts of future economic conditions.

The Partnership recognizes an allowance for impairment based on either 12-month or lifetime ECLs, depending on whether there has been a significant increase in credit risk since initial recognition.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Partnership considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Partnership's historical experience and informed credit assessment and including forward-looking information.

The Partnership recognizes lifetime ECLs for receivables that do not contain significant financing component. The Partnership uses provision matrix that is based on the Partnership's historical credit loss experience, adjusted for forward-looking factors specific to the borrowers and the economic environment.

At each reporting date, the Partnership assesses whether financial assets at amortized cost are credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events:

- (a) significant financial difficulty of the issuer or the borrower;
- (b) a breach of contract, such as a default or past due event;
- (c) the restructuring of a financial asset by the Partnership on terms that the Partnership would not consider otherwise;
- (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganization; or
- (e) the disappearance of an active market for that financial asset because of financial difficulties.

The Partnership considers a financial asset to be in default when a counterparty fails to pay its contractual obligations, or there is a breach of other contractual terms, such as covenants.

The Partnership directly reduces the gross carrying amount of a financial asset when there is no reasonable expectation of recovering the contractual cash flows on a financial asset, either partially or in full. This is generally the case when the Partnership determines that the borrower does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Partnership's procedures for recovery of amounts due.

The ECLs on financial assets at amortized cost are recognized as allowance for impairment losses against the gross carrying amount of the financial asset, with the resulting impairment losses (or reversals) recognized in profit or loss.

Classification of Financial Instruments between Liability and Equity

Financial instruments are classified as liability or equity in accordance with the substance of the contractual arrangement. Interest, dividends, gains and losses relating to a financial instrument or a component that is a financial liability, are reported as expense or income. Distributions to holders of financial instruments classified as equity are charged directly to equity, net of any related income tax benefits.

A financial instrument is classified as liability if it provides for a contractual obligation to:

- deliver cash or another financial asset to another entity;
- exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the Partnership; or

- satisfy the obligation other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of own equity shares.

If the Partnership does not have an unconditional right to avoid delivering cash or another financial asset to settle its contractual obligation, the obligation meets the definition of a financial liability.

The components of issued financial instruments that contain both liability and equity elements are accounted for separately, with the equity component being assigned the residual amount after deducting from the instrument as a whole or in part, the amount separately determined as the fair value of the liability component on the date of issue.

Offsetting Financial Instruments

Financial assets and financial liabilities are offset and the net amount is reported in the separate statements 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 assets and settle the liabilities simultaneously.

Inventories

Inventories are valued at the lower of cost and net realizable value. Cost is determined using specific identification method and weighted average method for coal inventories and weighted average method for fuel oil and other consumables, and spare parts. Net realizable value is the current replacement cost.

Any write-down of inventories to net realizable value and all losses of inventories are recognized as expense in the year of write-down or loss occurrence. The amount of reversals, if any, of write-down of inventories arising from an increase in net realizable value are recognized as reduction in the amount of inventories recognized as expense in the year in which the reversal occurs.

Prepaid Expenses and Other Current Assets

Prepaid expenses represent expenses not yet incurred but already paid in cash. These are initially recorded as assets and measured at the amount of cash paid. Subsequently, these are recognized in profit or loss as they are consumed or expire with the passage of time.

Other current assets pertain to assets which are expected to be realized within 12 months after the reporting period. Otherwise, these are classified as noncurrent assets.

Investment in Shares of Stock of a Subsidiary

The Partnership's investment in shares of stock of a subsidiary are accounted for under the cost method as provided under PAS 27, *Separate Financial Statements*. The investment is carried in the separate statement of financial position at cost less impairment in value. The Partnership recognized dividend from a subsidiary in profit or loss when its right to receive the dividends is established.

A subsidiary is an entity controlled by the Partnership. The Partnership controls an entity when it is exposed to, or has variable rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The Partnership re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control.

Business Combination

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Partnership elects whether to measure the non-controlling interests in the acquiree at fair value or at proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included as part of "Operating expenses" account in the profit or loss.

When the Partnership acquires a business, it assesses the financial assets and financial liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured at the acquisition date fair value and any resulting gain or loss is recognized in profit or loss.

The Partnership measures goodwill at the acquisition date as: a) the fair value of the consideration transferred; plus b) the recognized amount of any non-controlling interests in the acquiree; plus c) if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree; less d) the net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed. When the excess is negative, a bargain purchase gain is recognized immediately in profit or loss. Subsequently, goodwill is measured at cost less any accumulated impairment in value. Goodwill is reviewed for impairment, annually or more frequently, if events or changes in circumstances indicate that the carrying amount may be impaired.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized in profit or loss. Costs related to the acquisition, other than those associated with the issuance of debt or equity securities that the Partnership incurs in connection with a business combination, are expensed as incurred. Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes to the fair value of the contingent consideration are recognized in profit or loss.

▪ *Goodwill in a Business Combination*

Goodwill acquired in a business combination is, from the acquisition date, allocated to each of the cash-generating units, or groups of cash-generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities are assigned to those units or groups of units.

Each unit or group of units to which the goodwill is allocated:

- represents the lowest level within the Partnership at which the goodwill is monitored for internal management purposes; and
- is not larger than an operating segment determined in accordance with PFRS 8, *Operating Segments*.

Impairment is determined by assessing the recoverable amount of the cash-generating unit or group of cash-generating units, to which the goodwill relates. Where the recoverable amount of the cash-generating unit or group of cash-generating units is less than the carrying amount, an impairment loss is recognized. Where goodwill forms part of a cash-generating unit or group of cash-generating units and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained. An impairment loss with respect to goodwill is not reversed.

- *Intangible Assets Acquired in a Business Combination*

The cost of an intangible asset acquired in a business combination is the fair value as at the date of acquisition, determined using discounted cash flows as a result of the asset being owned.

Following initial recognition, intangible asset is carried at cost less any accumulated amortization and impairment losses, if any. The useful life of an intangible asset is assessed to be either finite or indefinite.

An intangible asset with finite life is amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at each reporting date. A change in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for as a change in accounting estimate. The amortization expense on intangible asset with finite life is recognized in profit or loss.

Property, Plant and Equipment

Property, plant and equipment, except for land, are stated at cost less accumulated depreciation and amortization and any accumulated impairment in value. Such cost includes the cost of replacing part of the property, plant and equipment at the time the cost is incurred, if the recognition criteria are met, and excludes the costs of day-to-day servicing. Land is stated at cost less impairment in value, if any.

The initial cost of property, plant and equipment comprises its construction cost or purchase price, including import duties, taxes and any directly attributable costs in bringing the asset to its working condition and location for its intended use. Cost also includes any related asset retirement obligation (ARO), if any. Expenditures incurred after the asset has been put into operation, such as repairs, maintenance and overhaul costs, are normally recognized as expense in the period the costs are incurred. Major repairs are capitalized as part of property, plant and equipment only when it is probable that future economic benefits associated with the items will flow to the Partnership and the cost of the items can be measured reliably.

Capital projects in progress (CPIP) represents the amount of accumulated expenditures on unfinished and/or ongoing projects. This includes the costs of construction and other direct costs. Borrowing costs that are directly attributable to the construction of plant and equipment are capitalized during the construction period. CPIP is not depreciated until such time that the relevant assets are ready for use.

Depreciation and amortization, which commence when the assets are available for their intended use, are computed using the straight-line method over the following estimated useful lives of the assets:

	Number of Years
Power plants	40
Leasehold improvements	5 - 25 or term of the lease, whichever is shorter
Other equipment	2 - 20
Building	10 - 25

The remaining useful lives, residual values, and depreciation and amortization methods are reviewed and adjusted periodically, if appropriate, to ensure that such periods and methods of depreciation and amortization are consistent with the expected pattern of economic benefits from the items of property, plant and equipment.

The carrying amounts of property, plant and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying amounts may not be recoverable.

Fully depreciated assets are retained in the accounts until they are no longer in use.

An item of property, plant and equipment is derecognized when either it has been disposed of or when it is permanently withdrawn from use and no future economic benefits are expected from its use or disposal. Any gain or loss arising from the retirement and disposal of an item of property, plant and equipment (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognized in profit or loss in the period of retirement and disposal.

Leases

Policy Applicable from January 1, 2019

At inception of a contract, the Partnership assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset for a period of time, the Partnership assesses whether, throughout the period of use;

- the Partnership has the right to obtain substantially all the economic benefits from use of the identified asset; and
- the Partnership has the right to direct the use of the identified asset.

Partnership as Lessee

The Partnership recognizes a right-of-use asset and a lease liability at the lease commencement date (i.e., the date the underlying asset is available for use). The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Partnership's incremental borrowing rate. Generally, the Partnership uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise of the following:

- fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Partnership is reasonably certain to exercise, lease payments in an optional renewal period if the Partnership is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Partnership is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in the estimate of the amount expected to be payable under a residual value guarantee, or changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recognized in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Partnership has elected not to recognize right-of-use assets and lease liabilities for short-term leases (i.e., lease that do not have a lease term of 12 months or less from the commencement date and do not contain a purchase option) and leases of low-value assets. The Partnership recognizes the lease payments associated with these leases as expense on a straight-line basis over the lease term.

Partnership as a Lessor

The Partnership determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Partnership makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, the lease is classified as a finance lease; if not, it is classified as an operating lease. As part of the assessment, the Partnership considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Partnership is an intermediate lessor, it accounts for the head lease and the sublease separately. It assesses the lease classification of a sublease with reference to the right-of-use asset arising from the head lease. If a head lease is a short-term lease to which the Partnership applies the recognition exemption, it classifies the sublease as an operating lease.

If an arrangement contains lease and non-lease components, the Partnership applies PFRS 15, *Revenue from Contracts with Customers*, to allocate the consideration in the contract.

The Partnership recognizes lease payments received under operating leases as rent income on a straight-line basis over the lease term.

Policy Applicable before January 1, 2019

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement 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. A reassessment is made after the inception of the lease only if one of the following applies:

- (a) there is a change in contractual terms, other than a renewal or extension of the arrangement;
- (b) a renewal option is exercised or an extension is granted, unless the term of the renewal or extension was initially included in the lease term;
- (c) there is a change in the determination of whether fulfillment is dependent on a specific asset; or
- (d) there is a substantial change to the asset.

Where a reassessment is made, lease accounting shall commence or cease from the date when the change in circumstances gives rise to the reassessment for scenarios (a), (c) or (d), and at the date of renewal or extension period for scenario (b) above.

Finance Lease

Finance leases, which transfer to the Partnership substantially all the risks and rewards incidental to ownership of the leased item, are capitalized at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Obligations arising from plant assets under finance lease agreement are classified in the separate statements of financial position as finance lease liabilities.

Lease payments are apportioned between financing charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Financing charges are recognized in profit or loss.

Capitalized leased assets are depreciated over the estimated useful lives of the assets when there is reasonable certainty that the Partnership will obtain ownership by the end of the lease term.

Operating Lease

Partnership as Lessee. Leases which do not transfer to the Partnership substantially all the risks and rewards of ownership of the asset 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. Associated costs such as maintenance and insurance are expensed as incurred.

Partnership as Lessor. Leases where the Partnership does not transfer substantially all the risks and rewards of ownership of the assets are classified as operating leases. Rent income from operating leases is recognized as income on a straight-line basis over the lease term. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as rent income. Contingent rents are recognized as income in the period in which they are earned.

Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Subsequently, intangible assets are carried at cost less accumulated amortization and any accumulated impairment losses. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditures are recognized in profit or loss in the year in which the related expenditures are incurred.

The useful lives of intangible assets are assessed to be either finite or indefinite.

Intangible assets with finite lives are amortized over the useful life and assessed for impairment whenever there is an indication that the intangible assets may be impaired. The amortization period and the amortization method used for an intangible asset with a finite useful life are reviewed at least at each reporting date. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimate. The amortization expense on intangible assets with finite lives is recognized in profit or loss consistent with the function of the intangible asset.

Amortization is computed using the straight-line method over the estimated useful lives of intangible assets of 3 years.

Gains or losses arising from the disposal of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognized in profit or loss when the asset is derecognized.

Impairment of Non-financial Assets

The carrying amounts of investment in Alpha Water and Realty Services Corp. (AWRSC), property, plant and equipment, right-of-use assets and intangible assets with finite useful lives are reviewed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. Goodwill are tested for impairment annually either individually or at the cash-generating unit level. If any such indication exists, and if the carrying amount exceeds the estimated recoverable amount, the assets or cash-generating units are written down to their recoverable amounts. The recoverable amount of the asset is the greater of fair value less costs to sell and value in use. The fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less costs of disposal. Value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs. Impairment losses are recognized in the profit or loss in those expense categories consistent with the function of the impaired 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 recoverable amount is estimated. A previously recognized impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If 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, net of depreciation and amortization, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in profit or loss. After such a reversal, the depreciation and amortization charge is adjusted in future periods to allocate the asset's revised carrying amount, less any residual value, on a systematic basis over its remaining useful life. An impairment loss with respect to goodwill is not reversed.

Fair Value Measurements

The Partnership measures financial and non-financial assets and liabilities at fair value at each reporting date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either: (a) in the principal market for the asset or liability; or (b) in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or most advantageous market must be accessible to the Partnership.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

The Partnership uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the separate financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3: inputs for the asset or liability that are not based on observable market data.

For assets and liabilities that are recognized in the separate financial statements on a recurring basis, the Partnership determines whether transfers have occurred between levels in the hierarchy by re-assessing the categorization at the end of each reporting period.

For the purpose of fair value disclosures, the Partnership has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy.

Provisions

Provisions are recognized when: (a) the Partnership has a present obligation (legal or constructive) as a result of past events; (b) it is probable (i.e., more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation; and (c) a reliable estimate of the amount of the obligation can be made. Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognized as a separate asset only when it is virtually certain that reimbursement will be received. The amount recognized for the reimbursement shall not exceed the amount of the provision. Provisions are reviewed at each reporting date and adjusted to reflect the current best estimate.

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 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.

ARO. The Partnership records a provision for asset retirement costs of its power plants. Asset retirement costs are provided at the present value of expected costs to settle the obligation using estimated cash flows and are recognized as part of property, plant and equipment. The cash flows are discounted at a current pre-tax rate that reflects the risks specific to the retirement liability. The unwinding of the discount is expensed as incurred and recognized in profit or loss as "Interest expense and other financing charges". The estimated future costs of asset retirement are reviewed annually and adjusted prospectively. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the power plants. If the decrease in the liability exceeds the carrying amount of the asset, the excess shall be recognized immediately in profit or loss.

Partners' Contribution

Contributed Capital

Contributed capital represents equity contributed by the Partners to the Partnership less withdrawals. The Partnership maintains separate account for each Partner of the Partnership.

Retained Earnings

Retained earnings represent the accumulated net income or losses, net of any dividend, distributions and other capital adjustments. Appropriated retained earnings represent that portion which is restricted and therefore not available for any dividend declaration.

Dividend distributions are approved by the Partnership.

Retained earnings is allocated in proportion to the capital contribution of the Partners, provided, however, that the Limited Partner shall not be liable for losses beyond its contributed capital.

Other Equity Transaction

Other equity transactions represent share-based compensation received in the form of equity instruments by certain employees of the Partnership from the Ultimate Parent and incorporation expenses which are deducted directly from equity.

Share-based Compensation

Certain employees of the former Partnership receive remuneration in the form of share-based payment transactions, whereby employees render services as consideration for equity instruments of the former Ultimate Parent ("equity-settled transactions").

Equity-settled share based payments are measured at fair value at the date of grant. The fair value, as determined by the former Ultimate Parent at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period on the Partnership's estimate of shares that will eventually vest and adjusted for the effect of nonmarket-based vesting conditions and estimated forfeitures. The Partnership recognized a corresponding increase recognized in equity as a contribution from the former Ultimate Parent.

Fair value is measured using the Black-Scholes pricing model. The expected life used in the model has been adjusted, based on management's best estimate, for the effects of non-transferability exercise restrictions and behavioral considerations.

Accruals have been reversed in 2018 arising from change of Partnership ownership.

Revenue Recognition

The Partnership recognizes revenue from contracts with customers when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Partnership expects to be entitled in exchange for those goods or services. Revenues are inclusive of pass-through charges, net of value-added tax (VAT) and other fees collected on behalf of other parties collected on behalf of other parties.

The transfer of control can occur over time or at a point in time. Revenue is recognized at a point in time unless one of the following criteria is met, in which case it is recognized over time: (a) the customer simultaneously receives and consumes the benefits as the Partnership performs its obligations; (b) the Partnership's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or (c) the Partnership's performance does not create an asset with an alternative use to the Partnership and the Partnership has an enforceable right to payment for performance completed to date.

The Partnership assesses its revenue arrangements to determine if it is acting as principal or agent. The Partnership has concluded that it acts as a principal as it controls the goods or services before transferring to the customer.

The following specific recognition criteria must also be met before revenue is recognized:

Sale of Power

Revenue from power generation and trading is recognized over time when actual power or capacity is generated, transmitted and/or made available to the customers, net of related discounts and adjustments.

Retail and Other Power-related Services

Revenues from retail and other power-related services are recognized over time upon the supply of electricity to the customers. The Uniform Filing Requirements on the rate unbundling released by the Energy Regulatory Commission (ERC) on October 30, 2001 specified the following bill components: (a) generation charge, (b) transmission charge, (c) system loss charge, (d) distribution charge, (e) supply charge, (f) metering charge, (g) currency exchange rate adjustments, where applicable and (h) interclass and life subsidies. Feed-in tariffs allowance, VAT and universal charges are billed and collected on behalf of the national and local government and do not form part of the Partnership's revenue. Generation, transmission and system loss charges, which are part of revenues, are pass-through charges.

Interest income. Interest income is recognized using the effective interest method. In calculating interest income, the effective interest rate is applied to the gross carrying amount of the asset.

Management income. Management income is recognized when earned in accordance with the terms of the agreement.

Rent income. Rent income from operating lease is recognized on a straight-line basis over the related lease terms. Lease incentives granted are recognized as an integral part of the total rent income over the term of the lease.

Costs and Expenses

Costs and expenses are decreases in economic benefits during the reporting period in the form of outflows or decrease of assets or incurrence of liabilities that result in decreases in equity, other than those relating to distributions to equity participants. Cost of power sold is debited for the direct costs related to power generation, retail and distribution of electricity, and/or trading. Expenses are recognized when incurred.

Interest Expense and Other Financing Charges. Interest expense and other financing charges comprise finance charges on finance lease liabilities, loans, concession payable, premium on option liabilities and other borrowings. Finance charges on finance lease liabilities, loans, concession payable and premium on option liabilities are recognized in profit or loss using the effective interest rate method.

Borrowing Costs

Borrowing costs directly attributable to the acquisition or construction of an asset that necessarily takes a substantial period of time to get ready for its intended use are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur. Capitalization of borrowing costs commences when the activities to prepare the asset are in progress and expenditures and borrowing costs are being incurred. Borrowing costs are capitalized until the assets are substantially ready for their intended use.

Investment income earned on the temporary investment of specific borrowings pending expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Employee Benefits

Short-term Employee Benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognized for the amount expected to be paid if the Partnership has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Retirement Costs

The net defined benefit retirement liability or asset is the aggregate of the present value of the amount of future benefit that employees have earned in return for their service in the current and prior periods, reduced by the fair value of plan assets (if any), adjusted for any effect of limiting a net defined benefit asset to the asset ceiling. The asset ceiling is the present value of economic benefits available in the form of reductions in future contributions to the plan.

The cost of providing benefits under the defined benefit retirement obligation is actuarially determined using the projected unit credit method. Projected unit credit method reflects services rendered by employees to the date of valuation and incorporates assumptions concerning projected salaries of employees. Actuarial gains and losses are recognized in full in the period in which they occur in other comprehensive income. Such actuarial gains and losses are also immediately recognized in equity and are not reclassified to profit or loss in subsequent period.

Defined benefit costs comprise the following:

- Service costs;
- Net interest on the defined benefit retirement liability or asset; and
- Remeasurements of defined benefit retirement liability or asset.

Service costs which include current service costs, past service costs and gains or losses on non-routine settlements are recognized as expense in profit or loss. Past service costs are recognized when plan amendment or curtailment occurs. These amounts are calculated periodically by independent qualified actuary.

Net interest on the net defined benefit retirement liability or asset is the change during the period as a result of contributions and benefit payments, which is determined by applying the discount rate based on the government bonds to the net defined benefit retirement liability or asset. Net interest on the net defined benefit retirement liability or asset is recognized as expense or income in profit or loss.

Remeasurements of net defined benefit retirement liability or asset comprising actuarial gains and losses, return on plan assets, and any change in the effect of the asset ceiling (excluding net interest) are recognized immediately in other comprehensive income in the period in which they arise. Remeasurements are not reclassified to profit or loss in subsequent periods.

When the benefits of a plan are changed, or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Partnership recognizes gains and losses on the settlement of a defined benefit retirement plan when the settlement occurs.

Foreign Currency

Foreign Currency Translations

Transactions in foreign currencies are initially recorded in the respective functional currency of the Partnership entities at exchange rates at the dates of the transactions.

Monetary assets and monetary liabilities denominated in foreign currencies are retranslated to the functional currency at exchange rate ruling at the reporting date.

Non-monetary assets and non-monetary liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at the exchange rate when the fair value was determined. Non-monetary items denominated in foreign currencies that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Foreign currency differences arising on translation are recognized in profit or loss.

Taxes

Current Tax. Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Current tax relating to items recognized directly in equity is recognized in equity and not in profit or loss. The Partnership periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretations and establishes provisions where appropriate.

Deferred Tax. Deferred tax is recognized using the liability method in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- with respect to taxable temporary differences associated with investments in shares of stock of subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, carryforward benefits of unused tax credits - Minimum Corporate Income Tax (MCIT) and unused tax losses - Net Operating Loss Carry Over (NOLCO), to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward benefits of MCIT and NOLCO can be utilized, except:

- where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- with respect to deductible temporary differences associated with investments in shares of stock of subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred 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.

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Partnership expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

VAT. Revenues, expenses and assets are recognized net of the amount of VAT, except:

- where the tax incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case the tax is recognized as part of the cost of acquisition of the asset or as part of the expense item as applicable; and
- receivables and payables that are stated with the amount of tax included.

The net amount of tax recoverable from, or payable to, the taxation authority is included as part of "Prepaid expenses and other current assets" or "Accounts payable and accrued expenses" accounts in the separate statements of financial position.

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. Transactions between related parties are on an arm's length basis in a manner similar to transactions with non-related parties.

Contingencies

Contingent liabilities are not recognized in the separate financial statements. They are disclosed in the notes to the separate financial statements unless the possibility of an outflow of resources embodying economic benefits is remote. Contingent assets are not recognized in the separate financial statements but are disclosed in the notes to the separate financial statements when an inflow of economic benefits is probable.

Events After the Reporting Date

Post year-end events that provide additional information about the Partnership's financial position at the reporting date (adjusting events) are reflected in the separate financial statements. Post year-end events that are not adjusting events are disclosed in the notes to the separate financial statements when material.

4. Use of Judgments, Estimates and Assumptions

The preparation of the separate financial statements in accordance with PFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the amounts of assets, liabilities, income and expenses reported in the separate financial statements at the reporting date. However, uncertainty about these judgments, estimates and assumptions could result in an outcome that could require a material adjustment to the carrying amount of the affected asset or liability in the future.

Judgments and estimates are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions are recognized in the period in which the judgments and estimates are revised and in any future period affected.

Judgment

In the process of applying the accounting policies, the Partnership has made the following judgments, apart from those involving estimations, which have an effect on the amounts recognized in the separate financial statements:

Determining Functional Currency. The Partnership has determined that its functional currency is the United States dollar. It is the currency of the primary economic environment in which the Partnership operates. It is the currency that mainly influences the sales price of goods and services and the costs of providing these goods and services.

Determining whether an Arrangement Contains Lease (Prior to the Adoption of PFRS 16). The Partnership uses its judgement in determining whether an arrangement contains a lease, based on the substance of the arrangement at inception date and makes assessment of whether the arrangement is dependent on the use of a specific asset or assets, the arrangement conveys a right to use the asset and the arrangement transfers substantially all the risks and rewards incidental to ownership to the customers.

Finance Lease - Partnership as Lessee (Prior to the Adoption of PFRS 16). The partnership entered into an agreement with Power Sector Assets and Liabilities Management Corporation (PSALM) and AWRSC for the lease of land where a portion of the Masinloc Power Plant is situated. The Partnership's management has made a judgment that such agreements contain a lease (Note 6).

The Partnership's management has made a judgment that it has substantially acquired all the risks and rewards incidental to the ownership of the land. Accordingly, the Partnership accounted for the agreements as finance lease and recognized the land and finance lease liabilities at the present value of the agreed monthly payments to PSALM and AWRSC (Note 6).

Finance lease liabilities recognized in the separate statements of financial position amounted to \$11,746,408 and \$10,865,590 as at December 31, 2019 and 2018, respectively (Notes 15 and 17).

The carrying amount of land under finance lease amounted to \$16,728,381 as at December 31, 2019 and 2018 (Notes 11 and 12).

Operating Lease Commitments - Partnership as Lessor/Lessee (Prior to the Adoption of PFRS 16). The Partnership has entered into various lease agreements either as a lessor or a lessee. The Partnership had determined that it retains all the significant risks and rewards of ownership of the property leased out on operating leases while the significant risks and rewards for property leased from third parties and related parties are retained by the lessors (Note 6).

Rent income recognized in the profit or loss amounted to \$6,479 and \$9,489 in 2019 and 2018, respectively (Notes 6 and 23).

Rent expense recognized in profit or loss amounted to \$134,117 and \$92,995 in 2019 and 2018, respectively (Notes 6, 21 and 23).

Determining the Lease Term of Contracts with Renewal Options - Partnership as Lessee (Upon the Adoption of PFRS 16). The Partnership determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised.

At lease commencement date, the Partnership applies judgment in evaluating whether it is reasonably certain to exercise the option to renew the lease by considering all relevant factors that create an economic incentive for it to exercise the renewal option. The Partnership reassesses whether it is reasonably certain to exercise the options if there is a significant event or change in circumstances within its control.

Estimating the Incremental Borrowing Rate. The Partnership cannot readily determine the interest rate implicit in its leases. Therefore, it uses the relevant incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Partnership would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR, therefore, reflects what the Partnership would have to pay, which requires estimation when no observable rates are available and to make adjustments to reflect the terms and conditions of the lease. The Partnership estimates the IBR using observable inputs (such as market interest rates) when available and is required to consider certain contract and entity-specific judgments estimates.

Determining Whether the Partnership is acting as a Principal or Agent in a Revenue Transaction. The determination whether the Partnership is a principal or agent in a contract is made by identifying each specified goods or services promised to the customers in the contract and evaluating whether the Partnership obtains control of the specified goods and services before it is transferred to the customer.

For the sale of power and retail and other power-related services, the Partnership has the obligation to provide a recurring service to the customer over the contract term and transfers control upon delivery, hence, the Partnership has determined that it is acting as principal in these revenue arrangements with customers.

Adequacy of Tax Liabilities. The Partnership takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Partnership believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretation of tax laws and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes the Partnership to change its judgment regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Classification of Financial Instruments. The Partnership exercises judgments in classifying a financial instrument in accordance with PFRS 9. The Partnership classifies a financial instrument, or its component parts, on initial recognition as a financial asset, a financial liability, or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial asset, a financial liability or an equity instrument. The substance of a financial instrument, rather than its legal form, governs its classification in the separate statements of financial position.

The Partnership uses its judgment in determining the classification of financial assets based on its business model in which assets are managed and their cash flow characteristics. The classification and fair values of financial assets and financial liabilities are presented in Note 27.

Contingencies. The Partnership is currently involved in various pending claims and cases which could be decided in favor of or against the Partnership. The Partnership's estimate of the probable costs for the resolution of these pending claims and cases has been developed in consultation with in-house as well as outside legal counsel handling the prosecution and defense of these matters and is based on an analysis of potential results. The Partnership currently does not believe that these pending claims and cases will have a material adverse effect on its financial position and financial performance. It is possible, however, that future financial performance could be materially affected by the changes in the estimates or in the effectiveness of strategies relating to these proceedings (Note 28).

Estimates and Assumptions

The key estimates and assumptions used in the separate financial statements are based upon the Partnership's evaluation of relevant facts and circumstances as at the date of the separate financial statements. Actual results could differ from such estimates.

Assessment for ECL on Trade and Other Receivables. The Partnership, applying the simplified approach in the computation of ECL, initially uses a provision matrix based on historical default rates for trade receivables. The Partnership also uses appropriate groupings if its historical credit loss experience show significantly different loss patterns for different customer segments. The Partnership then adjusts the historical credit loss experience with forward-looking information on the basis of current observable data affecting each customer segment to reflect the effects of current and forecasted economic conditions.

The Partnership has assessed that the forward-looking default rate component of its ECL on trade receivables is not material because substantial amount of trade receivables are normally collected within one year. Moreover, based on management's assessment, current conditions and forward-looking information does not indicate a significant increase in credit risk exposure of the Partnership from its trade receivables.

In 2019 and 2018, the Partnership recognized impairment on trade receivables amounting to \$271,769 and \$3,053,455, respectively. The allowance for impairment losses on trade receivables amounted to \$4,984,156 and \$4,538,069 as at December 31, 2019 and 2018, respectively. The carrying amount of trade receivables amounted to \$66,375,914 and \$59,933,619 as at December 31, 2019 and 2018, respectively (Note 8).

Assessment for ECL on Other Financial Assets at Amortized Cost. The Partnership determines the allowance for ECL using general approach based on the probability-weighted estimate of the present value of all cash shortfalls over the expected life of financial assets at amortized cost. ECL is provided for credit losses that result from possible default events within the next 12 months unless there has been a significant increase in credit risk since initial recognition in which case ECL is provided based on lifetime ECL.

When determining if there has been a significant increase in credit risk, the Partnership considers reasonable and supportable information that is available without undue cost or effort and that is relevant for the particular financial instrument being assessed such as, but not limited to, the following factors:

- actual or expected external and internal credit rating downgrade;
- existing or forecasted adverse changes in business, financial or economic conditions; and
- actual or expected significant adverse changes in the operating results of the borrower.

The Partnership also considers financial assets at day one to be the latest point at which lifetime ECL should be recognized unless it can demonstrate that this does not represent a significant risk in credit risk such as when non-payment was an administrative oversight rather than resulting from financial difficulty of the borrower.

The Partnership has assessed that the ECL on other financial assets at amortized cost is not material because the transactions with respect to these financial assets were entered into by the Partnership only with reputable banks and companies with good credit standing and relatively low risk of defaults. Accordingly, no provision for ECL on other financial assets at amortized cost was recognized in 2019 and 2018. The carrying amounts of other financial assets at amortized cost are as follows:

	Note	2019	2018
Cash	7	\$51,458,263	\$32,056,776
Due from related parties	23	4,180,033	4,311,738
Current portion of long-term loan to a related party	23	8,492,150	9,081,839
Other current assets*	10	36,002,652	13,957,489
Rent security deposit**	13	78,772	78,722
Restricted cash for plant expansion**	13	74,489,010	43,015,734
		\$174,700,880	\$102,502,298

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

Fair Value Measurements. A number of the Partnership's accounting policies and disclosures require the measurement of fair values for both financial and non-financial assets and liabilities.

The Partnership has an established control framework with respect to the measurement of fair values. This includes a valuation team that has the overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values. The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information is used to measure fair values, then the valuation team assesses the evidence obtained to support the conclusion that such valuations meet the requirements of PFRS, including the level in the fair value hierarchy in which such valuations should be classified.

The Partnership uses market observable data when measuring the fair value of an asset or liability. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques (Note 3).

If the inputs used to measure the fair value of an asset or a liability can 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 based on the lowest level input that is significant to the entire measurement.

The Partnership recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

The methods and assumptions used to estimate the fair values for both financial and non-financial assets and liabilities are discussed in Note 27.

Write-down of Inventory. The Partnership writes-down the cost of inventory to net realizable value whenever net realizable value becomes lower than cost due to damage, physical deterioration, obsolescence, changes in price levels or other causes.

Estimates of net realizable value are based on the most reliable evidence available at the time the estimates are made of the amount the inventories are expected to be realized. These estimates take into consideration fluctuations of price or cost directly relating to events occurring after the reporting date to the extent that such events confirm conditions existing at the reporting date.

The Partnership assessed that no write-down of inventories to net realizable value is necessary as at December 31, 2019 and 2018.

The carrying amount of inventories amounted to \$37,097,430 and \$32,091,386 as at December 31, 2019 and 2018, respectively (Note 9).

Estimated Useful Lives of Property, Plant and Equipment. The Partnership estimates the useful lives of property, plant and equipment based on the period over which the assets are expected to be available for use. The estimated useful lives of property, plant and equipment are reviewed periodically and are updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence and legal or other limits on the use of the assets.

In addition, estimation of the useful lives of property, plant and equipment is based on collective assessment of industry practice, internal technical evaluation and experience with similar assets. It is possible, however, that future financial performance could be materially affected by changes in 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, plant and equipment would increase the recorded cost of power sold and selling and administrative expenses and decrease noncurrent assets.

Property, plant and equipment, net of accumulated depreciation and amortization, amounted to \$1,120,404,215 and \$1,113,773,837 as at December 31, 2019 and 2018, respectively. Accumulated depreciation and amortization of property, plant and equipment amounted to \$419,285,366 and \$387,481,271 as at December 31, 2019 and 2018, respectively (Note 11).

Estimated Useful Lives of Intangible Assets. The useful lives of intangible assets are assessed at the individual asset level as having either a finite or an indefinite life. Intangible assets are regarded to have an indefinite useful life when, based on analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the Partnership.

Intangible assets with finite useful lives, such as computer software and licenses, amounted to \$1,660,216 and \$1,063,547 as at December 31, 2019 and 2018, respectively. Accumulated amortization of computer software and licenses amounted to \$691,175 and \$636,933 as at December 31, 2019 and 2018, respectively (Note 13).

Impairment of Goodwill with Indefinite Useful Life. The Partnership determines whether the goodwill acquired in a business combination is impaired at least annually. This requires the estimation of value in use of the cash-generating units to which the goodwill is allocated. Estimating value in use requires management to make an estimate of the expected future cash flows from the cash-generating unit and to choose a suitable discount rate to calculate the present value of those cash flows.

The recoverable amount of goodwill arising from the acquisition of Masinloc Coal-Fired Thermal Power Plant has been determined based on the value in use using discounted cash flows. Assumptions used in the discounted cash flows include discount rate and terminal growth rate of 9.0% and 3.0%, respectively, in 2019 and 2018 (Note 5)

Management believes that any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause its carrying amount to exceed its recoverable amount.

No impairment loss was recognized in 2019 and 2018 in relation to the goodwill arising from the acquisition of Masinloc Coal-Fired Thermal Power Plant.

The carrying amount of goodwill amounted to \$66,243,504 as at December 31, 2019 and 2018 (Note 5).

Acquisition Accounting. At the time of acquisition, the Partnership considers whether the acquisition represents an acquisition of a business or a group of assets. The Partnership accounts for an acquisition as a business combination if it acquires an integrated set of business processes in addition to the group of assets acquired.

The Partnership accounts for acquired businesses using the acquisition method of accounting which requires that the assets acquired and the liabilities assumed are recognized at the date of acquisition based on their respective fair values.

The application of the acquisition method requires certain estimates and assumptions concerning the determination of the fair values of acquired intangible assets and property, plant and equipment as well as liabilities assumed at the acquisition date. Moreover, the useful lives of the acquired intangible assets and property, plant and equipment have to be determined. Accordingly, for significant acquisitions, the Partnership obtains assistance from valuation specialists. The valuations are based on information available at the acquisition date.

Realizability of Deferred Tax Assets. The Partnership reviews its deferred tax assets at each reporting date and reduces the carrying amount 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 assets to be utilized. The Partnership's assessment on the recognition of deferred tax assets on deductible temporary differences and carryforward benefits of MCIT and NOLCO is based on the projected taxable income in the following periods.

Deferred tax assets arising from MCIT and NOLCO have not been recognized because the management believes that it is not probable that future taxable income will be available against which the Partnership can utilize the benefits therefrom (Note 18).

Deferred tax assets from temporary differences amounted to \$27,847,339 and \$25,771,630 as at December 31, 2019 and 2018, respectively (Note 18).

Impairment of Non-financial Assets. PFRS requires that an impairment review be performed on investments and advances, property, plant and equipment, right-of-use assets and intangible assets with finite useful lives when events or changes in circumstances indicate that the carrying amounts may not be recoverable. Determining the recoverable amounts of these assets requires the estimation of cash flows expected to be generated from the continued use and ultimate disposition of such assets. While it is believed that the assumptions used in the estimation of fair values reflected in the separate financial statements are appropriate and reasonable, significant changes in these assumptions may materially affect the assessment of recoverable amounts and any resulting impairment loss could have a material adverse impact on the financial performance.

The accumulated impairment loss on property, property plant and equipment as at December 31, 2019 and 2018 amounted to \$2,022,354 and \$1,331,305, respectively (Note 11).

The combined carrying amounts of investment in AWRSC, property, plant and equipment, and intangible assets with finite useful lives amounted to \$1,124,990,903 and \$1,117,763,856 as at December 31, 2019 and 2018, respectively (Notes 11 and 13).

Present Value of Defined Benefit Retirement Obligation. The present value of the defined benefit retirement obligation depends on a number of factors that are determined on an actuarial basis using a number of assumptions. These assumptions are described in Note 22 to the separate financial statements and include discount rate and salary increase rate.

The Partnership determines the appropriate discount rate at the end of each reporting period. It is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the retirement obligations. In determining the appropriate discount rate, the Partnership considers the interest rates on government bonds that are denominated in the currency in which the benefits will be paid. The terms to maturity of these bonds should approximate the terms of the related retirement obligation.

Other key assumptions for the defined benefit retirement obligation are based in part on current market conditions.

While it is believed that the assumptions of the Partnership are reasonable and appropriate, significant differences in actual experience or significant changes in assumptions may materially affect the defined benefit retirement obligation of the Partnership.

The present value of defined benefit retirement obligation amounted to nil and \$2,257,142 as at December 31, 2019 and 2018, respectively (Note 22).

ARO. The Partnership has ARO arising from power plants and leased properties. Determining ARO requires estimation of the costs of dismantling, installing and restoring leased properties to their original condition. The Partnership determined the amount of the ARO by obtaining estimates of dismantling costs for the operation of the asset, discounted at the Partnership's current credit-adjusted risk-free rate of 12.64% for Layer 1 and 6.13% for Layer 2 depending on the life of the capitalized costs. While it is believed that the assumptions used in the estimation of such costs are reasonable, significant changes in these assumptions may materially affect the recorded expense or obligation in future periods.

The Partnership's ARO presented under "Other noncurrent liabilities" account in the separate statements of financial position amounted to \$1,066,044 and \$1,038,414 as at December 31, 2019 and 2018, respectively (Note 17).

5. Business Combination and Goodwill

On April 16, 2008, the Partnership acquired the Masinloc Coal-Fired Thermal Power Plant from PSALM for the production and sale of electricity in the Philippines. The acquisition of these assets accounted for as a business combination resulted to the recognition of goodwill amounting to \$66,243,504.

Goodwill represents the value of expected synergies and the assumed power supply contracts.

The purchase of the power plant facilities is covered under the Asset Purchase Agreement (APA) entered into with PSALM. Below are the significant provisions of the APA:

- a. The Partnership assumed all the rights and obligations of PSALM under the Power Supply Contracts (PSCs), except for those obligations and liabilities that are outstanding before the closing date. The Partnership, as the assignee or transferee of the PSCs, shall undertake the supply of energy to the customers in the volume stated therein. The PSCs in place are short term, for a maximum of one to three years.

- b. As embedded in the APA, the Partnership entered into a Land Lease Agreement (LLA) with PSALM for the lease of the land in which the plant is situated. The details of the LLA are discussed in Note 6. The LLA resulted in the recording of the land under finance lease of \$11,877,428 and the related land lease liability of \$4,648,675 in 2008 that represented the fair value of future minimum lease payments net of advance rental paid covering the 20-year lease term at the inception of the LLA, as part of the purchased assets and liabilities.

Under the LLA, the Partnership has the right to reimburse from PSALM the amount of clean-up cost of environmental materials as at closing date up to the extent of \$3,500,000. The Partnership recorded \$3,500,000 under "Other current assets" and a corresponding accrued environmental cost of the same amount under "Other current liabilities" as at December 31, 2014 to represent the reimbursement right from PSALM and the liability for the clean-up cost. In 2014, the Partnership reversed \$2,987,937 accrued environmental cost and corresponding reimbursable following AWRSC's purchase of additional 9% of the land owned by PSALM. Both parties agreed to hire the services of an external consultant to make a study of the extent of the clean-up cost.

- c. The Partnership has the obligation to incur dismantling cost for the restoration of the site at the end of the term. The amortized cost of the asset retirement obligation, which is included under "Other noncurrent liabilities" in the separate statements of financial position as at December 31, 2019 and 2018 amounted to \$1,066,044 and \$1,038,414, respectively (Note 17).

Impairment of Goodwill

In 2018, the Partnership uses the fair value as a valuation technique in assessing whether the goodwill is impaired.

The recoverable amount used is the recent purchase price paid by SMC Global to the Sellers to acquire Masinloc Business, which amounted to \$1.9 billion. Based on the comparison between the fair value and carrying value of the cash-generating unit, it was determined that there is no impairment loss for the year ended December 31, 2018.

In 2019, the Partnership has determined the value in use of the cash-generating unit to which the goodwill is allocated. The recoverable amount of goodwill has been determined based on the value in use using discounted cash flows and was based on the following key assumptions:

- Cash flows were projected based on experience and actual operating results and covers forecast until 2024 based on long range plans approved by management. Management believes that the forecast was justifiable due to long-term contracts with major customers. Cash flows beyond the forecasted period are extrapolated using a constant growth rate determined per cash-generating unit.
- A discount rate of 9.0% in 2019 was applied based on the weighted-average cost of capital, which reflects the management's estimate of the risk specific to the cash-generating unit.
- Terminal growth rate of 3.0% in 2019 was applied as the Partnership is in the process of increasing its capacity and upgrading its facilities and hence foresees growth in cash flows generated perpetually. This growth rate is consistent with the long-term average growth rate for the industry.

The values assigned to the key assumptions represent the management's assessment of future trends in the industry and are based on internal sources (historical data).

For purposes of discount rate sensitivity, discount rate scenarios of 8.5% and 9.5% in 2019 are applied on the discounted cash flows analysis. Management believes that any reasonably possible change in the discount rate on which the recoverable amount is based would not cause its carrying amount to exceed its recoverable amount.

Based on management's assessment, goodwill is not impaired since the recoverable amount of the related to the cash-generating unit for which the goodwill was attributed still exceeds the carrying amount as at December 31, 2019.

6. Significant Agreements and Lease Commitments

a. Lease Commitments

1. Finance Lease Commitment - Partnership as Lessee

The Partnership has an existing LLA with PSALM for the lease of the 187,078 square meters land located in Barangay Bani, Masinloc, Zambales, for a period of 20 years, renewable for another 10 years. The lease agreement will expire on April 11, 2028.

The Partnership paid \$7,030,000 representing the lease payments for 20 years. As part of the initial consideration, the Partnership paid a non-refundable purchase option price of \$0.7 million exercisable within one year from the issuance of an option existence notice.

The Partnership was also required to pay PSALM a cash security deposit in the amount of \$1.5 million relating to the lease which shall be returned to the Partnership without interest after the lease term or will be deducted from the land purchase price in case the option to buy is exercised. The purchase option is assignable to an affiliate. In 2010, the Partnership received from PSALM the Option Existence Notice (OEN) for 77% of total land under lease.

Based on the agreement, in case the option to purchase is exercised, the land purchase price should be equivalent to the highest of the following valuations or amounts: (1) assessment of the Provincial Assessor of Zambales, (2) assessment of the Municipal Assessor having jurisdiction over the particular portion of the leased premises, (3) zonal valuation of the Bureau of Internal Revenue or, (4) US\$10.90 per square meter. Valuation basis for (1) to (3) shall be based on the date of the receipt of PSALM of the option to exercise notice. The exchange rate to be used should be the Philippine Dealing Exchange (PDEX) rate at the date of receipt of PSALM of the option to exercise notice. The unused advance rental corresponding shall be deducted from the land purchase price.

In the second quarter of 2011, the Partnership assigned to AWRSC its OEN. The OEN provides the holder the option right to purchase 77% of the land being leased by the Partnership from PSALM. Such OEN was exercised fully by AWRSC, the latter buying the land properties. Simultaneously, the Partnership leased the same land from AWRSC and derecognized its remaining finance lease liability to PSALM, recognizing a gain on the derecognition of finance lease liability of \$0.8 million.

On December 26, 2013, the Partnership assigned another OEN to AWRSC which provides the latter the option right to purchase of the land being leased by the Partnership from PSALM. The OEN was exercised fully by AWRSC, and the latter was able to acquire 121,797 square meters of lot, which was simultaneously leased to the Partnership under finance lease.

Pursuant to the Deed of Assignment, where the Partnership assigned its right to purchase the optioned assets between PSALM and the Partnership and the OEN issued by PSALM to the Partnership, AWRSC purchased 2 lots from PSALM with a total of 2,526 square meters in October 2017 and another 2 lots with a total of 12,522 square meters in August 2019.

As at December 31, 2019 and 2018, the land under finance lease from AWRSC and PSALM amounted to \$16,728,381 and is included as part of "Right-of-use asset" (Note 12), with the corresponding amount of lease liability amounting to \$11,746,408 and \$10,865,590 as at December 31, 2019 and 2018, respectively, recognized under "Other current liabilities" and "Other noncurrent liabilities" account (Notes 15 and 17).

Future minimum lease payments under finance lease with the corresponding present value of future minimum lease payments follow:

	2019		2018	
	Minimum Lease Payments	Present Value of Minimum Lease Payments	Minimum Lease Payments	Present Value of Minimum Lease Payments
Not later than 1 year	\$2,402,755	\$1,031,571	\$4,113,256	\$2,327,612
More than 1 year and not later than 5 years	6,422,342	3,756,922	6,397,454	3,974,020
Later than five years	22,199,687	6,956,915	21,030,469	4,563,958
	31,023,784	11,746,408	31,541,179	10,865,590
Less: Future finance charges on finance lease liability	19,278,376	-	20,675,589	-
Present value of minimum lease payments	\$11,746,408	\$11,746,408	\$10,865,590	\$10,865,590

2. Operating Lease Commitment - Partnership as Lessor

The Partnership has an existing Equipment Lease Agreement with AWRSC. The lease is for a period of 25 years and with an annual rate of \$10,081 or P500,000.

The rent income recognized in December 31, 2019 and 2018 amounted to \$6,479 and \$9,489, respectively.

The future minimum rental payables under the non-cancellable operating lease are as follows:

	2019	2018
Within one year	\$9,875	\$9,509
After one year but not more than 5 years	49,373	38,037
More than five years	71,246	88,754
Total	\$130,494	\$136,300

3. Operating Lease Commitment - Partnership as Lessee

The Partnership has an existing Coal Offloading and Delivery Agreement (CODA) and Water Services Agreement (WSA) wherein AWRSC will supply water and offloading of coal services.

This lease agreement does not qualify under PFRS 16 for the recognition of right-of-use asset since there were no identifiable assets in the agreement.

Rent expense recognized in profit or loss amounted to \$134,117 and \$92,995 in 2019 and 2018, respectively.

The future minimum payments under the non-cancellable operating lease are as follows:

	2019	2018
Within one year	\$394,984	\$380,373
After one year but not more than 5 years	1,679,935	1,521,491
More than five years	3,367,362	3,518,448
Total	\$5,332,281	\$5,420,312

b. Market Participation Agreements (MPA)

The Partnership entered into an MPA with the Philippine Electricity Market Corporation (PEMC) to satisfy the conditions contained in the Philippine Wholesale Electricity Spot Market (WESM) Rules on WESM membership and to set forth the rights and obligations of a WESM member.

The relevant parties in each of the MPAs acknowledged that PEMC was entering into the agreement in its capacity as both governing arm and autonomous group market operator of the WESM, and that in due time the market operator functions shall be transferred to an independent market operator (IMO) pursuant to RA No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001" (EPIRA). The parties further agreed that upon such transfer, all rights, obligations and authority of PEMC under the MPA shall also pertain to the IMO and that all references to PEMC shall also refer to such IMO.

Upon the initiative of the Department of Energy (DOE) and PEMC, Independent Electricity Market Operator of the Philippines (IEMOP) was incorporated and assumed the functions and obligations as the market operator of the WESM commencing on September 26, 2018. Consequently, the Partnership entered into separate Supplemental MPAs with PEMC and IEMOP for the transfer of rights of the market operator to IEMOP.

Under the WESM Rules, the cost of administering and operating the WESM shall be recovered through a charge imposed on all WESM members or transactions, as approved by the ERC.

c. Power Supply Agreements (PSA)

Between January 2009 and May 2010, the Partnership entered into various bilateral PSAs with 11 local off-takers in the Philippines to deliver energy over multiple periods. The Partnership previously had entered into 1 similar arrangement with a local off-taker in June of 2008. The terms of these arrangements are typically for 3 to 5 years and had automatic renewal periods for another 2 to 3 years so long as the Partnership did not cancel within 60 days prior to the end of the initial term. In 2011 and 2012, before the expiration of the original PSAs, the Partnership signed supplemental agreements with nine (9) of its customers mainly to extend and renew the term of the PSAs for another 10 years (except for two contracts where the extension are for 5 years and 11 years, respectively) and to agree on the contracted quantities for the period of the extension. On December 2012, four (4) agreements of the Partnership with its customers expired and the Partnership entered into new agreements with two (2) of these customers to continue its supply of electricity under a new pricing mechanism while the other two were terminated.

On June 26, 2013, the Retail Competition and Open Access (RCOA) scheme in the Philippines began to operate. Under the RCOA, large power users (termed as "contestable customers" having an average consumption of at least 1MW per trading interval) are able to choose their own suppliers. This is in contrast with the previous system whereby the contestable customers are limited to the supplier that has jurisdiction over their areas. In 2013, the Partnership entered into two Retail Power and Supply Agreements (RPSA). The terms of these agreements are between 3 to 5 years.

In 2015, the Partnership entered into various bilateral PSAs with 10 local off-takers in the Philippines to deliver energy coming from the Unit 3 expansion project over multiple periods. All of these contracts have the same rate structure, pass-through and indexations with contract terms ranging from 10 to 20 years. The start of supply and commercial operation are expected to happen in 2019.

From 2016 to 2018, the Partnership entered into various bilateral PSAs with local off-takers (3 in 2016, 2 in 2017 and 4 in 2018) in the Philippines to deliver energy coming from the existing unit or Unit 3 expansion project (or both) over multiple periods. These contracts have varying rate structure, pass-through and indexations with contract terms ranging from 1 to 10 years.

In 2019, additional bilateral PSA with an existing off-taker was entered into by the Partnership at a fixed rate for 21 billing periods.

The Partnership can also purchase power from WESM and other power generation companies during periods when the power generated from the power plants is not sufficient to meet customers' power requirements. Power purchases amounted to \$156,852,020 and \$50,140,218 in 2019 and 2018, respectively.

d. Ancillary Service Procurement Agreement (ASPA)

On September 8, 2017, the Partnership entered into an ASPA with National Grid Corporation of the Philippines (NGCP) for a period of 5 years to allocate the entire capacity of its 10 MW Masinloc Battery Energy Storage System (BESS) as frequency regulating reserve for the NGCP to maintain power quality, reliability and security of the grid.

Revenue from ancillary services of the Partnership amounted to \$6,987,022 and \$3,605,719 in 2019 and 2018, respectively, and was recognized as part of "Revenues" account in the profit or loss.

e. Purchase Commitments

The Partnership has entered into various purchase commitments with third parties for the supply of its equipment, spare parts, coal and other inventories, repairs and engineering services. Coal contracts are executed to match the general requirements of expected contract's demand. The majority of the contracts were index priced in nature with short-term deliveries. The sources of supply originated mainly from Australia and Indonesia. Shipping contracts were executed to coincide with supply. Shipping contracts were fixed price in nature.

f. Retail Supply Contracts

The Partnership has retail supply contracts with contestable customers, including related parties, to supply or sell electricity either produced by SMC Consolidated Power Corporation (SCPC) or purchased from WESM, San Miguel Energy Corporation (SMEC) or other affiliate power generators. Most contracts provide for renewals or extensions subject to terms and conditions mutually agreed upon by the parties and applicable rules and regulations.

Certain contestable customers are billed using energy-based pricing, such as time-of-use, flat generation rate or fixed energy rate, while others are billed at capacity-based rates. As stipulated in the contracts, each energy-based customer has to pay based on actual energy consumption using the basic energy charge and/or adjustments. For capacity-based contracts, the customers are charged with the capacity fees based on the contracted capacity plus the energy fees for the associated energy taken during the month.

g. Distribution Wheeling Service (DWS) Agreements

The Partnership, related to its Retail Electricity Supplier (RES) licenses, entered into DWS Agreements with certain Distribution Utilities (DU) for the conveyance of electricity through its distribution systems in order to meet the demand of the contestable customers. The agreements are valid and binding upon execution unless terminated by either party.

The DWS charges from the DUs are passed on to its customers as mandated by ERC thru the "Single-Billing Policy".

h. Agreements with National Transmission Corporation (TransCo)

1. Connection Agreement

This agreement sets forth the principal terms and conditions for the existing and continued connection of the Partnership's generation facility to TransCo's transmission system. This agreement may be terminated subject to the relevant provisions of the Open Access Transmission Service (OATS) Rules and upon the retirement of the Generation Facility without prejudice to the fulfillment of the parties' remaining obligations under this Agreement.

2. Transmission Service Agreement

This agreement shall govern the provision of Power Delivery Service and Ancillary Services by the Transmission Provider to the Transmission Customer.

3. Metering Services Agreement

The Partnership entered into a metering service agreement with TransCo where the latter has agreed to provide maintenance and upgrade of metering facilities, read meters or retrieve meter data and provide metering data to WESM market operator for billing and settlement. This agreement is effective for 15 years from the date of turn-over of the generation facility and may be extended for another 5 years.

i. Engineering, Procurement, and Construction (EPC) Contracts.

On December 1, 2015, the Partnership executed a Lump Sum Construction ("Onshore Contract") and a Lump Sum Supply Contract ("Offshore Contract") (collectively, "EPC Contract") with Ventanas Philippines Construction Inc. ("Ventanas") and POSCO Engineering and Construction Co., Ltd. ("POSCO") (collectively "EPC Contractors"), respectively. The EPC Contractors will be responsible for the design, engineering, procurement, manufacturing, supply, erection and commissioning of a 300 MW (net) capacity coal-fired plant.

j. Operations and Maintenance Agreement

Effective May 31, 2019, the Partnership's Corporate Services Agreement with SMCGP Transpower Pte. Ltd. dated June 1, 2014 and the Energy Marketing Services Agreement with SMCGP Philippines Inc. dated March 17, 2008 were terminated (Note 23).

The Partnership executed an operations and maintenance agreement with Mantech Power Dynamic Services Inc., a related party, effective June 1, 2019 for the operations and maintenance of the Masinloc Power Plant. As a result of such change in business strategy, the positions held by existing employees of the Partnership were deemed redundant and were abolished in good faith and in compliance with applicable laws. Settlement of the Partnership employees' severance was likewise made on May 31, 2019.

7. Cash

Cash consists of:

	Note	2019	2018
Cash in banks		\$51,452,859	\$32,050,443
Cash on hand		5,404	6,333
	26, 27	\$51,458,263	\$32,056,776

Cash in banks earn interest at the prevailing bank deposit rates. For the years ended December 31, 2019 and 2018, interest income from cash in banks amounted to \$258,256 and \$2,376, respectively.

8. Trade Receivables - net

Trade receivables - net consist of:

	2019	2018
Bilateral	\$68,898,404	\$60,852,822
Spot	2,461,666	3,618,866
	71,360,070	64,471,688
Less allowance for impairment losses	4,984,156	4,538,069
	\$66,375,914	\$59,933,619

Trade receivables are non-interest bearing, unsecured and are generally on a 30-day term or an agreed collection period. The balance of trade receivables is inclusive of VAT on the sale of power collectible from customers.

The movements in the allowance for impairment losses are as follows:

	Note	2019	2018
Balance at beginning of year		\$4,538,069	\$1,577,633
Impairment losses during the year	21	271,769	3,053,455
Foreign exchange adjustment		174,318	(93,019)
Balance at end of year		\$4,984,156	\$4,538,069

The spot sales receivable from PEMC, operator of WESM is presented net of payables from purchases of electricity since these receivables are settled on a net basis which reflects the billing arrangement under these transactions.

9. Inventories

Inventories at cost consist of:

	Note	2019	2018
Coal	6	\$21,229,692	\$21,653,409
Stores and spares		15,710,109	10,278,102
Diesel	23	157,629	159,875
		\$37,097,430	\$32,091,386

Inventories charged to cost of power sold amounted to \$157,818,555 and \$185,959,938 in 2019 and 2018, respectively.

10. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of:

	Note	2019	2018
Advances to suppliers		\$30,561,713	\$9,454,027
Prepaid taxes and licenses		11,866,929	7,353,724
Claim receivable		4,379,123	3,991,399
Tax certificate receivable		2,198,728	2,670,983
Input VAT	15	2,122,359	2,006,953
Restricted cash	26, 27	937,477	-
Prepaid Insurance		734,097	1,006,886
Reimbursable environmental cost		512,063	512,063
Prepaid interest		71,157	84,045
		\$53,180,646	\$27,080,080

Advances to suppliers consist of advance payments to suppliers of goods and services not yet delivered and rendered.

Prepaid taxes and licenses consist of local business taxes and permits for 2019.

Claim receivable consists of claims from the AES Corporation pertaining to pre-termination of property insurance in 2018 due to change in provider beginning March 20, 2018.

Tax certificate receivable consists of creditable withholding taxes from sale of power to customers and from lease of equipment to AWRSC upon billing.

Input VAT consists of input VAT on purchases of goods and services which can be offset against the output VAT payable (Note 15).

Prepaid interest consists of a stand-by letter of credit fee valid for the period November 5, 2019 to May 5, 2020, representing a bank guarantee commission that entitles the Partnership a line of credit of \$27,350,000.

Restricted cash consists of funds to be remitted to host local government unit in compliance with the Department of Energy (DOE) Energy Regulation No. 1-94, pursuant to Section 5 (I) of Republic Act No. 7638, otherwise known as the "Department of Energy Act of 1992".

11. Property, Plant and Equipment

Property, plant and equipment consist of:

	Leased Land	Power Plant	Buildings	Office Equipment, Furniture and Fixtures	Machinery and Transportation Equipment	Capital Projects in Progress	Total
Cost							
January 1, 2018	\$16,728,381	\$934,948,587	\$18,681,539	\$3,268,428	\$2,360,532	\$415,837,900	\$1,391,825,367
Additions	-	3,987,776	-	-	1,022,443	107,178,585	112,188,804
Reclassifications/retirements	-	23,263,004	109,319	-	(58,629)	(24,743,452)	(1,427,758)
December 31, 2018 (Audited)	16,728,381	962,199,367	18,790,858	3,268,428	3,326,346	498,273,033	1,502,586,413
Adjustments due to adoption of PFRS 16	(16,728,381)	-	-	-	-	-	(16,728,381)
December 31, 2018 (Adjusted)	-	962,199,367	18,790,858	3,268,428	3,326,346	498,273,033	1,485,858,032
Additions	-	-	-	-	-	56,599,104	56,599,104
Reclassifications/retirements	-	5,243,878	54,657	178,094	2,077,894	(8,299,714)	(745,201)
December 31, 2019	-	967,443,245	18,845,515	3,446,522	5,404,230	548,572,423	1,541,711,935
Accumulated Depreciation							
January 1, 2018	-	346,196,560	1,332,755	2,264,074	1,487,890	-	351,281,279
Additions	-	35,866,307	545,678	213,470	140,758	-	36,766,213
Reclassifications/retirements	-	(965,055)	(13,171)	(5,105)	117,110	-	(566,221)
December 31, 2018	-	381,397,812	1,865,262	2,472,439	1,745,758	-	387,481,271
Additions	-	30,848,445	547,132	196,776	125,011	-	31,517,364
Reclassifications/retirements	-	-	-	-	286,731	-	286,731
December 31, 2019	-	412,046,257	2,412,394	2,669,215	2,157,500	-	419,285,366
Accumulated Impairment							
Losses	-	-	-	-	1,331,305	-	1,331,305
December 31, 2018	-	-	-	-	691,049	-	691,049
Impairment	-	-	-	-	2,022,354	-	2,022,354
December 31, 2019	-	-	-	-	-	-	-
Carrying Amount							
December 31, 2018	\$16,728,381	\$580,801,555	\$18,925,596	\$795,988	\$249,283	\$498,273,033	\$1,113,773,837
December 31, 2019	\$ -	\$555,396,988	\$16,433,121	\$777,307	\$1,224,376	\$546,572,423	\$1,120,404,215

- a. The carrying amount of land under finance lease with AWRSC and PSALM amounted to \$16,728,381 as at December 31, 2018, respectively (Note 3, 4 and 6). Upon adoption of PFRS 16, this was reclassified to "Right-of-use asset" account as at January 1, 2019 (Note 12).
- b. Capital projects in progress pertains to ongoing construction of the Unit 3 which is expected to be completed in 2020.

The capitalized borrowing cost included in the capital projects in progress account amounted to \$22 million and \$19.3 million as at December 31, 2019 and 2018, respectively. The average capitalization rate is 5.60% and 4.44% in 2019 and 2018, respectively.

The unamortized portion of borrowing cost amounted to \$8,995,092 and \$10,192,698 in 2019 and 2018, respectively.

- c. Depreciation related to property, plant and equipment are recognized in the separate statements of comprehensive income as follows:

	Note	2019	2018
Cost of power sold		\$30,238,736	\$31,592,235
Operating expenses	21	1,278,628	5,173,978
		\$31,517,364	\$36,766,213

The Partnership recognized impairment loss amounted to \$691,049 and \$1,331,305 in 2019 and 2018, respectively. This is presented as part of "Other income (charges) - net" account in the separate statements of comprehensive income.

12. Right-of-use Asset:

The movement in right-of-use asset is as follows:

	Note	Land
Cost		
Adjustment due to adoption of PFRS 16	3	\$16,728,381
December 31, 2019		\$16,728,381

13. Other Noncurrent Assets

Other noncurrent assets consist of:

	Note	2019	2018
Restricted cash for plant expansion	26, 27	\$74,489,010	\$43,015,734
Advances to suppliers		3,296,997	3,210,065
Investment in AWRSC		2,926,472	2,926,472
Intangible assets - net		1,660,216	1,063,547
Rent security deposits	26, 27	78,772	78,772
		\$82,451,467	\$50,294,590

Restricted cash for plant expansion pertains to the Partnership's Cash Flow Waterfall accounts with a local Trust Company as required in its credit facilities (Notes 26).

AWRSC is a structured entity established mainly to own land and other real properties. The Partnership has 40% ownership interest in AWRSC. It was assessed that the Partnership has the ability to direct the financial and operational policies of AWRSC. The relevant activities of AWRSC are being conducted on behalf of the Partnership according to the specific needs in such a way that the Partnership has exposure to the variable returns from its involvement in AWRSC's operation. Accordingly, AWRSC is considered to be controlled by the Partnership in accordance with PFRS 10 and should be accounted for as an investment in subsidiary.

The movements in intangible assets are as follows:

	2019	2018
Cost		
Balance at beginning of year	\$1,700,480	\$1,700,480
Additions	650,911	-
Balance at end of year	2,351,391	1,700,480
Accumulated Amortization		
Balance at beginning of year	636,933	134,604
Amortization	54,242	502,329
Balance at end of year	691,175	636,933
	\$1,660,216	\$1,063,547

14. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of:

	Note	2019	2018
Trade payables		\$44,436,179	\$26,609,478
Accrued expenses:			
Operations and maintenance (O&M)		21,827,346	19,160,659
EPC contract		15,613,566	26,130,046
Interest	16	6,231,211	6,147,489
Bonus		-	695,110
Others		-	660,395
	26, 27	\$88,108,302	\$79,403,187

Trade payables consist of purchases of direct materials such as coal and fuel. These amounts are normally settled in an average of 30 days after receipt of invoice. Local coal purchases are settled in 2 - 3 days after receipt of invoice.

Accrued expenses on EPC contract relate to expenses incurred on the Masinloc Expansion Project (Note 6). The accrued expenses of completed construction is payable 7 working days after the approval of Notice to Pay.

Accrued O&M pertains to plant operations including accruals for stores and spares, routine maintenance, vehicle leasing costs and travel expenses. This account also includes accruals for market and concession fees in relation to the Partnership's participation in the spot market.

15. Other Current Liabilities

Other current liabilities consist of:

	Note	2019	2018
Output VAT payable - net of Input VAT		\$22,107,482	\$9,447,865
Land lease liability - AWRSC	6, 23	1,032,571	4,113,256
Accrued environmental costs	5	512,063	512,063
Others		12,453	217,322
		\$23,664,569	\$14,290,506

Output VAT payable - net of Input VAT pertains to remaining output VAT on sale of power to customers that have been collected and which is due for remittance to the government.

16. Bank Loans Payable

Bank loans payable is comprised of senior bank loans and working capital loans as follows:

a. Senior Bank Loans Payable

Senior bank loans payable consists of:

	2019	2018
Senior loans	\$740,758,000	\$706,400,000
Less unamortized deferred financing cost	8,995,092	10,192,698
	731,762,908	696,207,302
Less current portion	63,593,330	49,295,055
	\$668,169,578	\$646,912,247

Omnibus Refinancing Agreement (ORA)

On December 28, 2012, the Partnership executed an ORA with Bank of the Philippine Islands (BPI), Rizal Commercial Banking Corporation (RCBC), Security Bank Corporation (SBC) and Philippine National Bank (PNB) (collectively "Refinancing Lenders") wherein the Refinancing Lenders will extend a 10-year loan to refinance existing debt obligations arising from the Omnibus Agreement (OA) dated February 15, 2008. The Refinancing Lenders agreed to refinance the outstanding obligation in the amount of \$500,000,000 by way of assignment by each of the old lenders' rights title and interest over the existing debt with the Partnership's old Philippine Peso obligations redenominated by the new lenders to US Dollar. The OA of 2008, which partially financed the acquisition, operation, maintenance and repair of the Purchased Assets covered by the APA, provided for the right to pre-pay the loan which originally matures in 2018 through 2026. The notice of pre-payment was served to old lenders on January 9, 2013 and the drawdown from the refinancing facility occurred on January 23, 2013. The loss incurred in 2013 on the early extinguishment of the OA amounted to \$42.7 million.

The salient terms of the agreements covering the Partnership's ORA facilities are as follows:

Interest Period	Interest is payable semi-annually on April 30 and October 30 of each year, commencing on April 30, 2013.
Fixed Interest Tranche	Dollar fixed loan interest is based on the Fixed Benchmark Rate determined one banking day after the signing of the ORA plus 2.00% (i.e. 4.7776% per annum).
Floating Interest Tranche	Dollar variable loan interest is based on the Floating Benchmark Rate [six-month London Interbank Offered Rate (LIBOR)] plus a credit spread of 2.25%. The floating interest rate applicable for the first Interest Period determined one Banking Day after the signing of the ORA (i.e. 2.25% per annum).
Repayment Terms	Commenced on April 30, 2013 until January 22, 2023.

Details of the principal amount of ORA are as follows:

	2019		
	Fixed	Variable	Total
BPI	\$44,712,000	\$40,824,000	\$85,536,000
PNB	48,600,000	16,200,000	64,800,000
RCBC	50,544,000	7,776,000	58,320,000
SBC	50,544,000	-	50,544,000
	\$194,400,000	\$64,800,000	\$259,200,000

	2018		
	Fixed	Variable	Total
BPI	\$51,646,500	\$47,155,500	\$98,802,000
PNB	56,137,500	18,712,500	74,850,000
RCBC	58,383,000	8,982,000	67,365,000
SBC	58,383,000	-	58,383,000
	\$224,550,000	\$74,850,000	\$299,400,000

Repayments made in 2019 and 2018 amounted to \$40,200,000 and \$38,100,000 respectively.

Loan facility has been fully drawn upon Initial avallment In 2013.

Interest expense and amortization of deferred financing costs related to ORA amounted to \$15,635,749 and \$17,236,742 in 2019 and 2018, respectively. Unamortized deferred financing costs amounted to \$399,377 and \$697,479 as at December 31, 2019 and 2018, respectively. Accrued interest expense amounted to \$3,184,226 and \$2,670,417 as at December 31, 2019 and 2018, respectively.

Omnibus Expansion Financing Agreement (OEFA)

On December 1, 2015, the Partnership executed an OEFA with BPI, RCBC, SBC and PNB (collectively "Expansion Lenders" or "Lenders") to finance the construction of the additional 335 MW (gross capacity) coal-fired plant within the Partnership's existing facilities. The loan is for \$525,000,000 divided into fixed and variable interest rate tranches at 75% and 25%, respectively. The amount is payable in scheduled loan repayments in the financing agreements with the last repayment to occur 15 years from the initial drawdown. The first and only drawdown in 2015 was made on December 15, 2015 in the amount of \$31,000,000. Deferred financing costs incurred in originating the loan amounted to \$8,192,375 which is included in the carrying value of the bank loans payable.

The salient terms of the agreements covering the Partnership's OEFA are as follows:

Interest Period	Interest is payable on October 30 and April 30 of every year.
Fixed Interest Tranche	<p>Year 1-8: As the initial draw against the facility occurred on December 15, 2015, the Fixed Interest Rate was set at 5.59%.</p> <p>As the initial draw against the facility occurred on December 15, 2015, the Fixed Interest Rate was set at 5.59%.</p> <p>Year 9-15: Based on the higher of (i) then prevailing average (of three days prior to reset) Benchmark Rate plus 2.65% or (ii) the Fixed Interest Rate utilized during years 1-8.</p>
Floating Interest Tranche	Based on the higher of (i) 6 months LIBOR plus 2.00% or (ii) 3.00%. Determined two days before applicable interest period. As the initial draw occurred on December 15, 2015, the Floating Interest Rate for the first interest period was set to 3.00%. Floating interest rate resets every 6 months.
Step Down	Per Section 2.03 of Volume 3, the Fixed and Floating Interest Rate spreads are reduced by 0.50% upon (i) completion of construction of the Expansion Project and (ii) the Partnership achieving the Required Contracting Capacity (RCC).
Repayment Terms	Per Schedule E of the OEFA and subject to a bullet payment of up to 30% at the end of the 15 th year. Initial repayment date is the earlier of (i) the first April 30 or October 30 after Commercial Operation Date (COD) or (ii) October 30, 2019. The expected COD is in 2020.

Details of the principal amount of OEFA are as follows:

	2019		
	Fixed	Variable	Total
BPI	\$128,413,195	\$82,557,239	\$210,970,434
PNB	77,965,153	22,932,567	100,897,720
RCBC	77,965,153	-	77,965,153
SBC	77,965,153	13,759,540	91,724,693
	\$362,308,654	\$119,249,346	\$481,558,000

	2018		
	Fixed	Variable	Total
BPI	\$108,527,085	\$69,783,634	\$178,310,719
PNB	65,891,444	19,384,343	85,275,787
RCBC	65,891,444	-	65,891,444
SBC	65,891,444	11,630,606	77,522,050
	\$306,201,417	\$100,798,583	\$407,000,000

Initial repayment was made in October 2019 amounting to \$442,000.

Availments made in 2019 and 2018 amounted to \$75,000,000 and \$170,000,000, respectively.

Interest expense and amortization of deferred financing costs related to OEFA which are all capitalized as borrowing costs amounted to \$28,306,711 and \$19,816,661 in 2019 and 2018, respectively. Unamortized deferred financing costs amounted to \$8,595,715 and \$9,495,219 as at December 31, 2019 and 2018, respectively. Accrued interest expense amounted to \$2,584,979 and \$4,160,137 as at December 31, 2019 and 2018, respectively.

Below is the summary of the outstanding balances for ORA and OEFA:

	2019	2018
BPI	\$296,506,433	\$277,112,719
PNB	165,697,720	160,125,787
RCBC	136,285,154	133,256,444
SBC	142,268,693	135,905,050
	740,758,000	706,400,000
Less unamortized deferred financing costs	8,995,092	10,192,698
	\$731,762,908	\$696,207,302

As at December 31, 2019, the Partnership has drawn all borrowings from the ORA facilities while \$482,000,000 out of \$525,000,000 was drawn from OEFA facilities.

The senior loans are secured by the assets purchased by the Partnership under the APA and all rights of the Partnership in the LLA with PSALM. The carrying values of these assets amounted to \$528.9 million and \$568.2 million as at December 31, 2019 and 2018, respectively, comprising of the land and generation assets.

The debt agreements of the Partnership impose a number of covenants including, but not limited to, maintenance of certain financial ratios throughout the duration of the term of the debt agreements. The terms and conditions of the debt agreements also contain negative pledge provision with certain limitations on the ability of the Partnership to create or have outstanding any security interest upon or with respect to any of the present or future business, undertaking, assets or revenue (including any uncalled capital) of the Partnership to secure any indebtedness, subject to certain exceptions.

The Partnership is in compliance with the loan covenants as at December 31, 2019 and 2018.

The loans of the Partnership obtained from its ORA and OEFA are secured by real estate and chattel mortgages on all present assets (purchased under its asset purchase agreement, and all its rights in a land lease agreement, with PSALM) and all future assets as defined in its loan agreements.

Annual aggregate undiscounted future payments of long-term debt, which consists of principal and interest payments, for the succeeding years ending December 31 are as follows:

2020	\$64,901,200
2021	69,378,400
2022	49,722,600
2023	176,554,200
2024 and thereafter	380,201,600
	<u>\$740,758,000</u>

b. Working Capital Loans Payable

The Partnership has the following outstanding drawn balance from the available working capital facilities:

2019	Facility Granted	Date Granted	End Date	Amount of Facility	Outstanding Balance
Bank PNB	Revolving Credit Facility	10/30/2019	1/28/2020	\$45 million	\$45 million
Citibank	Stand-by Letter of Credit	11/10/2017	5/3/2019	28 million	nil
2018	Facility Granted	Date Granted	End Date	Amount of Facility	Outstanding Balance
Bank Various	Revolving Credit Facility	8/28/2014	8/28/2019	\$100 million	\$45 million
Citibank	Stand-by Letter of Credit	11/10/2017	5/3/2019	28 million	nil

All working capital loans are unsecured.

Interest expense related to working capital facilities amounted to \$1.9 million and \$1.8 million in 2019 and 2018, respectively.

c. Deferred Financing Costs

Movement in deferred financing costs is as follows:

	Note	2019	2018
Balance at beginning of year		\$10,192,898	\$11,209,075
Less amortization	26	(1,197,606)	(1,016,377)
Balance at end of year		\$8,995,092	\$10,192,698

17. Other Noncurrent Liabilities

Other noncurrent liabilities consist of:

	Note	2019	2018
Land lease liability - AWRSC	6, 23	\$7,428,032	\$5,850,157
Land lease liability - PSALM	6	3,285,805	902,177
Asset retirement obligation	5	1,066,044	1,038,414
Pension liabilities	22	-	2,257,142
		\$11,779,881	\$10,047,890

18. Income Taxes

The components of income tax expense are as follows:

	2019	2018
Current	\$23,159,560	\$26,973,433
Deferred	(1,757,560)	(12,629,873)
Final	128,980	-
	\$21,530,980	\$14,343,560

Details of deferred tax assets (liabilities) - net are as follows:

	2019	2018
Unrealized foreign currency exchange losses	\$27,669,957	\$24,534,044
Pension liabilities	-	674,863
Remeasurement of pension liabilities in OCI	-	55,022
Deferred income tax liability on the difference between the carrying amount of non-monetary assets and liabilities and their related tax bases recognized in profit or loss	(14,239,443)	(13,921,295)
Others	277,382	507,701
	\$13,607,896	\$11,850,335

Movements in the deferred tax assets (liabilities) - net are as follows:

	2019	2018
Charged to profit or loss	\$1,757,560	(\$12,629,873)
Charged to other comprehensive income	-	132,520
Foreign exchange translation	-	(132,520)
	\$1,757,560	(\$12,629,873)

A reconciliation of statutory income tax rates to effective income tax rates is as follows:

	2019	2018
Statutory income tax rate	30.00%	30.00%
Increase (decrease) in income tax rate resulting from:		
Income subjected to final tax	(0.41%)	-
Others	(3.36%)	1.33%
Effective income tax rate	26.23%	31.33%

19. Partners' Contribution and Other Equity Transactions

The General Partner has been appointed as managing partner to act on behalf of the Partnership in all matters affecting the management of the project of the Partnership, provided, however, that the management powers of the General Partner shall in no way interfere with the rights of the Limited Partner to:

- inspect and copy any and all Partnership's books of accounts required under Philippine law;
- have, upon reasonable and written demand, true and full information of all things concerning the Partnership insofar as such things relate to the Limited Partner's interest as a limited partner;
- have a full and formal account of Partnership's affairs on a quarterly basis, within sixty (60) days after the end of each quarter of each financial year of the Partnership; and,
- have the Partnership dissolved and wound up by decree of court.

The Partnership's profit and losses shall be allocated in proportion to the capital contributions of the Partners, provided, however, that the Limited Partner shall not be liable for losses beyond its capital contribution.

Incorporation expenses amounted to \$1,246,088, included in "Other equity transactions" account under "Partners' Contribution" in the separate statements of financial position, represent registration and other regulatory fees, incurred in raising the Partnership's equity during its incorporation.

The former Parent Company grants options to certain employees of the Partnership to purchase shares of common stock under stock option plans. Under the terms of the plans, the former Parent Company may issue options to certain employees of the Partnership to purchase shares of the former's common stock at a price equal to 100% of the market price at the date the option is granted. Stock options are generally granted based upon a percentage of an employee's base salary. Stock options issued under these plans in 2009 and 2010 have a three-year vesting schedule and vest in one-third increments over the three-year period. The stock options have a contractual term of 10 years. In all circumstances, stock options granted by the former Parent Company do not entitle the holder the right, or obligate the former Parent Company, to settle the stock option in cash or other assets of the former Parent Company.

In 2018, the share-based payments amounting to \$793,776 were reversed due to the sale of Partnership to SMC Global.

The Partnership has no declaration of dividends in 2019 and 2018.

20. Transmission Charges, Market Fees and Other Costs

Transmission charges, market fees and other costs are comprised of:

	Note	2019	2018
Transmission charges and market fees		\$12,633,017	\$24,449,204
Taxes and licenses		6,361,962	6,468,590
Insurance		2,686,950	3,736,827
Salaries, wages and employee benefits	22, 24	1,877,612	5,372,462
		\$23,448,541	\$40,027,083

21. Operating Expenses

Operating expenses consist of:

	Note	2019	2018
Outside services		\$23,647,424	\$20,382,900
Taxes and licenses		6,793,876	9,020,320
Repairs and maintenance		3,823,080	7,645,403
Management fees	23	2,364,295	5,202,892
Salaries, wages and employee benefits	22, 24	1,903,710	5,817,713
Supplies		1,443,998	281,670
Donations		1,420,951	986,136
Depreciation and amortization	11, 13	1,332,870	5,676,307
Travel and transportation		339,135	111,776
Impairment losses on trade receivables	8	271,769	3,053,455
Corporate special program		206,751	180,049
Rent	6	134,117	92,995
Miscellaneous		747,004	517,872
		\$44,428,980	\$53,733,488

22. Retirement Benefits

The Partnership has an unfunded, noncontributory, defined benefit retirement plan covering all of its permanent employees. Retirement benefits expense pertains to accrual of expected retirement benefits of active employees in accordance with RA No. 7641, *The Philippine Retirement Law*. Retirement benefits expense and liability are determined using the projected unit credit method. The Partnership's latest actuarial valuation date is December 31, 2018. Valuations are obtained on a periodic basis.

The Partnership executed an operations and maintenance agreement with Mantech Power Dynamic Services Inc. effective June 1, 2019 for the operations and maintenance of the Masinloc Power Plant (Note 6). As a result of such change in business strategy, the positions held by existing employees of the Partnership were deemed redundant and were abolished in good faith and in compliance with applicable laws. Settlement of the Partnership employees' severance was likewise made on May 31, 2019. Accordingly, no actuarial valuation report was prepared for 2019.

The principal actuarial assumptions used to determine retirement benefits are as follows:

	2018
Discount rate	7.39%
Salary increase rate	6.50%

The following table shows reconciliation of the net defined benefit retirement obligation and its component:

	2019	2018
Balance at beginning of year	\$2,257,142	\$2,361,360
Recognized In Profit or Loss		
Current service cost	122,366	368,115
Interest cost	56,542	130,680
Benefits paid	(12,954)	-
Settlement gains	(2,423,096)	-
	-	498,795
Recognized In Other Comprehensive Income		
Remeasurements:		
Actuarial (gains) losses arising from:		
Changes in financial assumptions	-	(441,734)
Exchange differences	-	(161,279)
	-	(603,013)
Balance at end of year	\$ -	\$2,257,142

Defined benefit retirement obligation presented as "Pension liabilities" under "Other noncurrent liabilities" account in the separate statements of financial position amounted to nil and \$2,257,142 as at December 31, 2019 and 2018, respectively.

The retirement costs amounting to \$178,908 and \$498,795 in 2019 and 2018, respectively, are recognized as part of "Salaries, wages and benefits" under "Operating Expenses" account in the separate statements of comprehensive income (Notes 21 and 24).

Settlement gain mainly pertains to the difference of the settlement price and the retirement benefits obligation of the severed and resigned employees. Due to the settlement of the retirement benefit obligation, related reserve for retirement plan and translation reserves amounting to \$170,220 was charged to retained earnings.

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the defined benefit obligation as at the end of the reporting period, assuming if all other assumptions were held constant:

Significant Assumptions	Increase (Decrease)	Effect on Defined Benefit Obligation	
		2019	2018
Discount rate	+100bps	\$ -	(\$138,407)
	-100bps	-	160,978
Salary increase rate	+100bps	-	144,770
	-100bps	-	(128,935)

Shown below is the maturity analysis of the undiscounted benefit payments:

	2019	2018
Less than 1 year	\$ -	\$547,895
More than 1-2 years	-	243,722
More than 2-3 years	-	78,282
More than 3-4 years	-	161,089
More than 4-5 years	-	280,890
More than 5 years	-	1,420,587

23. Related Party Disclosures

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 or common significant influence. Related parties may be individuals or corporate entities.

Transactions are generally settled in cash, unless otherwise stated. The following are the transactions with related parties and the outstanding balances as at December 31:

	Ref	Year	Revenues from Related Parties	Purchases from Related Parties	Amounts Owed by Related Parties	Amounts Owed to Related Parties	Terms	Conditions
SMC	a	2019	\$ -	\$548,804	\$ -	\$382,717	On demand; noninterest-bearing; due and demandable	Unsecured
	a	2018	-	-	-	317,719	-	-
Parent Company	a	2019	-	9,955,993	-	5,521,546	On demand; noninterest-bearing; due and demandable	Unsecured
	a	2018	-	14,195,331	-	5,594,969	-	-
Entities under Common Control	b	2019	2,696,964	-	1,605,091	-	On demand; noninterest-bearing; due and demandable	Unsecured; no impairment
	b	2018	5,672,635	-	1,377,672	-	On demand; noninterest-bearing; due and demandable	Unsecured
	b	2019	-	44,759,335	-	7,609,126	-	-
Management fees and other intercompany charges	b	2018	-	22,812,238	-	8,900,401	See discussions in items (h), (i), and (j)	Unsecured
	h, i, j	2019	-	1,333,840	-	-	-	-
	h, i, j	2018	-	270,279	-	-	-	-
Subsidiary								
Management fees and other intercompany charges	d, e, f, g	2019	940,510	-	202,453	-	On demand; interest bearing noninterest-bearing; due and demandable	Unsecured; no impairment
	d, e, f, g	2018	197,479,527	-	2,066,262	-	-	-
	e, f, g	2019	-	-	-	627,727	On demand; interest bearing noninterest-bearing; due and demandable	Unsecured
	e, f, g	2018	-	896,00	-	106,187	-	-
Loan to ANRSC - Principal		2019	-	3	8,492,150	-	More than 1 year, non-interest bearing noninterest-bearing; due and demandable	Unsecured; no impairment
Loan to AWRSC - Interest	b	2018	-	-	9,081,839	-	-	-
	b	2019	732,821	-	2,372,489	-	8% interest, payable semiannually due and demandable	Unsecured; no impairment
Finance lease liability - Principal	c	2018	896,003	-	867,604	-	On demand or 30 days; non-interest bearing; 26% implicit rate	Unsecured
	c	2019	-	827,775	-	8,460,602	On demand or 30 days; non-interest bearing; 26% implicit rate	Unsecured
Finance lease liability - Interest		2018	-	-	-	9,963,413	On demand or 30 days; non interest bearing; 26% implicit rate	Unsecured
	c	2018	-	-	-	2,663,525	Interest bearing; 26% implicit rate	-
		2019	-	-	-	\$22,601,719	-	-
		2018	-	-	-	\$13,393,577	-	-
						\$12,672,183	-	-
						\$25,546,214	-	-

- a. Pertains to advances to/from related parties in the normal course of business for working capital purposes.
- b. Pertains to the Partnership's loan to AWRSC broken down as follows:

2019 Facility	Outstanding Balance		Interest	Payment Terms
	Current	Noncurrent		
\$2.01 million (P100 million)	\$1.97 million	\$ -	8% annual interest payable every April 4 and September 4	Immediately payable
\$12.24 million (P610 million)	\$6.6 million	-	8% annual interest payable every June 10 and December 10	Immediately payable
	\$8.47 million	\$ -		

2018 Facility	Outstanding Balance		Interest	Payment Terms
	Current	Noncurrent		
\$2.01 million (P100 million)	\$2.01 million	\$ -	8% annual interest payable every April 4 and September 4	Immediately payable
\$12.24 million (P610 million)	7.07 million	-	8% annual interest payable every June 10 and December 10	Immediately payable
	\$9.08 million	\$ -		

Total interest income recognized in the separate statements of comprehensive income in 2019 and 2018 amounted to \$732,921 and \$952,511, respectively. Interest receivable as at December 31, 2019 and 2018 amounted to \$2,372,489 and \$867,604, respectively.

The loan to AWRSC has become due and demandable due to default on payment of interest and due portion of loans in 2018.

- c. Pertains to the Partnership's LLA with AWRSC for the lease of the land (Notes 5 and 6).
- d. Pertains to the Partnership's Technical Operations and Maintenance Consultancy Agreement (TOMCA) with AWRSC where the latter appoints the Partnership to render independent advisory and consultancy services on all aspects of the technical operation and maintenance of the facilities.
- e. Pertains to the Partnership's Water Sale Agreement (WSA) and Coal Offloading and Delivery Agreement (CODA) with AWRSC, where the latter is to provide services for the supply of water and offloading of coal services from seagoing vessels for the operations of the power plant.
- f. Pertains to the Partnership's Equipment Lease Agreement with AWRSC where the latter leases certain equipment used for offloading and delivery in jetty of coal and other materials and those used for extraction of water from seas, rivers and other sources at a nominal fee, as laid out in the agreement.
- g. Pertains to the Partnership's Energy Marketing Services Agreement (EMSA) with SMCGP Philippines, Inc. (SPI) (formerly AES Philippines Inc), an entity under common control, where SPI acted as an agent in coordinating bidding, scheduling and marketing of energy related products, procuring and delivering fuel, and managing all contracts, settlements, and/or invoicing associated with sales of energy and energy-related products for 20 years. The EMSA was terminated effective May 31, 2019 (Note 6).

- h. Pertains to the Partnership's Provisional Corporate Service Agreement with SMCGP Transpower Private Ltd. - Philippine ROHQ (formerly AES Transpower Private Ltd. - Philippine ROHQ) (ROHQ) for certain corporate and support services. The agreement provides that the Partnership shall pay a service fee based on actual cost of ROHQ plus 7.8% mark-up and reasonable expenses incurred by the Partnership in rendering the services. The agreement was terminated effective May 31, 2019 (Note 6).
- i. The Partnership employed employees of affiliated companies (entities under common control) for certain advisory and support services related to the operations, maintenance and administrative functions of the Partnership's operations. Compensation income of the employees under this arrangement is settled through intercompany billings.
- j. The Partnership's key management functions are performed by personnel employed by the parent company and SMC under management agreements. Key management compensation are billed to the Company through management fees (Note 21).

24. Salaries, Wages and Employee Benefits

Salaries, wages and employee benefits consist of:

	Note	2019	2018
Salaries and wages		\$1,381,309	\$3,387,440
Retirement benefits	22	178,908	498,795
Other employee benefits		2,221,105	2,067,940
		\$3,781,322	\$5,954,175

Other employee benefits mainly pertain to bonuses, meals, accommodations and health benefits.

Salaries, wages and employee benefits are classified as follows:

	Note	2019	2018
Cost of power sold	20	\$1,877,612	\$5,372,462
Operating expenses	21	1,903,710	581,713
		\$3,781,322	\$5,954,175

25. Interest Expense and Other Financing Charges

Interest expense and other financing charges are consist of:

	Note	2019	2018
Interest expense on loans and other obligations	16	\$8,002,163	\$18,481,732
Amortization of deferred financing costs	16	488,534	1,016,377
Accretion expense on lease liability	6	892,199	977,259
Charges on standby letter of credit		-	146,589
		\$9,382,896	\$20,621,957

26. Financial Risk and Capital Management, Objectives and Policies

Objectives and Policies

The Partnership has significant exposure to the following financial risks primarily from its use of financial instruments:

- Interest Rate Risk
- Foreign Currency Risk
- Liquidity Risk
- Credit Risk

This note presents information about the exposure to each of the foregoing risks, the objectives, policies and processes for measuring and managing these risks, and for management of capital.

The principal non-trade related financial instruments of the Partnership include cash, long-term loan to a related party, restricted cash, working capital loans payable and senior bank loans payable. These financial instruments are used mainly for working capital management purposes. The trade-related financial assets and financial liabilities of the Partnership such as trade receivables, accounts payable and accrued expenses, finance lease liabilities and other noncurrent liabilities arise directly from and are used to facilitate its daily operations.

The BOD has the overall responsibility for the establishment and oversight of the risk management framework of the Partnership.

The risk management policies of the Partnership are established to identify and analyze the risks faced by the Partnership, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and activities. The Partnership, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The BOD constituted the Audit and Risk Oversight Committee to assist the BOD in fulfilling its oversight responsibility of the Partnership's corporate governance process relating to the: a) quality and integrity of the separate financial statements and financial reporting process and the systems of internal accounting and financial controls; b) performance of the internal auditors; c) annual independent audit of the financial statements, the engagement of the independent auditors and the evaluation of the independent auditors' qualifications, independence and performance; d) compliance with tax, legal and regulatory requirements; e) evaluation of management's process to assess and manage the enterprise risk issues; and f) fulfillment of the other responsibilities set out by the BOD. The Audit and Risk Oversight Committee shall prepare such reports as may be necessary to document the activities of the committee in the performance of its functions and duties. Such reports shall be included in the annual report of the Partnership and other corporate disclosures as may be required by the Philippine SEC and/or the PDEX.

The Audit and Risk Oversight Committee also oversees how management monitors compliance with the risk management policies and procedures of the Partnership and reviews the adequacy of the risk management framework in relation to the risks faced by the Partnership. Internal Audit assists the Audit and Risk Oversight Committee in monitoring and evaluating the effectiveness of the risk management and governance processes of the Partnership. Internal Audit undertakes both regular and special reviews of risk management controls and procedures, the results of which are reported to the Audit and Risk Oversight Committee.

Interest Rate Risk

Interest rate risk is the risk that future cash flows from a financial instrument (cash flow interest rate risk) or its fair value (fair value interest rate risk) will fluctuate because of changes in market interest rates. The Partnership's exposure to changes in interest rates relates primarily to the long-term borrowings. Borrowings issued at fixed rates expose the Partnership to fair value interest rate risk. On the other hand, borrowings issued at variable rates expose the Partnership to cash flow interest rate risk.

Management is responsible for monitoring the prevailing market-based interest rate and ensures that the mark-up rates charged on its borrowings are optimal and benchmarked against the rates charged by other creditor banks.

The following tables show the information about the Partnership's senior bank loans payable that are exposed to interest rate risk:

2019	Effective Interest Rate	Total
BPI	2.00%/2.25% over LIBOR	\$296,506,433
PNB	2.00%/2.25% over LIBOR	165,697,720
RCBC	2.25% over LIBOR	136,285,154
SBC	2.00% over LIBOR	142,268,693
		\$740,758,000

2018	Effective Interest Rate	Total
BPI	2.00%/2.25% over LIBOR	\$277,112,719
PNB	2.00%/2.25% over LIBOR	160,125,787
RCBC	2.25% over LIBOR	133,256,444
SBC	2.00% over LIBOR	135,905,050
		\$706,400,000

The following tables demonstrate the sensitivity to a reasonably possible change in interest rates, with all other variables held constant, of the Partnership's profit before tax:

Benchmark Interest Rate	Increase/ Decrease in Basis Points	Effect in Income before Income Tax	
		2019	2018
LIBOR	+25	(\$633,220)	(\$603,850)
	-25	633,220	603,850

There is no impact on the Partnership's other comprehensive income.

Foreign Currency Risk

The Partnership's foreign currency risk arises as the functional currency of the Partnership, the USD, is not the local currency in the country of its operations. The Partnership faces foreign currency risk arising from its cash, trade receivables and accounts payable and accrued expenses denominated in foreign currencies, mainly on the movements in the US dollar/Philippine peso exchange rates.

The Partnership seeks to mitigate the effects of its currency exposure by anticipating the US dollar/Philippine peso movement in order to assess whether to early settle the foreign currency denominated receivables and payables.

Information on the Partnership's Philippine peso-denominated monetary assets and monetary liabilities and their US dollar equivalent is as follows:

	December 31, 2019		December 31, 2018	
	Philippine Peso	USD Equivalent	Philippine Peso	USD Equivalent
Financial Assets				
Cash	P2,263,879,904	\$38,083,324	1,685,545,281	\$32,056,776
Trade receivables - net	3,364,933,154	69,478,003	3,151,309,887	59,933,619
Due from related parties	353,431,697	5,686,407	224,211,794	4,264,203
Current portion of long-term loan to a related party	430,000,000	8,492,150	477,523,095	9,091,839
Other current assets	382,410,987	7,611,488	733,884,720	13,957,488
Other noncurrent assets	198,070,072	3,911,723	2,430,552,407	46,225,797
	7,002,725,814	133,243,095	6,703,026,984	165,619,722
Financial Liabilities				
Accounts payable and accrued expenses	76,131,950	8,769,848	306,239,275	5,824,264
Senior bank loans payable - current portion	-	-	4,958,033,992	94,295,085
Due to related parties	421,037,051	10,202,334	819,343,676	15,582,801
Senior bank loans payable - net of current portion	-	-	34,014,645,947	646,912,247
Other current liabilities	1,632,044,909	34,218,898	604,188,682	11,490,846
Other noncurrent liabilities	997,663,363	21,889,533	473,718,302	9,009,477
	3,126,877,273	76,080,613	41,176,169,874	783,114,680
Net Financial Assets	P3,875,848,541	\$58,162,482	(P32,473,142,890)	(\$617,594,958)

The Partnership reported net (losses) gains on foreign exchange amounting to (\$7,598,839) and \$8,881,624 in 2019 and 2018, respectively, with the translation of its foreign currency-denominated assets and liabilities.

These mainly resulted from the movements of the Philippine peso against the US dollar as shown in the following table:

	US Dollar to Philippine Peso
December 31, 2019	50.64
December 31, 2018	52.58

The following table demonstrates the sensitivity to a reasonably possible change in the foreign exchange rates applicable to the foreign currency denominated financial assets and financial liabilities:

	P1 Increase (decrease) in PHP Exchange Rate	Effect in Income before Tax
2019	+P1	1,077,238
	-P1	(1,077,238)
2018	+P1	(1,224,757)
	-P1	1,224,757

There is no effect on equity other than those affecting the separate statements of comprehensive income.

Liquidity Risk

Liquidity risk is the risk that the Partnership will be unable to meet its financial obligations when due. The Partnership manages its liquidity by close monitoring of cash flows to ensure that the operation maintains optimum levels of liquidity at all times sufficient to meet contractual obligation as and when they fall due. Based on experience, an average daily cash balance is maintained to pay maturing obligations. Investments are placed in accordance with funding requirements. In addition, the Partnership's ultimate parent company is fully committed to support the Partnership to fulfill its maturing obligations.

The tables below summarize the maturity profile of the Partnership's financial assets and liabilities based on contractual undiscounted payments.

December 31, 2019	Carrying Amount	Contractual Cash Flow	1 Year or Less	> 1 Year - 2 Years	> 2 Years - 5 Years	Over 5 Years
Financial Assets						
Cash (excluding cash on hand)	\$61,452,859	\$61,452,859	\$61,452,859	\$ -	\$ -	\$ -
Trade receivables - net	66,375,914	66,375,914	66,375,914	-	-	-
Due from related parties	4,180,033	4,180,033	4,180,033	-	-	-
Current portion of long-term loan to a related party	8,492,150	8,492,150	8,492,150	-	-	-
Other current assets*	36,002,652	36,002,652	36,002,652	-	-	-
Restricted cash for plant expansion**	74,489,010	74,489,010	-	74,489,010	-	-
Financial Liabilities						
Accounts payable and accrued expenses (excluding statutory payables)	\$88,108,302	\$88,108,302	\$88,108,302	-	-	-
Working capital loans payable	45,000,000	45,000,000	45,000,000	-	-	-
Senior bank loans payable - current portion	63,593,330	63,593,330	63,593,330	-	-	-
Due to related parties	14,041,117	14,041,117	14,041,117	-	-	-
Other current liabilities (excluding statutory payables)	1,078,858	1,078,858	1,078,858	-	-	-
Senior bank loans payable - net of current portion	668,169,578	668,169,578	-	67,995,517	260,285,916	348,907,045
Other noncurrent liabilities	11,779,881	32,080,828	-	2,402,754	6,422,342	23,265,732

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

December 31, 2018	Carrying Amount	Contractual Cash Flow	1 Year or Less	> 1 Year - 2 Years	> 2 Years - 5 Years	Over 5 Years
Financial Assets						
Cash (excluding cash on hand)	\$32,060,443	\$32,060,443	\$32,060,443	\$ -	\$ -	\$ -
Trade receivables - net	59,933,619	59,933,619	59,933,619	-	-	-
Due from related parties	4,311,738	4,311,738	4,311,738	-	-	-
Current portion of long-term loan to a related party	9,081,839	9,081,839	9,081,839	-	-	-
Other current assets*	13,957,487	13,957,487	13,957,487	-	-	-
Rent security deposits*	78,772	78,772	-	78,772	-	-
Restricted cash for plant expansion**	43,015,734	43,015,734	-	43,015,734	-	-
Financial Liabilities						
Accounts payable and accrued expenses (excluding statutory payables)	79,354,326	79,354,326	79,354,326	-	-	-
Working capital loans payable	45,000,000	45,000,000	45,000,000	-	-	-
Senior bank loans payable - current portion	49,295,055	49,295,055	49,295,055	-	-	-
Due to related parties	15,582,801	15,582,801	15,582,801	-	-	-
Other current liabilities (excluding statutory payables)	4,140,572	4,140,572	4,140,572	-	-	-
Senior bank loans payable - net of current portion	846,912,247	857,104,945	49,396,200	61,353,200	263,385,200	252,762,647
Other noncurrent liabilities	10,047,890	10,047,890	2,327,612	1,278,277	4,593,957	1,878,044

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

Credit Risk

Credit risk is the risk of financial loss to the Partnership when a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from trade and other receivables. The Partnership manages its credit risk mainly through the application of transaction limits and close risk monitoring. It is the Partnership's policy to enter into transactions with a wide diversity of creditworthy counterparties to mitigate any significant concentration of credit risk.

The Partnership has regular internal control reviews to monitor the granting of credit and management of credit exposures.

Trade and Other Receivables

The exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Partnership's customer base, including the default risk of the industry in which customers operate, as these factors may have an influence on the credit risk.

The Partnership has established a credit policy under which each new customer is analyzed individually for creditworthiness before the standard payment and delivery terms and conditions are offered. The Partnership ensures that sales on account are made to customers with appropriate credit history. The Partnership has detailed credit criteria and several layers of credit approval requirements before engaging a particular customer or counterparty. The review includes external ratings, when available, and in some cases bank references. Purchase limits are established for each customer and are reviewed on a regular basis. Customers that fail to meet the benchmark creditworthiness may transact with the Partnership only on a prepayment basis.

The Partnership establishes an allowance for impairment losses that represents its estimate of expected losses in respect of trade and other receivables. The main components of this allowance include a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

Financial information on the Partnership's maximum exposure to credit risk as at December 31, without considering the effects of other risk mitigation techniques, is presented below:

	<i>Note</i>	2019	2018
Cash (excluding cash on hand)	7, 27	\$51,452,859	\$32,050,443
Trade receivables - net	8, 27	66,375,914	59,933,619
Due from related parties	23, 27	4,180,033	4,311,738
Current portion of long-term loan to a related party	23, 27	8,492,150	9,081,839
Other current assets*	10, 27	36,002,652	13,957,487
Rent security deposits**	13, 27	78,772	78,772
Restricted cash for plant expansion**	13, 27	74,489,010	43,015,734
		\$241,071,390	\$162,429,632

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

The table below presents the Partnership's exposure to credit risk and shows the credit quality of the assets by indicating whether the assets are subjected to 12-month ECL or lifetime ECL. Assets that are credit-impaired are separately presented.

	2019			
	Financial Assets at Amortized Cost			
	12-month ECL	Lifetime ECL - not credit impaired	Lifetime ECL - credit impaired	Total
Cash (excluding cash on hand)	\$51,452,859	\$ -	\$ -	\$51,452,859
Trade receivables - net	-	66,375,914	4,984,166	71,360,070
Due from related parties	-	4,180,033	-	4,180,033
Current portion of long-term loan to a related party	-	8,492,180	-	8,492,180
Other current assets*	-	36,002,652	-	36,002,652
Restricted cash for plant expansion**	74,489,010	-	-	74,489,010
	\$125,941,869	\$115,050,749	\$4,984,166	\$245,976,774

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

	2018			
	Financial Assets at Amortized Cost			
	12-month ECL	Lifetime ECL - not credit impaired	Lifetime ECL - credit impaired	Total
Cash in banks (excluding cash on hand)	\$32,050,444	\$ -	\$ -	\$32,050,444
Trade receivables	-	59,933,819	4,538,069	64,471,888
Due from related parties	-	4,311,738	-	4,311,738
Current portion of long-term loan to a related party	-	9,081,839	-	9,081,839
Other current assets*	-	13,957,487	-	13,957,487
Long-term loan to a related party	-	-	-	-
Rent security deposit**	-	78,775	-	78,775
Restricted cash for plant expansion**	43,015,733	-	-	43,015,733
	\$75,066,177	\$87,363,458	\$4,538,069	\$166,967,704

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

Receivables that are not credit impaired are considered high grade, since the counterparties have strong financial capacity and business performance and with the lowest default risk.

The aging of trade and other receivables as at December 31 is as follows:

	2019				2018			
	Trade	Non-trade	Amounts Owed by Related Parties	Total	Trade	Non-trade	Amounts Owed by Related Parties	Total
Current	\$55,417,542	\$ -	\$157,069	\$55,574,731	\$45,554,515	\$ -	\$950,365	\$46,404,900
Past due:								
1-30 days	348,135	-	-	348,135	2,550,520	-	765	2,551,385
31-90 days	327,729	462,131	373,137	1,162,997	408,310	-	413,332	821,642
91-90 days	100,073	-	374,658	474,831	336,306	-	813,117	1,149,423
Over 90 days	10,184,035	4,265,458	3,275,249	17,717,740	11,063,868	3,974,174	999,398	15,957,410
	\$66,375,914	\$4,720,807	\$4,180,033	\$75,276,534	\$59,933,819	\$3,974,174	\$2,976,067	\$66,884,060

Past due trade receivables more than 30 days pertain mainly to output VAT. The Partnership believes that the unimpaired amounts that are past due and those that are neither past due nor impaired are still collectible based on historical payment behavior and analyses of the underlying customer credit ratings. There are no significant changes in their credit quality. There were no write-offs and reversals in 2019 and 2018.

The credit risk for cash and restricted cash is considered negligible, since the counterparties are reputable entities with high quality external credit ratings.

The Partnership has significant concentration of credit risk. Sale of power to Meralco accounts for 52% and 51% of the Partnership's total revenues for the years ended December 31, 2019 and 2018. The Partnership does not execute any credit guarantee in favor of any counterparty.

Capital Management

The Partnership maintains a sound capital base to ensure its ability to continue as a going concern, thereby continue to provide returns to partners and benefits to other stakeholders and to maintain an optimal capital structure to reduce cost of capital.

The Partnership defines capital as partner's contribution and retained earnings, both appropriated and unappropriated. Other component of equity such as equity reserve for retirement plan is excluded from capital for purpose of capital management.

The Partnership monitors capital on the basis of debt-to-equity ratio, which is calculated as total debt divided by total partner's contribution. Total debt is defined as total current liabilities and total noncurrent liabilities, while equity is total partner contribution as shown in the separate statements of financial position.

The partners have overall responsibility for monitoring capital in proportion to risk. Profiles for capital ratios are set in the light of changes in the external environment and the risks underlying the Partnership's business, operation and industry.

There were no changes in the Partnership's approach to capital management during the year.

27. Financial Assets and Financial Liabilities

The table below presents a comparison by category of the carrying amounts and fair values of the Partnership's financial instruments:

	December 31, 2019		December 31, 2018	
	Carrying Values	Fair Values	Carrying Value	Fair Values
Financial Assets				
Cash	\$51,458,263	\$51,458,263	\$32,050,443	\$32,050,443
Trade receivables - net	66,375,914	66,375,914	59,933,619	59,933,619
Due from related parties	4,180,033	4,180,033	4,311,738	4,311,738
Current portion of long-term loan to a related party	8,492,150	8,492,150	9,081,839	9,081,839
Other current assets*	38,002,882	38,002,882	13,967,487	13,967,487
Rent security deposits**	78,775	78,775	78,775	78,775
Restricted cash for plant expansion**	74,488,010	74,488,010	43,015,733	43,015,733
	\$241,076,794	\$241,076,794	\$162,435,967	\$162,435,967
Financial Liabilities				
Accounts payable and accrued expenses (excluding statutory payables)	\$88,108,302	\$88,108,302	\$79,354,328	\$79,354,328
Working capital loans payable	45,000,000	45,000,000	45,000,000	45,000,000
Senior bank loans payable - current portion	63,593,330	63,593,330	49,295,055	49,295,055
Due to related parties	14,041,117	14,041,117	15,582,801	15,582,801
Other current liabilities (excluding statutory payables)	1,078,868	1,078,868	4,140,572	4,140,572
Senior bank loans payable - net of current portion	668,169,578	667,814,708	646,912,247	657,104,948
Other noncurrent liabilities	11,779,881	10,437,319	10,047,890	8,169,847
	\$891,771,066	\$910,073,634	\$850,332,891	\$858,647,546

*Included under "Prepaid expenses and other current assets" account.

**Included under "Other noncurrent assets" account.

The following methods and assumptions are used to estimate the fair value of each class of financial instruments:

Cash, Trade Receivables, Due from Related Parties, Current Portion of Long-term Loan to a Related Party, Other Current Assets and Restricted Cash. The carrying amounts of cash and trade and other receivables approximate their fair values primarily due to the relatively short-term maturities of these financial instruments. In the case of noncurrent receivables, long term loan to a related party and restricted cash, the carrying amount approximates fair value, since the effect of discounting is not considered material.

Accounts Payable and Accrued Expenses (excluding statutory payables), Working Capital Loans Payable, Senior Bank Loans Payable - current portion, Due to Related Parties and Other Current Liabilities (excluding statutory payables). The carrying amount of loans payable and accounts payable and accrued expenses approximates fair value due to the relatively short-term maturities of these financial instruments.

Senior Bank Loans Payable - net of current portion and Other Noncurrent Liabilities. The fair value is based on the present value of expected cash flows using the applicable discount rates based on current market rates of similar instruments. The fair value of Senior Bank Loans Payable - net of current portion and Other Noncurrent Liabilities has been categorized as Level 2 in the fair value hierarchy.

The fair values of the bank loans payable and land lease liabilities are based on the discounted value of expected future cash flows using the applicable interest rate for similar types of instruments, as follows:

	2019	2018
Bank loans payable	3.32% - 4.76%	6.02% - 7.21%
Land lease liability	6.73% - 7.53%	4.05% - 6.17%

28. Supplementary Cash Flows Information

The following are the financing activities resulting to changes in the Partnership's liabilities:

	Working Capital Loans Payable	Senior Bank Loans Payable	Interest Loans	Total
Balance as at January 1, 2019	\$45,000,000	\$696,207,302	\$10,192,698	\$751,400,000
Changes from Financing Cash Flows				
Proceeds from borrowings	180,000,000	75,000,000	-	255,000,000
Payments of borrowings	(180,000,000)	(40,642,000)	(37,838,186)	(258,480,186)
Total Changes from Financing Cash Flows	-	34,358,000	(37,838,186)	(3,480,186)
Balance as at December 31, 2019	\$45,000,000	\$730,565,302	(\$27,645,488)	\$747,919,814

a. Electric Power Industry Reform Act (EPIRA)

In June 2001, Congress approved and passed into law the EPIRA, providing the mandate and the framework to introduce competition in the electricity market. EPIRA also provides for the privatization of the assets of National Power Corporation (NPC), including its generation and transmission assets, as well as its contracts with Independent Power Producers (IPPs). EPIRA provides that competition in the retail supply of electricity and open access to the transmission and distribution systems would occur within three years from EPIRA's effective date in June 2001. Prior to June 2002, concerned government agencies were to establish a wholesale electricity spot market, ensure the unbundling of transmission and distribution wheeling rates and remove existing cross-subsidies provided by industrial and commercial users to residential customers. The WESM was officially launched on June 23, 2006 and began commercial operations for Luzon. The ERC has already implemented a cross subsidy removal scheme. The inter-regional grid cross subsidy was fully phased out in June 2002. The intra-regional grid cross subsidy was completely removed in October 2005. ERC has already approved unbundled rates for TRANSCO and majority of the distribution utilities.

Under EPIRA, NPC's generation assets are to be sold through transparent, competitive public bidding, while all transmission assets are to be transferred to TRANSCO, initially a government-owned entity that is to eventually be privatized. The privatization of these NPC assets has been delayed and is considerably behind the schedule set by the Department of Energy (DOE). EPIRA also created the PSALM, which is to accept transfers of all assets and assume all outstanding obligations of NPC, including its obligations to IPPs. One of PSALM's responsibilities is to manage these contracts with IPPs after NPC's privatization. PSALM also is responsible for privatizing at least 70% of the transferred generating assets and IPP contracts no later than three years from the effective date of the law.

Likewise, full retail competition and open access will commence once PSALM successfully (i) privatizes at least 70 percent of the total capacity of generating assets of NPC; and (ii) transfers of the management and control of at least 70 percent of the total energy output of power plants under contract with NPC to the IPP Administrators. On September 27, 2012, the DOE and ERC released a joint statement resolving that initial open access date is on December 26, 2012 and the first 6 months will be Transition Period, while commercial operations will commence effective June 26, 2013. Transition Period covers the registration, discussions, trainings, and simulations among Suppliers, Contestable Customers, and other stakeholders.

In August 2005, the ERC of the Philippines issued a resolution reiterating the statutory mandate under the EPIRA law for generation and distribution companies to make an initial public offering (IPO) of at least 15% of their common shares by June 26, 2006. For companies which operated after the implementation of EPIRA, the IPO shall be implemented not later than five years from the issuance of the Certificate of Compliance (COC) by the ERC. The Partnership received its COC on December 14, 2007. On May 23, 2011, the ERC finally issued the rules requiring generation companies and distribution utilities which are not publicly listed to offer and sell not less than 15% of their common shares. Existing companies must comply with the rules within 5 years and new companies are required to comply within 5 years of their certificate of compliance.

b. Clean Air Act

The Clean Air Act and the related Implementing Rules and Regulations (IRR) contain provisions that have an impact on the industry as a whole, and to the Partnership in particular. The Partnership will comply with the provisions of the Clean Air Act and its IRR.

c. Contingencies

The Partnership is a party to certain cases or claims which are either pending decision by the court/regulators or are subject to settlement agreements. The outcome of these cases or claims cannot be presently determined.

i. *Petition to Stop the Imposition of the Increase in Generation Charge*

The Partnership became a party to a Petition for Certiorari and Prohibition with prayer for Temporary Restraining Order (TRO) and/or Preliminary Injunction (Petition) filed in the Supreme Court by special interest groups which sought to stop the imposition of the increase in generation charge of Meralco for the November 2013 billing month. On December 23, 2013, the Supreme Court issued a TRO ordering Meralco not to collect, and the generators not to demand payment, for the increase in generation charge for the November 2013 billing month. The TRO was originally for a period of 60 days.

On January 08, 2014, Meralco filed its Separate Comment/Opposition with Counter-Petition (Counter Petition) which prayed, among others, for the inclusion of the Partnership and several generators as respondents to the case. On January 10, 2014, the Supreme Court issued an Order treating the Counter-Petition as in the nature of a Third-Party Complaint and granting the prayer to include the Partnership as respondents in the Petition.

In a Resolution dated April 22, 2014, the Supreme Court extended the effectivity of the TRO indefinitely. To date, the Petition is pending resolution with the Supreme Court.

ii. *ERC Order Voiding WESM Prices*

Relative to the above-cited Petition, on December 27, 2013, the DOE, ERC and PEMC, acting as a tripartite committee, issued a joint resolution setting a reduced price cap on the WESM of P32/kWh. The price was set to be effective for 90 days until a new cap will be decided upon.

On March 3, 2014, the ERC, in the exercise of its police power, issued an order in Miscellaneous Case No. 2014-021, declaring the November and December 2013 Luzon WESM prices void and imposed the application of regulated prices. On May 9, 2014, the ERC issued an order directing PEMC, the operator of the WESM, to calculate and issue adjustment bills using recalculated prices. Based on these orders, the Partnership recognized a reduction in its power purchases.

The Partnership filed a request with the ERC for the reconsideration of the ERC Order. Other generators also requested the Supreme Court to stop the implementation of the ERC Order.

On December 12, 2014, the Partnership filed before the Court of Appeals a Petition for Review under Rule 43 of the Revised Rules of Court assailing the ERC Orders dated March 3, 2014, March 27, 2014, and May 9, 2014.

After consolidating the cases, the Court of Appeals, in its decision dated November 7, 2017, granted the Petition for Review filed by the Partnership declaring the ERC Orders null and void and set aside the Orders of the ERC dated March 3, 2014, March 27, 2014, May 9, 2014 and October 15, 2014 in ERC Case No. 2014-021 MC and accordingly reinstated and declared as valid the WESM prices for Luzon for the supply months November to December 2013.

Motions for reconsideration of the November 7, 2017 Decision and motions for Intervention and motions to admit motions for reconsideration were filed by various intervenors.

In a resolution dated March 22, 2018, the Court of Appeals denied the aforesaid motions. On June 2018, the intervenors filed their respective motions for reconsideration of the said Resolution of the Court of Appeals dated March 22, 2018. On June 27, 2018, the Partnership filed a Separate Comment to the various Motions for Reconsideration. To date, the Court of Appeals has yet to resolve the aforesaid Motions, Comments, and Oppositions filed by the various parties.

On March 29, 2019, the CA issued an Omnibus Resolution affirming its decision dated November 7, 2017 and resolution dated March 22, 2018.

The intervenors thereafter filed petitions for certiorari before the SC, First Division. Each were denied by the SC through its resolutions dated September 11, 2019 and October 1, 2019 generally on the same ground that the petitioners each failed to sufficiently show that the CA committed any reversible error in promulgating its resolution dated March 22, 2018 denying petitioners' motions to Intervene and the subsequent Omnibus Resolution dated March 29, 2019 denying the petitioners' motions for reconsideration of the denial of their respective motions to intervene.

III. Refund of System Loss Charge

In 2008, Meralco filed a petition for dispute resolution against PEMC, TransCo, NPC and PSALM seeking, among others, the refund of the transmission line loss components of the line rentals associated with PSALM/NPC bilateral transactions from the start of the WESM operations and Transition Supply Contract (TSC) implemented in 2006. In this case, the ERC concluded that Meralco was being charged twice considering that it already paid line rental to the WESM beginning June 2006. Hence, the ERC ordered PSALM/NPC to refund Meralco the 2.98% system loss charge embedded in the NPC Time-of-Use (NPC TOU) rate (Meralco vs. PSALM, NPC, TransCo).

On March 4, 2013, the ERC issued a subsequent order directing Meralco: (i) to collect this system loss charge from the Successor Generating Companies (SGC) including the Partnership, which supplied the Meralco-NPC TSC and charged the NPC TOU rates, and (ii) to file a petition for dispute resolution against the SGC, to recover the line loss collected by them as these SGC were not parties to the petition for dispute resolution filed by Meralco in 2008. On July 1, 2013, the ERC clarified its previous order stating that SPPC should be included as one of the SGC against whom Meralco is directed to file a petition.

In compliance with the ERC's March 4, 2013 and July 1, 2013 Order, Meralco filed a petition for dispute resolution with the ERC against all SGC which supplied portions of the TSC. On September 20, 2013, the Partnership jointly with the other SGC filed a Motion to Dismiss before the ERC, on the ground of the Petition's failure to state a cause of action and the ERC's lack of jurisdiction over the subject matter of the Petition. To date, the Joint Motion to Dismiss remains unresolved by the ERC.

d. Effects of Corona Virus Disease 2019 (COVID-19)

On March 8, 2020, under Proclamation 922, the President of the Philippines has declared a state of public health emergency throughout the Philippines due to the outbreak of the COVID-19.

The Partnership, being engaged in the power generation business, is not significantly affected by the aforesaid declaration since the Partnership will need to continue its operations as it is considered to be a provider of essential services.

30. Supplementary Information Required under the Revenue Regulations (RR) No. 15-2016

The Bureau of Internal Revenue has issued RR No. 15-2010 which requires certain tax information to be disclosed in the notes to the separate financial statements. The Partnership presented the required supplementary tax information as a separate schedule attached to its annual income tax return.

Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Banl, Masinloc
Zambales, 2211 Philippines
tel 047 307 4000

**STATEMENT OF MANAGEMENT'S RESPONSIBILITY
FOR FINANCIAL STATEMENTS**

The management of Masinloc Power Partners Co. Ltd., (the "Partnership") is responsible for the preparation and fair presentation of the financial statements including the schedules attached therein, for the years ended December 31, 2019 and 2018, in accordance with the prescribed financial reporting framework indicated therein, 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.

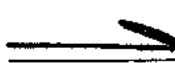
In preparing the financial statements, management is responsible for assessing the Partnership's ability to continue as a going concern, disclosing, as applicable matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Partnership. The Board of Directors is responsible for overseeing the Partnership's financial reporting process.

The Board of Directors reviews and approves the financial statements including the schedules attached therein, and submits the same to the stockholders.

R.G. Manabat and Co., the independent auditor appointed by the stockholders, has audited the financial statements of the Partnership in accordance with Philippine Standards on Auditing, and its report to the stockholders, has expressed its opinion on the fairness of presentation upon completion of such audit.



Elenita D. Go
Managing Partner & Chief Executive Officer



Paul Bernard D. Causon
Chief Finance Officer

Signed this 9th day of March, 2020

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

ANNEX "AA"
Masinloc Power Partners Co. Ltd.
Masinloc Power Facility
Masinloc Coal-Fired Thermal Power Plant
Barangay Beni, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

**EXPLANATION ON THE NON-APPLICABILITY OF THE MINIMUM ENERGY OFF-TAKE
("MEOT") PROVISION ON THE POWER SUPPLY AGREEMENT**

The Minimum Energy Off-take (MEOT) provision is not applicable to this PSA since the rate structure under the PSA is capacity based. The mechanics of the contract is such that MERALCO commits to purchase a specific Contract Capacity which has an applicable capacity fees such as Capital Recovery Fee (CRF) and Fixed Operations and Maintenance Fee (FOM) that are paid every month. While the Associated Energy is paid based on actual energy consumption.


ALBERTO B. REYES, III
Manager, Utility Economics Department
SMC Global Power Holdings Corp.

MASINLOC POWER PARTNERS CO. LTD.
A SUBSIDIARY OF SMC GLOBAL POWER

ANNEX "BB"

Masinloc Power Partners Co. Ltd.
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Masinloc Coal-Fired Thermal Power Plant
Barangay Bani, Masinloc
Zambales, 2211 Philippines
Tel.: 047 307 4000
Fax: 047 307 4003

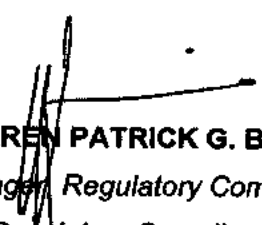
EXPLANATION ON THE NON-APPLICABILITY OF POTENTIAL COST OF ANCILLARY SERVICE

As of date submission, there is no existing Ancillary Service Procurement Agreement (ASPA) between Masinloc Power Partners Co. Ltd. Units 4 and 5 and NGCP, the former being greenfield projects. In this light, the requirement relating to Potential Cost of Ancillary Service is not Applicable.

WARREN PATRICK G. BELVIS
Manager, Regulatory Compliance Department
SMC Global Power Holdings Corp.

**EXPLANATION THAT ALL INFORMATION ON TECHNICAL CHARACTERISTICS
AND NET HEAT-RATE CAN BE FOUND IN THE PROJECT FEASIBILITY STUDY**

This is to respectfully inform the Honorable Commission that information relating to the technical characteristics and net heat rate of the Power Plant's Units 4 and 5 may be found on the submitted Project Feasibility Study (ANNEX U-1).


WARREN PATRICK G. BELVIS

Manager, Regulatory Compliance Department

and Regulatory Compliance Officer

SMC Global Power Holdings Corp.