



# Assessment on the Participation of Distribution Utilities in the Wholesale Electricity Spot Market

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**2023-2024**

This Report is prepared by the  
Philippine Electricity Market Corporation –  
Market Assessment Group  
and approved by the  
Market Surveillance Committee

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## EXECUTIVE SUMMARY

The Wholesale Electricity Spot Market (WESM) has been established under Section 30 of the Electric Power Industry Reform Act (EPIRA). It serves as a centralized platform for electricity buyers and sellers, where prices are determined by the interaction of demand and supply. It is also the venue for the generators to declare their bilateral contract quantities (BCQ) through the Central Registration and Settlement System (CRSS), which are then confirmed by their customer counterparties – these are more often than not, the Distribution Utilities (DUs) which are given the opportunity to source their consumption from the WESM or their BCQ, with high regards on the provisions of the contract. This declaration enables DUs to specify the amount of energy they have contracted, which is then netted out against their actual metered consumption. Any excess or shortfall in the undeclared portion shall then be settled at market prices based on real-time conditions using full nodal pricing.

The establishment of the WESM aims to create a transparent and reliable market for electricity. The objectives of the spot market are to establish a competitive, efficient, transparent and reliable market for electricity where: (a) A level playing field exists among WESM Participants, (b) Trading of electricity is facilitated among WESM Participants within the spot market, (c) Third parties are granted access to the power system in accordance with the Act, (d) Prices are governed as far as practicable by commercial and market forces, and (e) Efficiency is encouraged<sup>1</sup>. The WESM is also governed by the Philippine Electricity Market Board of Directors and Governance Committees, which ensure that its mandate to maintain a fair, transparent, and competitive market is upheld and actively pursued. Additionally, the operations and governance in the WESM is under the oversight of the Department of Energy (DOE) and the Energy Regulatory Commission (ERC). In June 2006, the WESM began operating commercially in the Luzon grid, followed by the integration of the Visayas grid in December 2010, and by Mindanao in January 2024.

Among the four (4) sectors established by the EPIRA, the distribution sector plays an essential responsibility in delivering electricity from the transmission system to the end-users, most of which are currently classified as captive customers<sup>2</sup> – this is mainly done by the DUs. On another note, the DU participation in the WESM helps them manage unexpected demand surges or supply shortages, and obtain real-time market signals, enabling them to make informed decisions about electricity procurement.

However, the participation of DUs in the WESM also pose risks in terms of cost predictability, as the prices in the WESM can be highly volatile due to various factors. While the real-time electricity market adjusts to system conditions within short intervals, frequently between 5 minutes, differences may arise from issues such as unplanned outages of power plants, unexpected levels of congestion on transmission lines, or increased demand for electricity due to sudden changes to weather conditions. It was observed that starting year 2024, high levels of spot exposures were noted for DUs, wherein the most common reason cited for this is due to unsuccessful Competitive Selection Processes.

On 26 March 2024, the Department of Energy has launched the implementation of Retail Competition and Open Access (RCOA) in Mindanao over which DUs would have a big role in enabling the smooth switching of captive customers to the RCOA – this also includes the Green Energy Option Program (GEOP) and the Retail Aggregation Program (RAP).

Considering these observations, the Market Surveillance Committee initiated an assessment on the participation of DUs in the WESM.

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<sup>1</sup> WESM Rules Clause 1.2.5

<sup>2</sup> Definition of Terms 2.4 C. “(Retail Rules) An electricity end user who does not have a choice of a Supplier of electricity, as may be determined by the ERC in accordance with the Act. Collectively, the end users make up the captive market”

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## 1.0 OBJECTIVE

In this study, the Market Surveillance Committee aims to, among other things:

1. Provide assessment on the participation of DUs in the WESM, focusing on their responsibilities and performance;
2. Survey the issues and challenges faced by the Distribution Utilities; and
3. Provide corresponding recommendations.

## 2.0 RESPONSIBILITIES

Section 23 of the EPIRA outlines the functions of DUs, where it is mandated to provide distribution services and connections to their system for any end-user within their franchise area. This also involves the interim provision of supply to the demand currently under its franchise area. In carrying out this mandate, the DUs can either produce the electricity or purchase it from power plants or other power supply resources through Power Supply Agreements or Bilateral Contracts. However, demands can vary from time to time, and there are instances where the power supplier encounters technical issues in their respective generating units, which prompts them to be on outage. During these instances, DUs will have to source for an alternative, immediate supply to satisfy the demand requirement in their area.

Considering that the WESM operates in a gross pool market concept, where all the electricity generated by power plants is centrally coordinated for scheduling, the DUs are required to register<sup>3</sup> in the WESM, whether their participation is direct or indirect membership<sup>4</sup>, mainly to allow DUs to declare and account their BCQs. Should there be any differences between the declared BCQ and the metered quantities, the same shall be accounted as spot market transactions. Figure 1 below shows the number of registered DUs, as of December 2024 (see Annex A for the complete list of private DUs and ECs). The total energy consumption for each region was likewise included in the illustration providing that Luzon has the highest energy consumption for 2024 considering that most of the economic activities happen in the region.

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<sup>3</sup> Registration, Suspension and De-Registration Criteria and Procedures Section 2.3.3

<sup>4</sup> WESM Rules Clause 10.2.4

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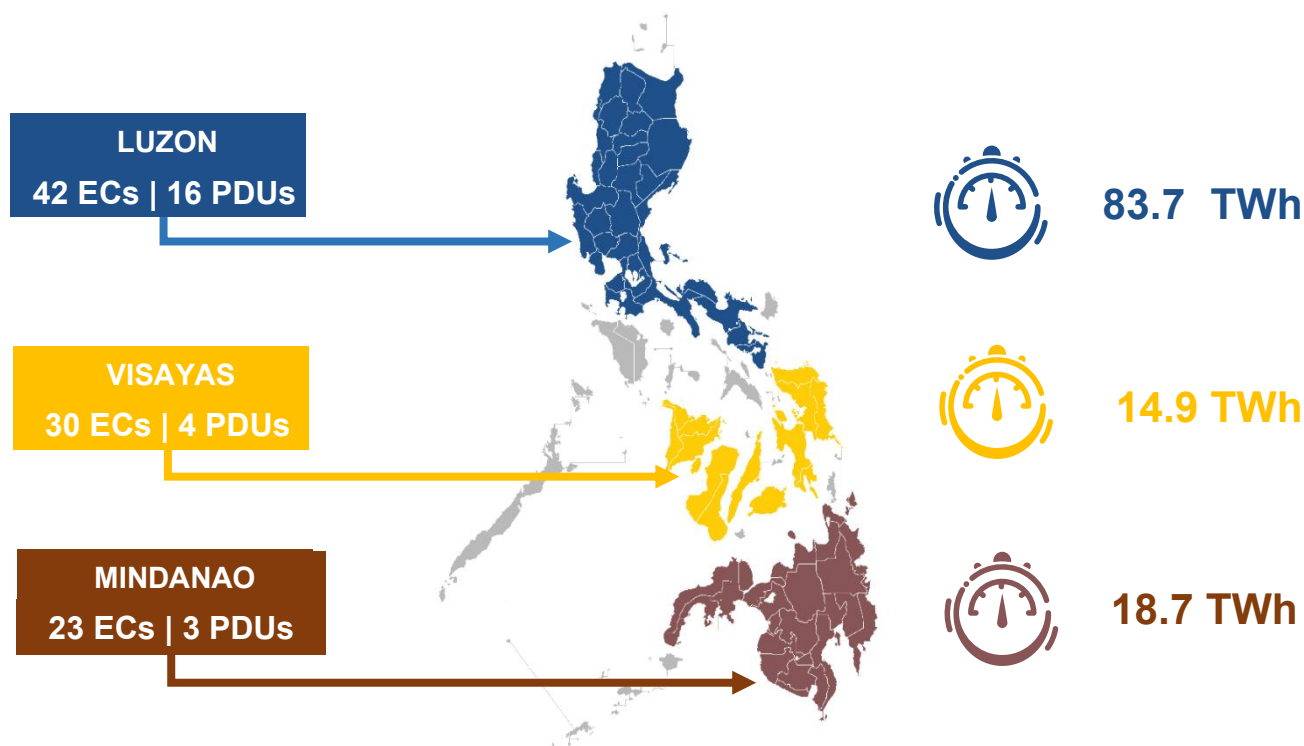


Figure 1: WESM Registration as of December 2024

In terms of reliability, while adhering with the objectives of EPIRA to ensure reliable and affordable electricity for consumers, the DUs are encouraged to enter into contracts through the Competitive Selection Process (CSP). The CSP policy mandates that all power supply agreements (PSAs) entered into by DUs must be procured through a competitive bidding process, and this policy applies to all DUs in both the main grid and off-grid areas to ensure that the procurement of power supply is done in a transparent and competitive manner, ultimately benefiting the consumers by providing electricity at the least cost. The process being conducted in the CSP are overseen and regulated by the policies sets out by the Department of Energy (DOE)<sup>5</sup> and the Energy Regulatory Commission (ERC)<sup>6</sup>.

DUs also serve as the default Metering Services Provider (MSP) for Contestable Customers within their franchise, registered as retail MSPs (RMSPs). The DUs as MSPs are registered as WESM members<sup>7</sup> and are mandated to ensure metering installations are provided, installed, tested, calibrated, and maintained as well as to ensure that the accuracy of each metering installations complies with the requirements of the WESM Rules, the Philippine Grid Code, and Philippine Distribution Code.

The performance of MSPs must meet the expected performance ratings, which are evaluated based on two key performance indicators: 1.) Service Delivery and 2.) Customer Satisfaction. Under the service delivery are the following indicators:

- a. Daily Meter Data Delivery
- b. Timeliness and Percentage Resolution to Daily Meter Trouble Report

<sup>5</sup> DOE DC 2023-06-0021: Mandatory conduct of the Competitive Selection Process (CSP) by Distribution Utilities for the procurement of power supply for their captive market

<sup>6</sup> ERC Resolution No. 16, Series of 2023: Implementing Guidelines for the Procurement, Execution, and Evaluation of Power Supply Agreements entered into by Distribution Utilities for the supply of electricity to their captive market

<sup>7</sup> WESM Rules Clause 2.3.6

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- c. Integrity of Meter Data
- d. Timeliness of Monthly Meter Data Delivery and
- e. Timeliness and Percentage Resolution to Monthly Meter Trouble Report

Based on the performance monitoring of the MSPs, the passing percentage of MSPs in 2024<sup>8</sup> are ranging from 85 to 90 percent in Luzon, Visayas, and Mindanao as depicted in figure 2. These values are relatively low considering that these performances are key in the efficient implementation of the RCOA.

Luzon RMSPs			Visayas RMSPs		
	RMSP	Rating		RMSP	Rating
1	NEECO1MSP	90.00%	1	VECOMSP	89.99%
2	PELCO1MSP	90.00%	2	MECMSP	89.87%
3	DECORPMSP	89.97%	3	LEYCOVMSP	89.71%
4	MRLCOMSP	89.91%	4	MOREMSP	89.49%
5	BTLC1MSP	89.86%	5	MEZMSP	89.31%
6	CELCORMSP	89.85%	6	BEZMSP	89.04%
7	TEIMSP	89.84%	7	ILECO2MSP	87.65%
8	LUELCOMSP	89.82%	8	CEBEC3MSP	87.52%
9	CGLCO1MSP	89.63%	9	AKELCOMSP	87.29%
10	NEEC21MSP	89.54%	10	NRECO2MSP	86.84%
11	TRLCO2MSP	89.53%	11	BLCIMSP	86.20%
12	PELCO2MSP	89.40%	12	CENECOMSP	85.70%
13	FLECOMSP	89.22%	13	BHCO1MSP	85.09%
14	LEZMSP	89.08%			
15	BTLC2MSP	89.04%			
16	PNLCO3MSP	89.00%			
17	PELCO3MSP	89.00%			
18	SEZMSP	88.99%			
19	BENECOMSP	88.86%			
20	INECMSP	88.84%			
21	CEDCMSP	88.51%			
22	ISECOMSP	88.21%			
23	LUECOMSP	85.92%			
24	MALVEZMSP	85.88%			

Mindanao RMSP		
	RMSP	Rating
1	DLPCMSP	89.68%

Figure 2: Retail Metering Service Providers Annual Performance Rating, 2024

<sup>8</sup> 2024 Annual Report on MSP Performance

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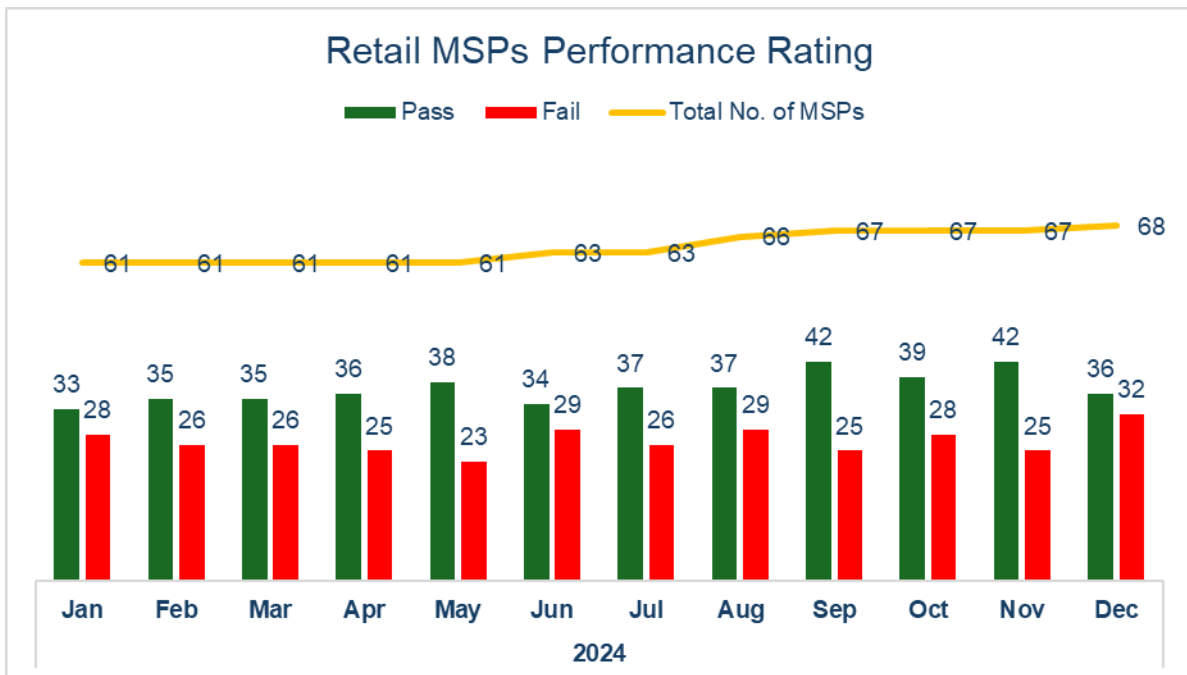


Figure 3: Retail Metering Service Providers Rating based on total number of MSPs, 2024

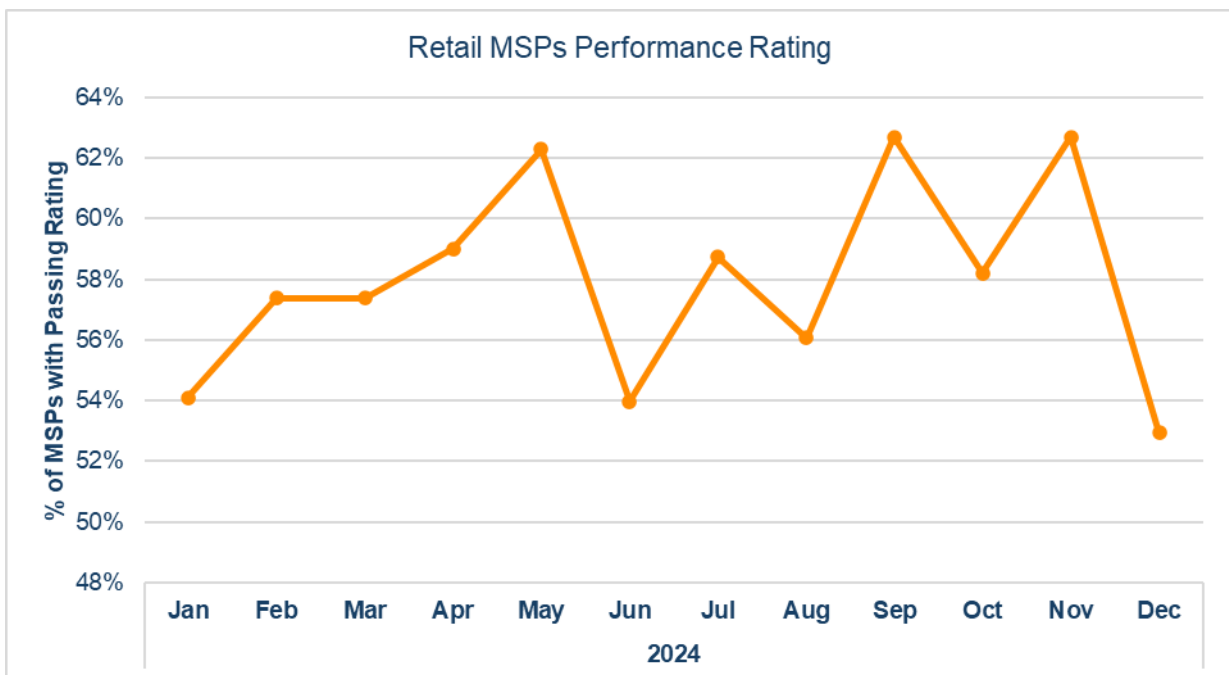


Figure 4: Over-all Retail Metering Service Providers Rating, 2024

Additionally, DUs have several compliance obligations, particularly in relation to the Renewable Portfolio Standards (RPS). The RPS requires DUs, and retail electricity suppliers, collectively called as the Mandated Participants, to source a certain percentage of their energy supply from eligible renewable energy (RE) resources. Under the existing rules and manuals<sup>9</sup>, Mandated Participants should source at least 11.4 percent of their supply from RE resources, to comply with their RPS obligation for 2024 – this target is re-calibrated on an annual basis. The Renewable Energy Market

<sup>9</sup> Chapter 4- RPS Compliance and Reporting for On-Grid Mandated Participants

(REM) is a new platform established by the DOE to allow for the trading Renewable Energy Certificates (RECs) to serve as proof of compliance with the RPS.

### 3.0 DATA AND OBSERVATION

Although the WESM is an avenue for the DUs to purchase electricity, buying electricity in the market exposes the DUs to price volatility considering various factors such as the propensity of price shocks due to external factors, and the supply and demand situation. This section provides details on the price outcomes and various factors that could affect the price of electricity in the WESM.

In 2022, there was a significant level of capacity on outage due to forced and maintenance outages caused by technical issues with generating units, which were further exacerbated by the restricted supply of natural gas from the SPEX Malampaya. Additionally, the Indonesian government imposed a coal export ban from 01 January 2022, to prioritize domestic coal supply for power plants, and was eventually lifted on 31 January 2022.

On 24 February 2022, the Ukraine-Russia war began, where it has had a significant impact on energy prices, causing sharp increases and considerable volatility in energy markets. The war has led to disruptions in energy supplies and increased sanctions on the Russian energy sector, which have vastly affected the economy. For instance, the number of Secondary Price Cap (SPC) intervals in the Wholesale Electricity Spot Market (WESM) exceeded 25,000 in 2022, representing 25% of the total intervals for the year.

Typically, during periods of tight supply margins, such as when demand surges, generation capacity is constrained due to generator and transmission lines unavailability, or when affected by external factors like geopolitical events (i.e. the Ukraine-Russia war or Indonesia coal export bans), these events may sometimes contribute to prolonged high electricity prices. These instances may trigger the imposition of one of price mitigating measures, which is the secondary price cap, wherein spot market prices will be capped at Php6,245/MWh when the average price over a 72-hour period exceeds the set threshold of Php9,000/MWh. The year 2022, has highest recorded instances of secondary price cap imposition as depicted in Figures 4 and 5.

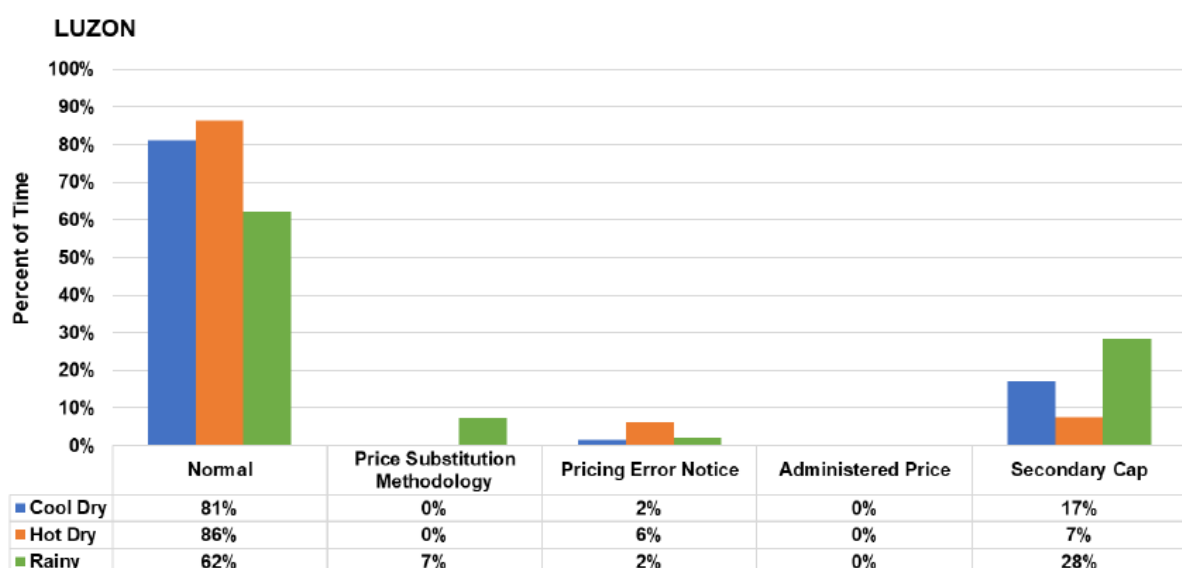


Figure 5: Summary of Pricing Conditions in Luzon, 2022

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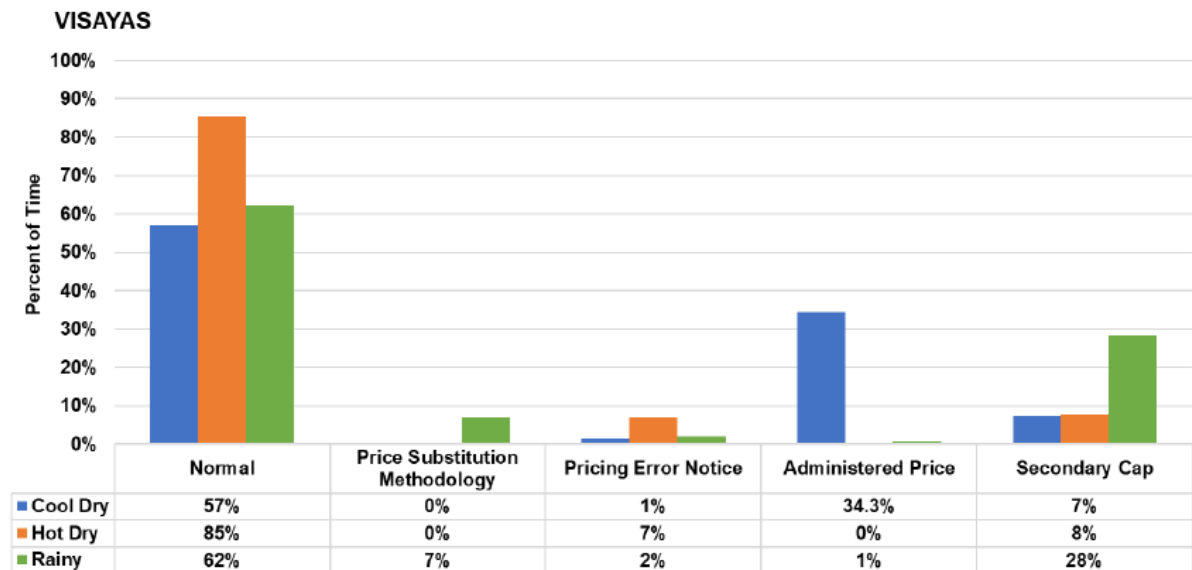


Figure 6: Summary of Pricing Conditions in Visayas, 2022

As historically established, the trend in LWAP is highly correlated with the supply margin. Tables 1 and 2 show that when the supply margin decreases, or if the difference between available generation capacity and system demand is relatively thin, prices tend to rise. Various factors, such as unplanned power plant outages and the technical constraints of generating units, including ramping limitations, often contribute to the fluctuations in supply levels.

Table 1: Seasonal LWAP comparison, 2023 vs 2024

Season	Average LWAP 2023	Average LWAP 2024	Percent Change
Cool Dry	PHP6,317/MWh	PHP4,304/MWh	(32)%
Hot Dry	PHP7,512/MWh	PHP6,861/MWh	(9)%
Rainy	PHP5,367/MWh	PHP4,913/MWh	(8)%

Table 2: Seasonal Supply Margin comparison, 2023 vs 2024

Season	Average Supply Margin 2023	Average Supply Margin 2024	Percent Change
Cool Dry	303 MW	953MW	214%
Hot Dry	917 MW	733 MW	(20)%
Rainy	991 MW	833 MW	(16)%

Similarly, in 2024, the month-on-month comparison indicates a rising trend in prices especially from March to May 2024. Figure 6 illustrates that the summer months experienced the highest average demand, attributed to the relatively high heat index during this period. Although the supply level managed to meet the increasing demand, the resulting supply margin was relatively narrow during the summer season compared to the rainy season, primarily due to forced outages of various power plants.

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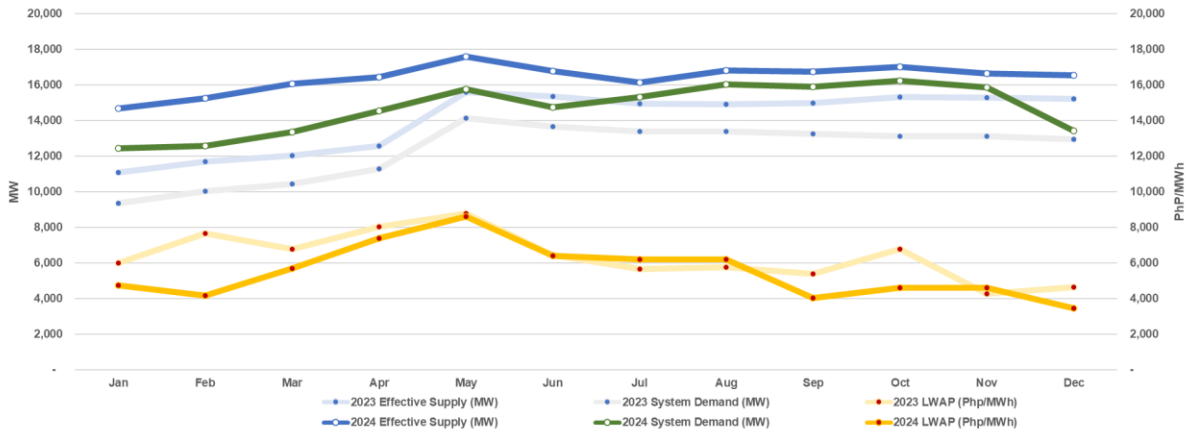


Figure 7: Supply, Demand and Price Outcome, 2023 vs 2024

These narrow supply margin translated to higher prices. For instance, the highest average price recorded in 2023 and 2024 fell on the month of May, with an average price of Php8,772/MWh and Php8,599/MWh as depicted in Figures 7 and 8. These figures support that if the DUs will not be able to become proactive in participating in the CSPs to secure contracts, they will be exposed to the spot market more frequently to satisfy the demand requirements of their franchise area.

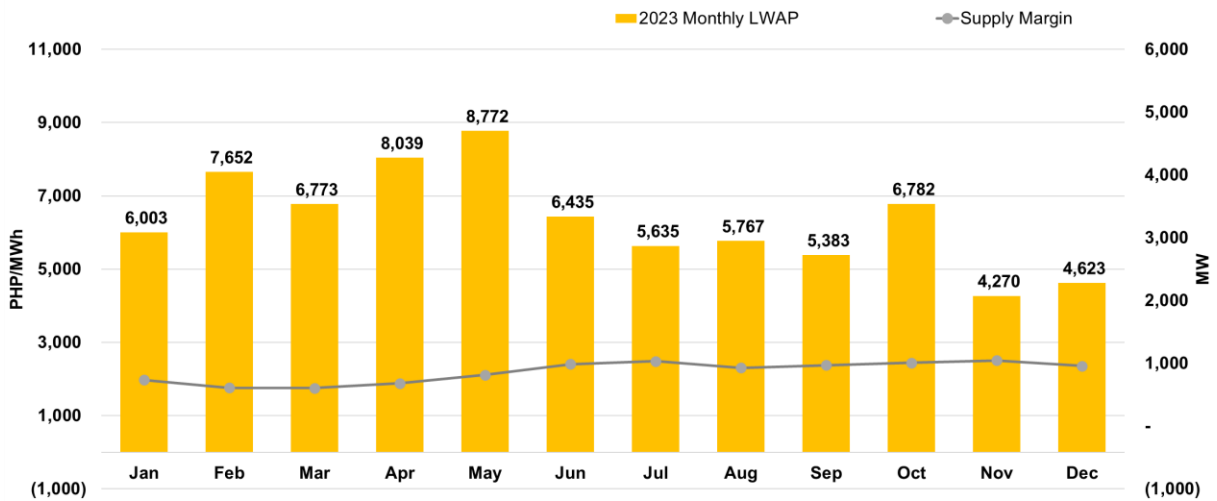


Figure 8: LWAP vs Supply Margin, 2023

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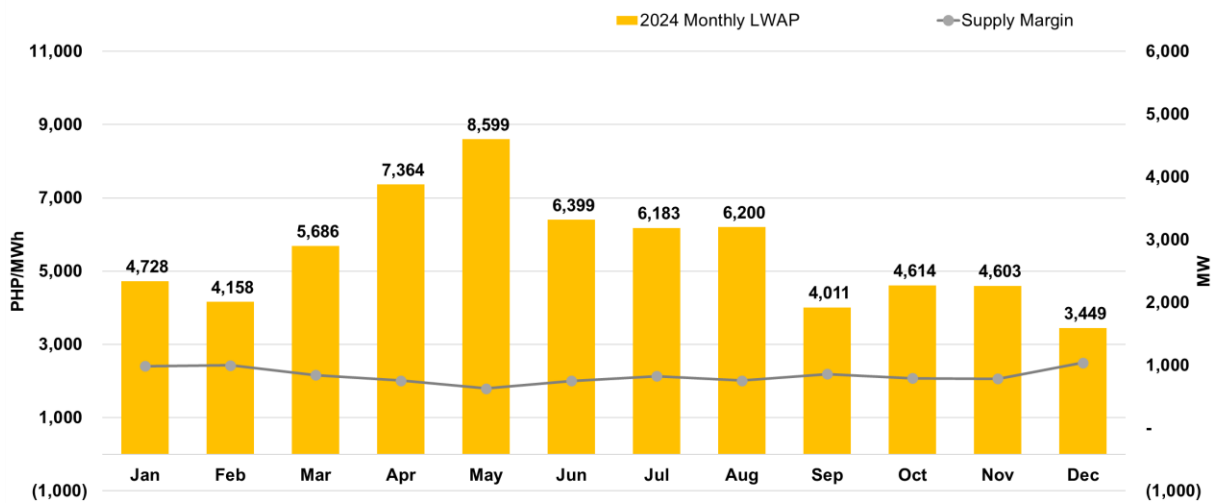


Figure 9: LWAP vs Supply Margin, 2024

On 11 May 2023, through an advisory released by the Department of Energy, the implementation of the single settlement took place for WESM trading participants in Luzon, Visayas, and Mindanao grids<sup>10</sup>, following the commercial operations of the Mindanao-Visayas Interconnection Project (MVIP) in January 2023. While this can alleviate high market prices, through an efficient power exchange between the regions, however, if the expired bilateral contracts will not be addressed through CSP participation to ensure electricity are settled in contract prices, it can still lead to increased spot market transactions of DUs.

Historically, the average monthly and hourly spot exposure ranged between 10 and 15 percent prior to the commercial operation of the 5-minute market. While most capacities were still secured through bilateral contracts, there was a notable increase in 2023 and 2024, with averages rising to 18 to 23 percent as depicted in Figure 9. This trend indicates that DUs need to enter into contracts via the CSP to avoid the volatile prices of the WESM.

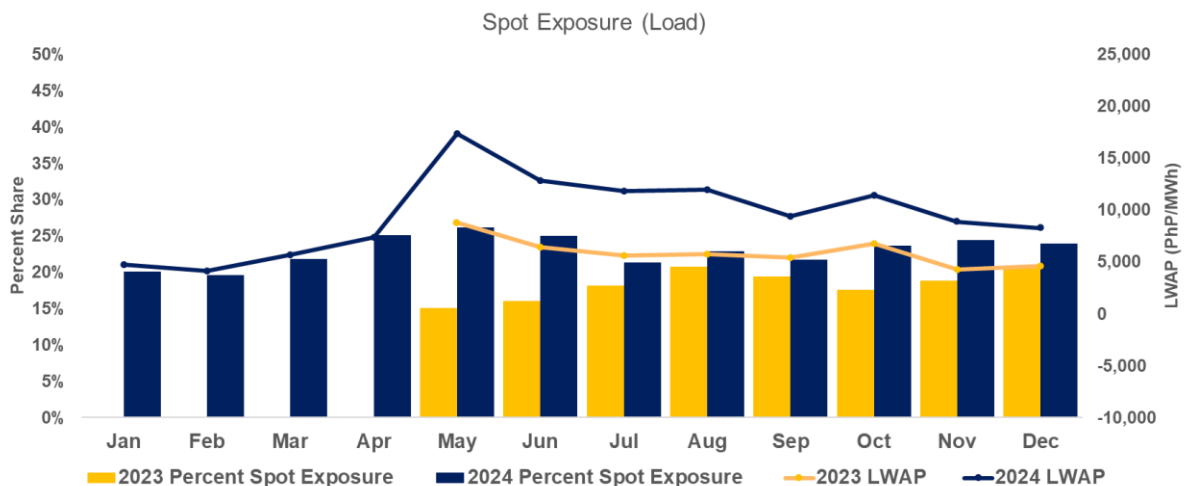


Figure 10: Monthly Spot Exposure, Load: 2023 vs 2024

<sup>10</sup> DOE Advisory. "Implementation of Single Settlement for WESM Trading Participants in Luzon, Visayas and Mindanao Grids" dated 11 May 2023

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Furthermore, Figure 10 shows the hourly profile of the spot exposure plotted against the average hourly price. A relatively higher average spot exposure was noted during the peak hours, particularly from 1100h-1400h and off-peak hours from 2000h-2400h. Generally, the hourly spot exposures in 2024 were significantly higher than in 2023.

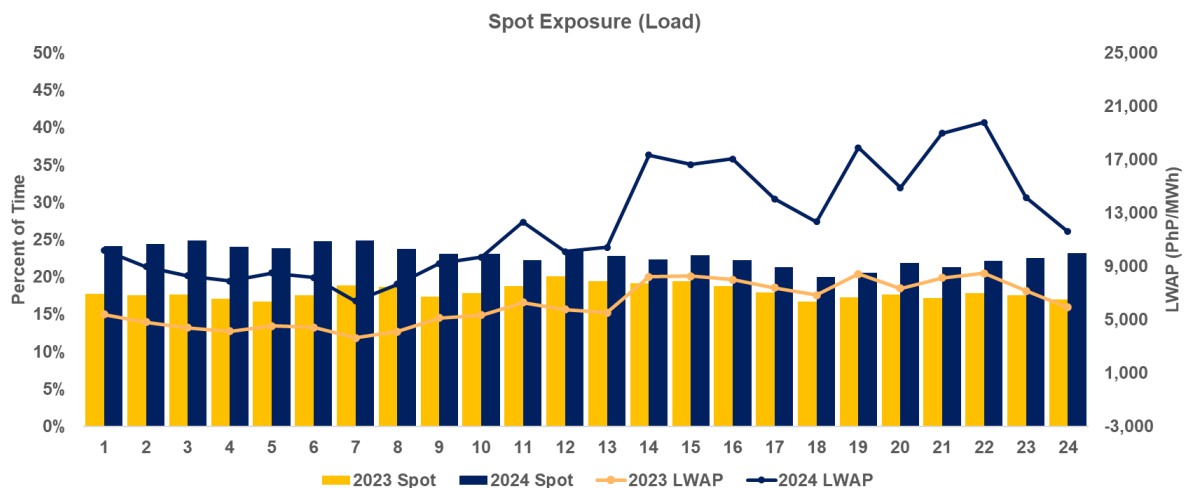


Figure 11: Hourly Spot Exposure, Load: 2023 vs 2024

Consequently, the Market Surveillance Committee conducted a survey on distribution utilities, with noted high levels of spot exposures for consecutive months from late 2022 to 2023. Based on the survey conducted to the distribution utilities with observed frequent exposure in the spot market, the summary of responses indicates that the common reason for their frequent exposure are as follows:

- Termination/expiration of contracts with their supplier counterparts
- Unsuccessful procurement of the new power suppliers through competitive selection process
- The high operation cost brought about by high fuel prices following the ongoing Ukraine-Russia war
- Spot prices are lower compared to the fuel rate and variable operating and maintenance cost of Bilateral Contract Quantity (BCQ) from the power suppliers

Based on the provided responses, it can be inferred that external shocks significantly impact how Distribution Utilities (DUs) meet consumer load requirements while complying with EPIRA mandates. Although these external shocks are classified as force majeure events, DUs have the option to enter into an Emergency Power Supply Agreement (EPSA). Furthermore, to reduce the frequency of spot market exposure, DUs should proactively manage expiring contracts and actively participate in the competitive selection process.

#### 4.0 ISSUES AND RECOMMENDATION

The distribution utilities' responsibilities, including registration, provision of energy at the least-cost manner, and compliance with WESM requirements, are essential for carrying-out an efficient market operation. However, considering that the market is evolving, there are rising challenges and issues that essentially needs actionable measures to ensure that compliances in the requirements of the market are still attainable. From this paper, the MSC has established several key issues in the operations of DUs and has provided several recommendations for possible adoption of appropriate market participants.

## RCOA Implementation

- On 26 March 2024, the Department of Energy officially launched the implementation of RCOA in Mindanao. While this marks a significant step toward liberalizing the electricity market and empowering contestable customers, it also introduces operational challenges most notably, the potential stranded capacities under existing PSAs held by DUs once eligible end-users avail of their power of choice for suppliers of electricity.
- One of the key strategies to mitigate this risk is the reallocation of contracts, which involves transferring contractual rights and obligations from one party to another, particularly when a customer transitions from captive to contestable status. This reallocation ensures that supply commitments are realigned with actual demand profiles. However, this process remains subject to regulatory oversight and requires prior approval from the Energy Regulatory Commission (ERC).
- In addition, the inclusion of carve-out provisions in PSAs can offer DUs greater operational flexibility. These provisions allow specific terms or conditions such as volumes associated with contestable customers to be excluded from the main contract. By doing so, DUs can adapt more readily to market shifts without breaching existing agreements. This approach is especially relevant in the context of RCOA, where customer classifications and demand patterns are expected to evolve rapidly.
- Stranded contracts may likewise be traded by the DUs in the WESM in accordance with Module Q2 of the Omnibus Rules for Customer Choice Programs in the Retail Market<sup>11</sup>.

## Competitive Selection Process

- Starting 2024, a notable rise in spot market exposure among DUs has been observed. A primary contributing factor identified is the failure of several CSPs, which has left many DUs without sufficient contracted capacity to meet their demand obligations. Despite the proactive engagement of DUs in CSP proceedings, the procedural rigidity and administrative bottlenecks have often hindered timely procurement of power supply agreements. To mitigate this issue, it is recommended that the CSP framework be revisited to introduce greater flexibility and responsiveness.
- The DOE has likewise issued its Department Circular<sup>12</sup> providing for policies for mandatory conduct of CSP for power supply to its captive market wherein it provided an exemption process—particularly for Embedded Generation (EG) and Renewable Energy (RE) sources—which would address immediate requirements and aid in the country's goal for energy transition as provided in the RE Act.
- Moreover, a comprehensive review of the Bilateral Contract Quantity (BCQ) Declaration Process is warranted. Current practices may not fully reflect the operational realities of DUs, particularly under evolving market conditions and regulatory mandates. Enhancing the accuracy and

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<sup>11</sup> ERC Resolution No. 13 Series of 2024 dated 14 August 2024

<sup>12</sup> DOE DC No. 2023-06-0021 entitled "Prescribing the Policy for the Mandatory Conduct of the Competitive Selection Process by the Distribution Utilities for the Procurement of Power Supply for Their Captive Market" dated 30 June 2023"

adaptability of BCQ declarations would support better alignment between contracted and actual demand. Additionally, the adoption of demand aggregation strategies is strongly encouraged. By consolidating procurement efforts, DUs—especially smaller ECs—can leverage economies of scale, resulting in more competitive pricing and improved negotiating power. This approach not only enhances procurement efficiency but also contributes to long-term cost stability for end-users.

### Renewable Portfolio Standards

- The DUs are also mandated to comply with the RPS accounting for 11.38% of the total demand for 2024. To meet this requirement, key recommendations include contracting with renewable energy (RE) resources as discussed in the CSP portion of this section, encouraging net-metering and distributed energy resources under its franchise area as the Renewable Energy Certificates (RECs) issued for its generation will currently be accounted to the host DU as provided under Clause 3.1.9 of the Renewable Energy Market (REM) Rules. Furthermore, the REM, which commercially operationalized in December 2024, gives an avenue for DUs to comply with this obligation by purchasing RECs for compliance.

### System Stability

- Persistent challenge that the DUs are facing is maintaining the efficiency and stability of their networks, particularly due to evolving demand patterns and the increased in the RE integration. In the National Electrification Administration's (NEA's) Compliance Report on the Performance of Electric Cooperatives for the 4<sup>th</sup> Quarter of 2024<sup>13</sup>, out of the 116 ECs regularly monitored based on stability and reliability, only 78 or 67% performed at the "green" level meeting all key performance index.
- Innovative solutions should continually be explored to improve the performance of the DUs such as the use of Battery Energy Storage Systems (BESS) which can play a critical role in enhancing grid regulation by storing excess energy during periods of low demand and releasing it during peak times. In a study undertaken by the Technical Committee in 2017, it posited that BESS can improve short- and long-duration voltage quality, provide reliable and cleaner back-up power for a limited time, reduce need for peak generation capacity, promote efficient use of RE resources, reduce need for transmission and distribution capacity upgrades which also addresses congestion issues, and lower greenhouse gas and other emissions. The benefit of using BESS is not just limited to the technical aspects but also to the economical aspect.
- Distributed Energy Resources (DERs), such as rooftop solar, small wind turbines, and other localized generation units, can also support voltage stability at the distribution level. When strategically deployed, DERs reduce transmission losses and help maintain voltage levels within acceptable limits, especially in remote or underserved areas. Moreover, encouraging net-metering allows consumers to generate their own electricity and feed excess power back into the grid. This not only empowers end-users but also contributes to voltage support and load balancing. When aggregated across a service area, net-metered systems can significantly enhance local grid resilience.

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<sup>13</sup> [National Electrification Administration Compliance Report on the Performance of Electric Cooperatives \(4<sup>th</sup> Quarter of 2024\)](#)

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The MSC recognizes the key role that the DUs are playing in order to deliver the energy needs of the end-users, especially at the household level, hence, this study was prepared to serve as a guide to participants encountering the enumerated challenges identified by the Committee. The provided recommendations are highly encouraged to be adopted by the involved market participants in order to alleviate the challenges currently faced technically, commercially, and economically.

This study is hereby respectfully submitted to the DUs, ERC, DOE, ERC, and NEA, for consideration.

## ANNEX

<b>List of Distribution Utility</b>			
<b>MERALCO</b>	Manila Electric Company	PIOU	Luzon
<b>ABRECO</b>	Abra Electric Cooperative, Inc.	EC-CDA	Luzon
<b>BENECO</b>	Benguet Electric Cooperative, Inc.	NEA-EC	Luzon
<b>IFELCO</b>	Ifugao Electric Cooperative, Inc.	NEA-EC	Luzon
<b>KAELCO</b>	Kalinga-Apayao Electric Cooperative, Inc.	NEA-EC	Luzon
<b>MOPRECO</b>	Mountain Province Electric Cooperative, Inc.	NEA-EC	Luzon
<b>DECORP</b>	Dagupan Electric Corporation	PIOU	Luzon
<b>LUECO</b>	La Union Electric Company, Inc.	PIOU	Luzon
<b>CENPELCO</b>	Central Pangasinan Electric Cooperative, Inc.	NEA-EC	Luzon
<b>INEC</b>	Ilocos Norte Electric Cooperative, Inc.	NEA-EC	Luzon
<b>ISECO</b>	Ilocos Sur Electric Cooperative, Inc.	NEA-EC	Luzon
<b>LUELCO</b>	La Union Electric Cooperative, Inc.	NEA-EC	Luzon
<b>PANELCO I</b>	Pangasinan I Electric Cooperative	EC-CDA	Luzon
<b>PANELCO III</b>	Pangasinan III Electric Cooperative	EC-CDA	Luzon
<b>CAGELCO I</b>	Cagayan I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CAGELCO II</b>	Cagayan II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>ISELCO I</b>	Isabela I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>ISELCO II</b>	Isabela II Electric Cooperative	EC-CDA	Luzon
<b>NUVELCO</b>	Nueva Vizcaya Electric Cooperative	EC-CDA	Luzon
<b>QUIRELCO</b>	Quirino Electric Cooperative	EC-CDA	Luzon
<b>BATANELCO</b>	Batanes Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>AEC</b>	Angeles Electric Corporation	PIOU	Luzon
<b>CEDC</b>	Clark Electric Distribution Corporation	PIOU	Luzon
<b>CELCOR</b>	Cabanatuan Electric Corporation	PIOU	Luzon
<b>OEDC</b>	Olongapo Electricity Distribution Company, Inc.	PIOU	Luzon
<b>SEZ</b>	Subic Enerzone Corporation	PIOU	Luzon
<b>SFELAPCO</b>	San Fernando Electric and Power Company, Inc.	PIOU	Luzon
<b>TEI</b>	Tarlac Electric, Inc.	PIOU	Luzon
<b>AURELCO</b>	Aurora Electric Cooperative, Inc.	NEA-EC	Luzon
<b>NEECO-I</b>	Nueva Ecija I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>NEECO II-Area 1</b>	Nueva Ecija II Electric Cooperative, Inc.- Area 1	NEA-EC	Luzon
<b>NEECO II-Area 2</b>	Nueva Ecija II Electric Cooperative, Inc. – Area 2	NEA-EC	Luzon
<b>PELCO I</b>	Pampanga I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>PELCO II</b>	Pampanga II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>PELCO III</b>	Pampanga III Electric Cooperative, Inc.	NEA-EC	Luzon
<b>PENELCO</b>	Peninsula Electric Cooperative, Inc.	NEA-EC	Luzon

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<b>PRESCO</b>	Pampanga Rural Electric Service Cooperative, Inc.	NEA-EC	Luzon
<b>SAJELCO</b>	San Jose City Electric Cooperative	NEA-EC	Luzon
<b>TARELCO I</b>	Tarlac I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>TARELCO II</b>	Tarlac II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>ZAMECO I</b>	Zambales I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>ZAMECO II</b>	Zambales II Electric Cooperative	NEA-EC	Luzon
<b>FBPC</b>	First Bay Power Corporation	LGUOU	Luzon
<b>IEC</b>	Ibaan Electric Corporation	PIOU	Luzon
<b>LEZ</b>	Lima Enerzone Corporation		Luzon
<b>MALVEZ</b>	Malvar Enerzone Corporation		Luzon
<b>BATELEC I</b>	Batangas I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>BATELEC II</b>	Batangas II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>FLECO</b>	First Laguna Electric Cooperative, Inc.	NEA-EC	Luzon
<b>QUEZELCO I</b>	Quezon I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>QUEZELCO II</b>	Quezon II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>BISELCO</b>	Busuanga Island Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>LUBELCO</b>	Lubang Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>MARELCO</b>	Marinduque Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>OMECO</b>	Occidental Mindoro Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>ORMECO</b>	Oriental Mindoro Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>PALECO</b>	Palawan Electric Cooperative	SPUG-EC CDA	Luzon
<b>ROMELCO</b>	Romblon Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>TIELCO</b>	Tablas Island Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>ALECO</b>	Albay Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CANORECO</b>	Camarines Norte Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CASURECO I</b>	Camarines Sur I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CASURECO II</b>	Camarines Sur II Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CASURECO III</b>	Camarines Sur III Electric Cooperative, Inc.	NEA-EC	Luzon
<b>CASURECO IV</b>	Camarines Sur IV Electric Cooperative, Inc.	NEA-EC	Luzon
<b>SORECO I</b>	Sorsogon I Electric Cooperative, Inc.	NEA-EC	Luzon
<b>SORECO II</b>	Sorsogon II Electric Cooperative	EC-CDA	Luzon
<b>FICELCO</b>	First Catanduanes Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>MASELCO</b>	Masbate Electric Cooperative, Inc.	SPUG-EC	Luzon
<b>MEPC</b>	MORE Electric and Power Corporation	PIOU	Visayas
<b>AKELCO</b>	Aklan Electric Cooperative, Inc.	NEA-EC	Visayas
<b>ANTECO</b>	Antique Electric Cooperative, Inc.	NEA-EC	Visayas
<b>CAPELCO</b>	Capiz Electric Cooperative, Inc.	NEA-EC	Visayas
<b>CENECO</b>	Central Negros Electric Cooperative, Inc.	NEA-EC	Visayas
<b>GUIMELCO</b>	Guimaras Electric Cooperative	NEA-EC	Visayas
<b>ILECO I</b>	Iloilo I Electric Cooperative, Inc.	NEA-EC	Visayas
<b>ILECO II</b>	Iloilo II Electric Cooperative, Inc.	NEA-EC	Visayas

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<b>ILECO III</b>	Iloilo III Electric Cooperative, Inc.	NEA-EC	Visayas
<b>NOCECO</b>	Negros Occidental Electric Cooperative	EC-CDA	Visayas
<b>NONECO</b>	Northern Negros Electric Cooperative, Inc.	NEA-EC	Visayas
<b>BEZ</b>	Balamban Enerzone Corporation	PIOU	Visayas
<b>BLCI</b>	Bohol Light Company, Inc.	PIOU	Visayas
<b>MECO</b>	Mactan Electric Company, Inc.	PIOU	Visayas
<b>MEZ</b>	Mactan Enerzone Corporation	PIOU	Visayas
<b>VECO</b>	Visayan Electric Company	PIOU	Visayas
<b>BOHECO I</b>	Bohol I Electric Cooperative, Inc.	NEA-EC	Visayas
<b>BOHECO II</b>	Bohol II Electric Cooperative, Inc.	NEA-EC	Visayas
<b>CEBECO I</b>	Cebu I Electric Cooperative, Inc.	NEA-EC	Visayas
<b>CEBECO II</b>	Cebu II Electric Cooperative, Inc.	NEA-EC	Visayas
<b>CEBECO III</b>	Cebu III Electric Cooperative, Inc.	NEA-EC	Visayas
<b>NORECO I</b>	Negros Oriental I Electric Cooperative, Inc.	NEA-EC	Visayas
<b>NORECO II</b>	Negros Oriental II Electric Cooperative	EC-CDA	Visayas
<b>BANELCO</b>	Bantayan Island Electric Cooperative, Inc.	SPUG-EC	Visayas
<b>CELCO</b>	Camotes Electric Cooperative, Inc.	SPUG-EC	Visayas
<b>PROSIELCO</b>	Province of Siquijor Electric Cooperative, Inc.	SPUG-EC	Visayas
<b>BILECO</b>	Biliran Electric Cooperative, Inc.	NEA-EC	Visayas
<b>DORELCO</b>	Don Orestes Romualdez Electric Cooperative, Inc.	NEA-EC	Visayas
<b>ESAMELCO</b>	Eastern Samar Electric Cooperative, Inc.	NEA-EC	Visayas
<b>LEYECO II</b>	Leyte II Electric Cooperative, Inc.	NEA-EC	Visayas
<b>LEYECO III</b>	Leyte III Electric Cooperative, Inc.	NEA-EC	Visayas
<b>LEYECO IV</b>	Leyte IV Electric Cooperative, Inc.	NEA-EC	Visayas
<b>LEYECO V</b>	Leyte V Electric Cooperative, Inc.	NEA-EC	Visayas
<b>NORSAMELCO</b>	Northern Samar Electric Cooperative, Inc.	NEA-EC	Visayas
<b>SAMELCO I</b>	Samar I Electric Cooperative, Inc.	NEA-EC	Visayas
<b>SAMELCO II</b>	Samar II Electric Cooperative, Inc.	NEA-EC	Visayas
<b>SOLECO</b>	Southern Leyte Electric Cooperative, Inc.	NEA-EC	Visayas
<b>MMPC</b>	Maripipi Multi-Purpose Cooperative	MPC	Visayas
<b>ZAMCELCO</b>	Zamboanga City Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>ZAMSURECO I</b>	Zamboanga del Sur I Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>ZAMSURECO II</b>	Zamboanga del Sur II Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>ZANECO</b>	Zamboanga del Norte Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>CEPALCO</b>	Cagayan Electric Power and Light Company, Inc.	PIOU	Mindanao
<b>ILPI</b>	Iligan Light and Power, Inc.	PIOU	Mindanao
<b>BUSECO</b>	Bukidnon II Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>CAMELCO</b>	Camiguin Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>FIBECO</b>	First Bukidnon Electric Cooperative, Inc.	NEA-EC	Mindanao

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Utilities in the Wholesale Electricity Spot Market

<b>LANECO</b>	Lanao del Norte Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>MOELCI I</b>	Misamis Occidental I Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>MOELCI II</b>	Misamis Occidental II Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>MORESCO I</b>	Misamis Oriental I Rural Electric Service Cooperative, Inc.	NEA-EC	Mindanao
<b>MORESCO II</b>	Misamis Oriental II Rural Electric Service Cooperative, Inc.	NEA-EC	Mindanao
<b>DLPC</b>	Davao Light and Power Company	PIOU	Mindanao
<b>DASURECO</b>	Davao del Sur Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>DORECO</b>	Davao Oriental Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>NORDECO</b>	Northern Davao Electric Cooperative, Inc.		Mindanao
<b>CLPC</b>	Cotabato Light and Power Company	PIOU	Mindanao
<b>COTELCO</b>	Cotabato Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>COTELCO-PPALMA</b>	Cotabato Electric Cooperative, Inc. – PPALMA	NEA-EC	Mindanao
<b>SOCOTECO I</b>	South Cotabato I Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SOCOTECO II</b>	South Cotabato II Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SUKELCO</b>	Sultan Kudarat Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>ANECO</b>	Agusan del Norte Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>ASELCO</b>	Agusan del Sur Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SIARELCO</b>	Siargao Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SURNECO</b>	Surigao del Norte Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SURSECO I</b>	Surigao del Sur I Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>SURSECO II</b>	Surigao del Sur II Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>DIELCO</b>	Dinagat Island Electric Cooperative, Inc.	SPUG-EC	Mindanao
<b>LASURECO</b>	Lanao del Sur Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>MAGELCO</b>	Maguindanao Electric Cooperative, Inc.	NEA-EC	Mindanao
<b>BASELCO</b>	Basilan Electric Cooperative, Inc.	SPUG-EC	Mindanao
<b>CASELCO</b>	Cagayan de Sulu Electric Cooperative, Inc.	SPUG-EC	Mindanao
<b>SIASELCO</b>	Siasi Electric Cooperative, Inc.	SPUG-EC	Mindanao
<b>SULECO</b>	Sulu Electric Cooperative, Inc.	SPUG-EC	Mindanao
<b>TAWELCO</b>	Tawi-tawi Electric Cooperative, Inc.	SPUG-EC	Mindanao