Market Assessment Report for 1st Quarter of 2025

26 December 2024 to 25 March 2025

June 2025

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

As of the end of Q1-2025, the total registered capacity in the WESM was recorded at 29,861 MW. This represents a 0.34% decrease, or a decline of 101 MW, compared to the 29,962 MW recorded as of 25 December 2024.

While the WESM recorded a total registered capacity of 29,861 MW by the end of the period in review, only 67% or an average of 19,998 MW was offered/nominated in the market. This is a 1.57% increase compared to Q4-2024 at 19,689 MW.

The capacity not offered/nominated has also noted an increase of 4.19% by the end of Q1-2025 which averaged at 4,749 MW when compared to Q4-2024 at 4,558 MW. The capacity not offered/nominated represents 16% of the total registered capacity.

Capacity of plants under Commissioning Test decreased during the period by 6.43% at 1,048 MW when compared to the 1,120 MW in Q4-2024. This translates to a 4% share in the total registered capacities.

Capacities on outage for the quarter represent 14% of the total registered capacities. By the end of the period in review, the capacities on outage declined by 4.51%, averaging at 4,118 MW compared to Q4-2024 at 4,312 MW.

Coal power plants, which held the largest share of registered capacity, consistently generated the highest portion of electricity across all monthly billing periods. During the review period, they contributed more than half of the total generation. This dominance highlights the country's heavy reliance on coal as a primary energy source, emphasizing its crucial role in the power generation sector.

The overall demand for electricity on the system slightly decreased by an average of 4.96% during the covered period at 13,139 MW. The highest demand was recorded at 17,090 MW which occurred on 06 March 2025 at 1450h trading interval. Coincidentally, the heat index was recorded to have peaked at 45 degree Celsius during the same day. These events normally lead to higher consumption as cooling appliances tend to be utilized to lower down the ambient temperatures. Meanwhile, the lowest demand was recorded at 8,822 MW which occurred on 26 December 2025 at 0425h trading interval due to the naturally low demand during holiday season.

The load-weighted average prices (LWAP) during Q1-2025 was recorded at PHP 3,825.41/MWh which demonstrated an upshift trend, attributable to the uptick of demand that started in the March billing period. This surge resulted in a 100.74% increase in the LWAP compared to February billing month. Despite the increase in March billing period, on a quarterly comparison, Q1-2025 remains to be lower by 11% compared to Q4-2024

In terms of market share, the five (5) major participant groups continued to lead based on registered capacity, offered capacity, and actual generation. The SMC group maintained the largest share of registered capacity, underscoring its strong market position, which also topped in terms of offered capacity, reflecting the operational readiness and availability of its generating units during the review period. This high level of offered capacity translated into the highest share in actual generation, indicating an effective dispatch of its available supply.

The load-market participants' spot market transactions experienced a slight decrease during Q1-2025, averaging at 21%, compared to 24% in Q4-2024. This indicates that majority of total energy purchases remained covered by bilateral contracts.

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QUARTERLY MARKET ASSESSMENT REPORT

This quarterly report presents an assessment on the results of the WESM operations for the First Billing Quarter of 2025 (Q1-2025), covering the period 26 December 2024 to 25 March 2025, and how the market performed compared with the previous quarters.

I. SUPPLY

A. Registered Capacity

As of the end of Q1-2025, the total registered capacity in the WESM was recorded at 29,861 MW. This represents a 0.34% decrease, or a decline of 101 MW, compared to the 29,962 MW recorded as of 25 December 2024.

Despite the continued registration of new plants in the market, with an aggregated total capacity of 165.8 MW as provided in Table 1, the overall decrease in registered capacity was primarily due to the deregistration of two (2) oil-based plants with an aggregated capacity of 85.2 MW and a net decrease of 181.6 MW in capacity from changes in registered capacities from 21 plants participating in the WESM (details are provided in *Annex A – Plants with Change in Capacity*).

Table 1. New Generation Facilities for Q1-2025

Plant Type	Registered Capacity (MW)	Facility Name
Luzon		
Solar	52.8	63.961 MWp Cordon Solar Power Project
Solar	35.8	Samal Solar Power Project Phase 1
Geothermal	20.2	21.573 MW Tanawon Geothermal Power Plant
Visayas		
Oil	57	60.702 MW Bohol In-Island Diesel Power Plant

Table 2. Deregistered/Ceased Power Plants, Q1-2025

Plant Type	Registered Capacity (MW)	Facility Name
Luzon		
Oil	41.2*	Therma Mobile, Inc. - Navotas Bunker C-Fired Diesel Power Plant Power Barge 2 / Mobile 4
Oil	44*	Therma Mobile, Inc. - Navotas Bunker C-Fired Diesel Power Plant Power Barge 4 / Mobile 6

**Capacities under " mothballed" status are temporarily excluded from the total registered capacity in the WESM*

Figure 1 illustrates that the WESM registered capacity is still dominated by coal and natural plants, with a combined share of 57% by the end of Q1-2025. The changes in registered capacity mix by plant type when compared to the previous quarter are likewise exhibited in this illustration. Particularly, coal, natural gas, hydro, and oil plants showed decreases in registered capacities, supporting the discussion in the preceding discussion.

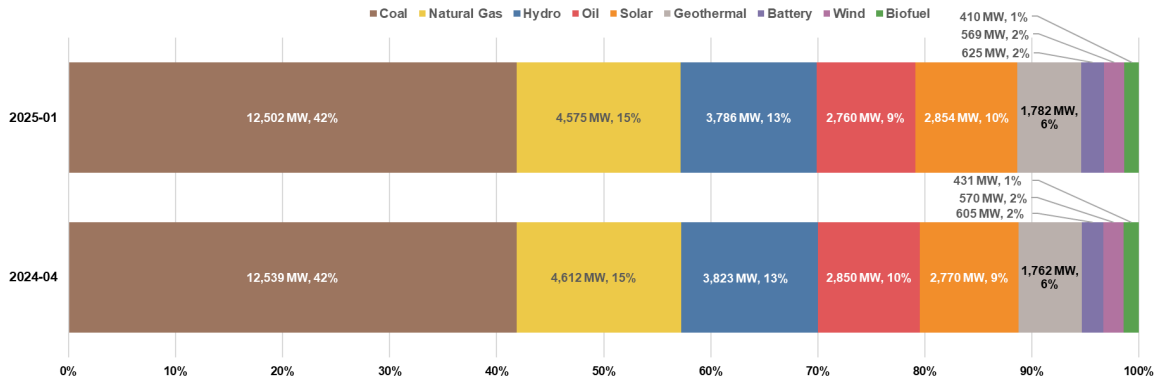

Figure 1. Registered Capacity by Plant type, as of the end of each billing quarter, Q4-2024 and Q1-2025

B. Capacity Profile

This section provides an analysis and discussion on the capacity profile, encompassing capacity offered/nominated, capacity not offered/nominated, capacity on commissioning test, and capacity on outage (detailed statistics are provided in *Annex B – Capacity Profile*).

It should be noted that the observed gap during the covered period was related to a Market Intervention (MI) that was declared by the System Operator (SO) on 08 February 2025.

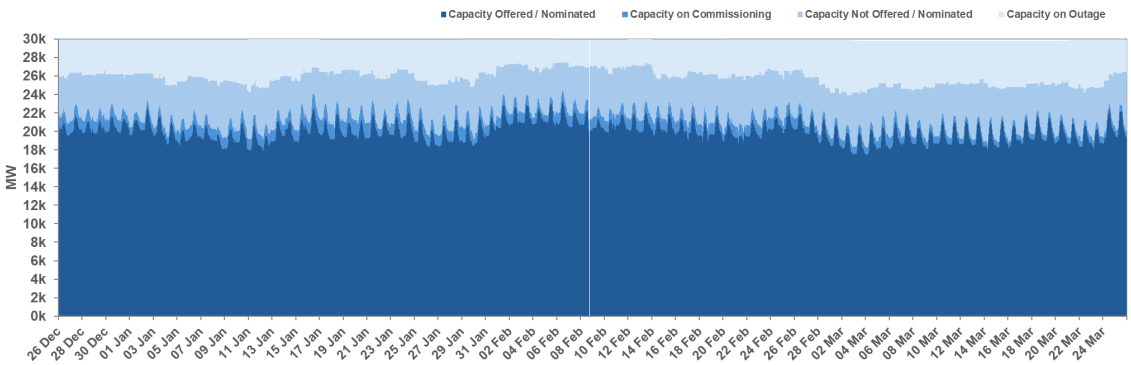

Figure 2. System: Capacity Profile, Q1-2025

Note: Missing portions represent the occurrence of Market Interventions/Market Suspensions

i. Capacity Offered/Nominated

While the WESM recorded a total registered capacity of 29,861 MW by the end of the billing quarter, only 67% or an average of 19,998 MW was offered/nominated in the market. This is a 1.57% increase compared to Q4-2024 at 19,689 MW.

The observed increase in offered/nominated capacity can be attributed to the decrease in capacity on outage during this period. Moreover, looking at a regional basis, Visayas recorded a decline in offered/nominated capacities caused by increased in capacity on outage.

Looking at a per plant type basis, coal-fired power plants, having the largest share in the registered capacities, also accounted for the largest share in offered capacity at 49%, almost reflecting their proportion in the total registered capacity. Most of the

capacities from coal-fired power plants are likewise covered by bilateral contracts, hence the resulting large share from this resource type. Natural gas power plants followed with an average percent share of 16% in the total offer/nominated capacities which is similarly situated with the coal-fired power plants.

In contrast, renewable energy (RE) plants, which consist of geothermal, run-of-river (RoR) hydro, solar, wind, and biomass plants, contributed to 22.5% of the total offered/nominated capacity in the market. These capacities enjoy preferential dispatching in the WESM and thus do not need to participate competitively in the market.

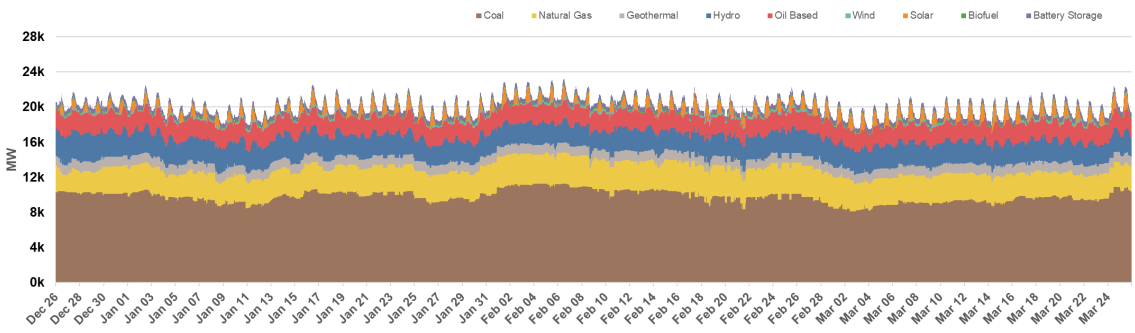

Figure 3. System: Offered/Nominated Capacity by Plant Type, Q1-2025

For the covered period, the average effective supply[1] was recorded at 16,119 MW, which is a 3.79% decrease when compared to the 16,729 MW average effective supply during Q4-2024.

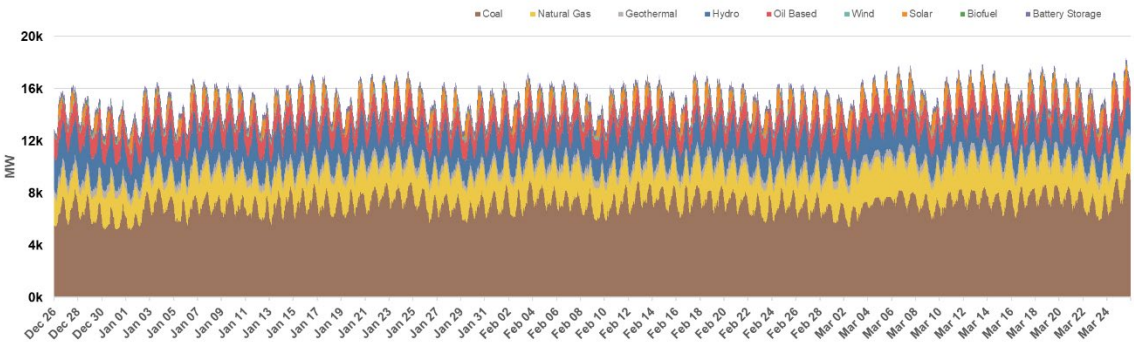

Figure 4. System: Effective Supply by Plant Type, Q1-2025

In terms of the plants that were scheduled to be dispatched in the WESM, the real-time dispatch (RTD) schedule per plant type was reviewed in this portion. As expected, coal-fired power plants contributed with the highest share in RTD schedule at 58%, despite a 10% decline from Q4-2024 which is primarily attributed to the increase in its capacity on outage by 18%. For the natural gas power plants, it recorded 19% of the RTD schedule which is a 21% increase from Q4-2024. The increase in availability of natural gas power plants was highly related to the decrease in capacities on outage by 49%.

[1] Calculated for each 5-minute trading interval as the sum of the offered capacity of all scheduled generators considering their offered ramp rates, nominated loading level of nonscheduled generators and projected output of preferential dispatch generators, adjusted for any over-riding constraints imposed by the System Operator (SO), and reserve offers. Output of generators on testing and commissioning were considered based on the over-riding constraints imposed by the SO.

On the other hand, RE plants accounted for 22.4% of the total RTD schedule which shows high commitment in the capacities of these plants based on their forecasted availability.

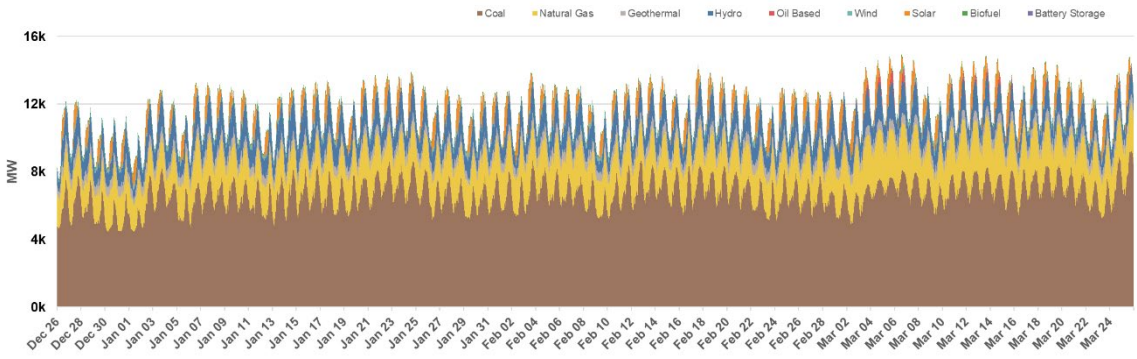

Figure 5. System: RTD Schedule by Plant Type, Q1-2025

ii. Capacity Not Offered/Nominated

The capacity not offered/nominated has also noted an increase of 4.19% by the end of Q1-2025 which averaged at 4,749 MW when compared to Q4-2024 at 4,558 MW. The capacity not offered/nominated represents 16% of the total registered capacity.

Figure 6 provides for the causes on capacities not offered/nominated with market system constraints[2] resulting as the highest reason for this occurrence. However, the main causes that affect the actual availability of power plants were the outages and resource constraints from various plants thereby having acceptable reasons for not submitting offers/nominations. Furthermore, are subject to the rigorous compliance monitoring procedures of the PEMC's Enforcement and Compliance Office.

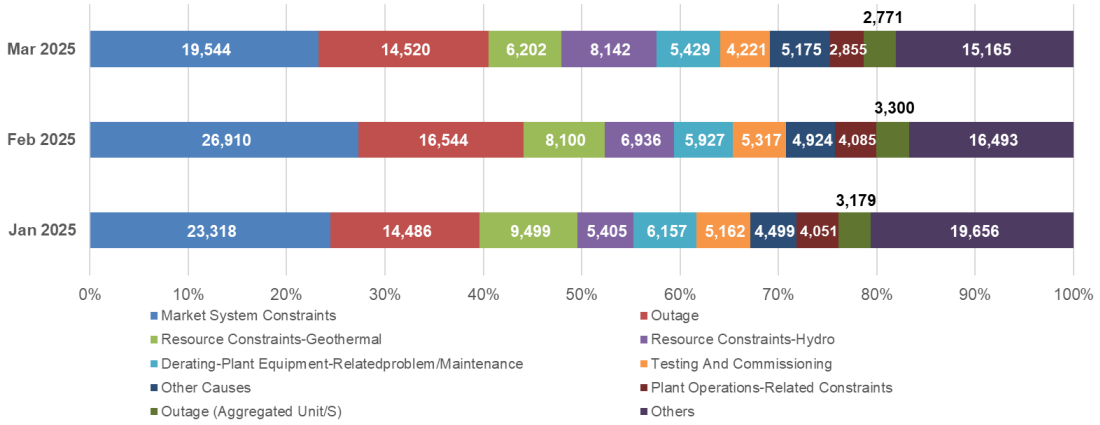

Figure 6. Reasons for Capacities not Offered/Nominated for Jan to Mar 2025

iii. Capacity on Commissioning Test

Capacity of plants under Commissioning Test decreased during the period by 6.43% at 1,048 MW when compared to the 1,120 MW in Q4-2024. This translates to a 4% share in the total registered capacities.

[2] WESM Compliance Bulletin Issue No. 11.1

It was also observed that 10 plants had completed their testing and commissioning and commenced commercial operations, as shown in Table 3 below.

Table 3. Plants that have completed testing and commissioning have commenced submitting nominations and/or stated commercial operations, Q1-2025

Plant Type	Facility Name	Registered Capacity (MW)	Remarks
Luzon			
Geothermal	35.700 MW Palayan Binary Power Plant	31	Started submitting nominations on 13 March 2025
Natural Gas	Batangas Combined Cycle Power Plant Unit 2	421.9	Submitted FCATC and start submitting nominations on 30 January 2025
Oil-Based	18.6 MW Bunker C-Fired Diesel Power Plant	18.1	Commercial operations started on 26 Feb 2025
Hydro	4.00 MW Colasi Mini Hydroelectric Power Plant (MHEPP)	4	Submitted FCATC and start submitting nominations on 13 March 2025
Solar	75.214 MWP Palauig Solar Power Project	49.5	Submitted FCATC and start submitting nominations on 07 January 2025
Solar	42.900 MWp Bongabon Solar Power Plant	30.9	Start submitting nominations on 06 January 2025; started commercial operations effective 25 March 2025
Solar	56.578 MWp Gamu Solar Power Project	41.2	start submitting nominations on 09 January 2025;
Solar	Sto. Domingo Solar Power Plant (SDSPP)	46.2	Submitted FCATC and start submitting nominations on 11 February 2025
Solar	6.554 MWp Naic Solar Rooftop Power Plant (SRPP)	5	Submitted FCATC and start submitting nominations on 04 March 2025
Mindanao			
Biofuel	14.9MW Biomass Cogeneration Plant	8	Commercial operations started on 31 January 2025

iv. Capacity on Outage

Capacities on outage for the quarter represent 14% of the total registered capacities. By the end of the period in review, the capacities on outage declined by 4.51%, averaging at 4,118 MW compared to Q4-2024 at 4,312 MW.

The changes in the capacities on outage are further discussed in the succeeding sub-sections.

1. Capacities on Outage by Plant Type

A breakdown of capacity on outage by plant type shows that coal-fired power plants accounted for the largest share, comprising 53% of the total capacity on outage during the billing quarter. While this is the case, the average capacity on outage of coal plants actually declined by 18.46% compared to Q4-2024 mainly caused by the resumption in operations of plants in Mindanao.

The overall increase in capacity on outage was primarily driven by natural gas plants and battery energy storage systems, contributing 636 MW and 19 MW, respectively.

Although coal-fired power plants accounted for the highest share of outage capacity, 88% of their long-duration outages were attributed to planned and maintenance outages, as illustrated in Table 4.

Table 4. Plant on Outage for more than 30-days, Q1-2025

Plant Type	Facility Name	Capacity (in MW)	Duration (days)	Category
Luzon				
Biofuel	GFI Isabela Bioethanol and Cogeneration Plant	15.8	32	Maintenance
Biofuel	ACNPC Tarlac Biomass Plant	3.2	47	Forced
Coal	Pagbilao 3 Power Plant	420	68	Planned
Coal	SEM-Calaca Coal-Fired Thermal Power Plant 1	240	31	Maintenance
Coal	SLPGC Circulating Fluidized Bed (CFB) Coal-Fired Power Plant 2	149.6	68	Maintenance
Coal	South Luzon Thermal Energy Corporation Coal-Fired Thermal Power Plant Unit 2	124	31	Planned
Geothermal	Makban -Bay Geothermal Power Plant A	57	57	Planned
Natural Gas	EERI Batangas Combined Cycle Power Plant Unit 3	440	101	Maintenance
Natural Gas	Ilijan Natural Gas Combined-Cycle Power Plant Block A-Unit 2	190	53	Forced
Oil	PEI Bataan Combined Cycle Power Plant Unit 6	60	44	Planned
Wind	Balaoi and Caunayan Wind Power Project Phase 1	80	56	Forced
Visayas				
Biofuel	NNBP Biomas Power Plant (BPP)	25	70	Forced
Coal	Therma Visayas, Inc. Circulating Fluidized Bed Coal-Fired Power Plant Unit 2	169	45	Planned
Hydro	Upper Taft Hydroelectric Power Plant	4.7	65	Forced
Mindanao				
Coal	Malita Circulating Fluidized Bed Coal Fired Thermal Power Plant (CFB CFTPP) Unit 2	150	84	Forced
Coal	Sarangani Energy Corporation Coal-Fired Power Plant Phase 2	122	32	Planned
Coal	PowerSource Philippines Energy Incorporated CFB Power Plant	20	123	Forced
Hydro	Agus IV Unit 1	52.7	77	Forced
Hydro	Tudaya 2 Hydroelectric Power Plant	5.5	99	Forced
Hydro	New Bataan Hydroelectric Power Plant	3	135	Forced
Hydro	Alamada Hydroelectric Power Plant	2.6	200	Forced
Hydro	Marbel-1 Hydroelectric Power Plant	0.5	77	Forced
Oil	WMPC Bunker-C Unit 8	10.1	43	Forced
Oil	WMPC Bunker-C Unit 7	10	52	Forced

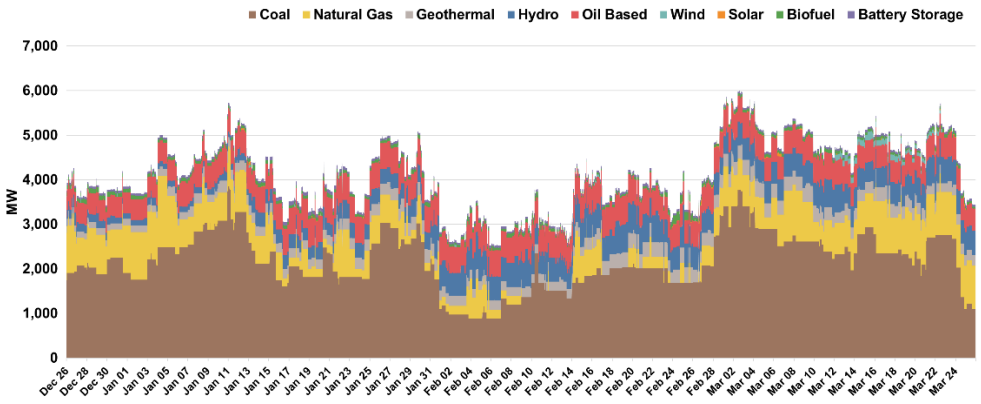

Figure 7. System: Capacity on Outage by Plant Type, Q1-2025

Outages from natural gas power plants represented the second largest in terms of registered capacities. Most of the long-duration outages for these plants were attributed to oil leak bearings gas turbine, and fuel or gas supply constraints.

Furthermore, a month-on-month analysis revealed that the March 2025 billing month recorded the highest average monthly outage level at 4,822 MW. The recorded peak capacity on outage at 6,004.5 MW on 02 March 2025 trading interval 1015h to 1030h when a large coal power plant capacity went on forced outage in addition to the ongoing outage that day. This high level of outage was including of the prolonged outages of coal-fired power plants with a total capacity of 1,529 MW.

2. Capacities on Outage by Category

In conjunction with the previous sub-section, this part discusses the outages observed during the billing quarter by category. Overall, the decrease in total outages was mainly attributed to a combined reduction of 646 MW from maintenance and forced outages, which outweighed the 452 MW rise in planned outage. These outages were strategically scheduled during these periods since the Department of Energy (DOE) prohibits the scheduling of planned and maintenance outages during the summer months or the second quarter of the year.

A total of 952 MW was categorized under planned outages, 835 MW of which or 88% was attributed to coal-fired power plants.

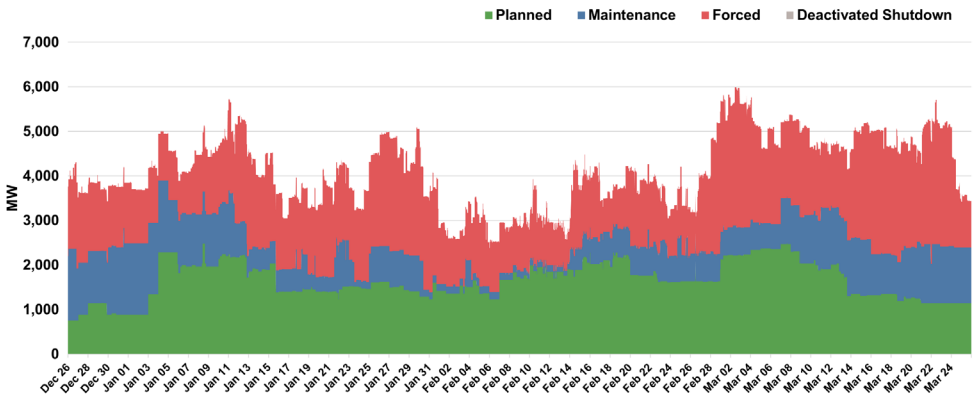

Figure 8. System: Capacity on Outage by Category, Q1-2025

C. Generation Mix

Coal power plants, which held the largest share of registered capacity, consistently generated the highest portion of electricity across all monthly billing periods. During the review period, they contributed more than half of the total generation. This dominance highlights the country's heavy reliance on coal as a primary energy source, emphasizing its crucial role in the power generation sector.

Natural gas generation also showed a notable increase across all the months throughout the billing quarter, consistent with earlier discussion on the return of service of several large natural gas plants from the fuel/gas constraint.

Moreover, RE plants retained a 27% share of the total generation mix. Although this share has remained relatively unchanged, the DOE has reaffirmed its commitment to transitioning toward a cleaner energy future. As outlined in the Philippine Development Plan (PDP) 2023–2050, the government has set a National target (including off-grid) of increasing the renewable energy share in the power generation mix to 35% by 2030. As of writing, the country is 8% short of its target in the next five (5) years.

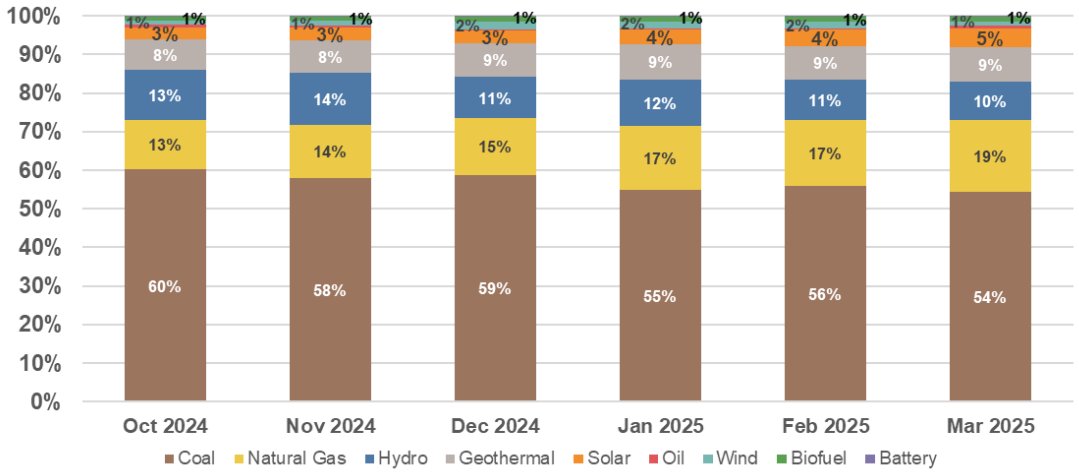

Figure 9. Generation Mix (Based on Metered Quantity) – Sep 2024 to Mar 2025

Figure 10 illustrates hourly generation by plant type, highlighting a notable increase in output beginning in March. This trend aligns with the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) issuing heat index warnings starting 01 March 2025. As temperatures rose, a corresponding uptick in

generation was also observed during this period to address the rising demand of the system.

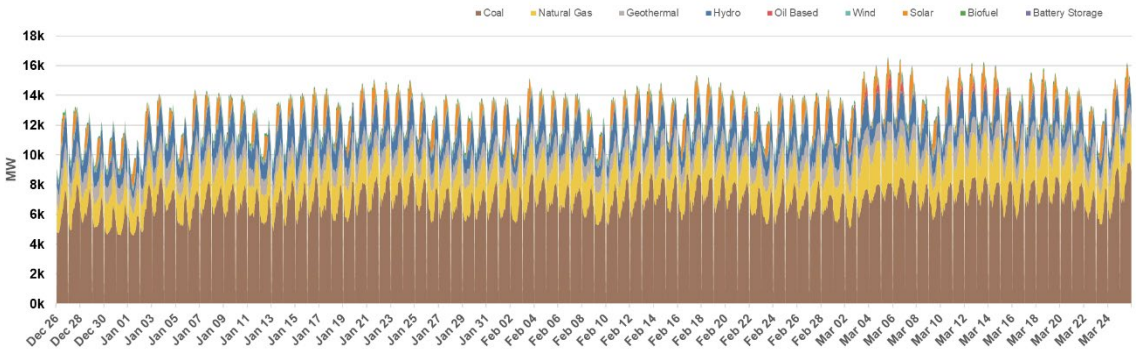

Figure 10. Hourly Generation Metered Quantity – Q1-2025

II. DEMAND

The overall demand for electricity on the system slightly decreased by an average of 4.96% during the covered period at 13,139 MW. The highest demand was recorded at 17,090 MW which occurred on 06 March 2025 at 1450h trading interval. Coincidentally, the heat index was recorded to have peaked at 45 degree Celsius[3] during the same day. These events normally lead to higher consumption as cooling appliances tend to be utilized to lower down the ambient temperatures. Meanwhile, the lowest demand was recorded at 8,822 MW which occurred on 26 December 2025 at 0425h trading interval due to the naturally low demand during holiday season.

The general decline in demand during the first portion of the review period was expected, given the higher number of holidays during the quarter and the cooler weather experienced during the rainy and cool-dry seasons.

Figure 11 presents the temporal dynamics among effective supply, system demand, and demand inclusive of reserve requirements across all dispatch intervals for the quarter. Despite sustained high levels of plant outages—amounting to 14% of the total registered capacity—the system's effective supply consistently met both the energy and reserve requirements. As a result, no grid alerts notices were issued during the reporting period, indicating adequacy in system reliability and resource availability.

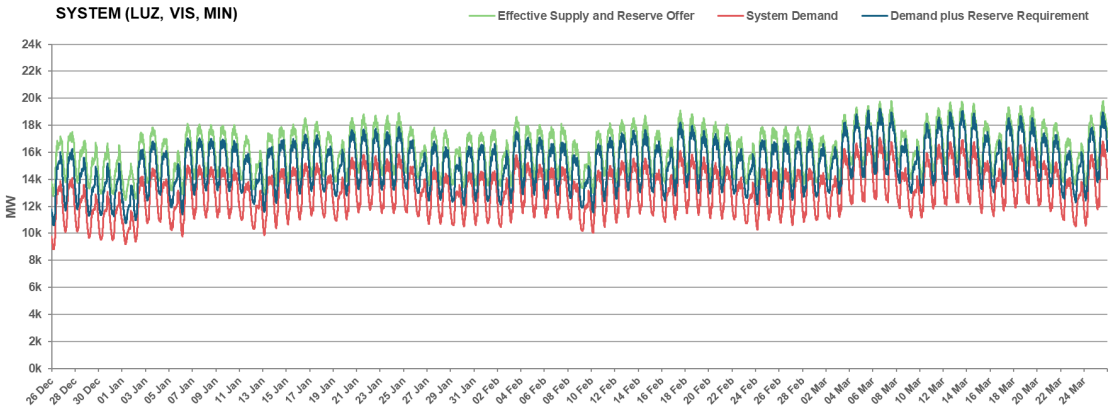

Figure 11. Demand, Supply and Demand plus Reserve Schedule, Q1-2025

[3] De Vera Ruiz, E. *Heat index at 'danger' level in 4 Luzon areas on March 6*. Link: https://mb.com.ph/6/3/2025/heat-index-at-danger-level-in-4-luzon-areas-on-march-6

As shown in the graph, starting at trading interval 1845h on 01 March 2025, a noticeable thining of the supply margin—falling down below 500MW—was observed. This supply constraint was primarily attributed to the unexpected forced outage of QPPL Coal-Fired Power Plant Unit 3, with a rated capacity of 460 MW. The unit tripped due to boiler heater problem and remained offline for approximately three (3) days, resuming operations at 0302h on 04 March 2025. This was compounded by the planned outage of Sta. Rita Natural Gas Power Plant Unit 3, with a rated capacity of 263 MW, which began on 01 March 2025. This simultaneous unavailability of these units contributed to the tightening of the supply margin, which persisted until trading inteval 2140h of 06 March 2025.

Figure 12 further illustrates the correlation between electricity demand and the heat index. As discussed in the previous sections, the first week of March marked the onset of rising heat index levels. This upward trend in perceived temperature coincided with a noticeable increase in electricity demand, likely driven by the higher use of cooling systems such as air conditioners and fans. The data suggests that as the heat index rises, so does the strain on the power grid due to increased consumption, highlighting the sensitivity of demand to weather conditions.

The observed variations may also be attributed to the type of day—such as holidays or weekends—when electricity demand typically declines due to reduced commercial and industrial activity.

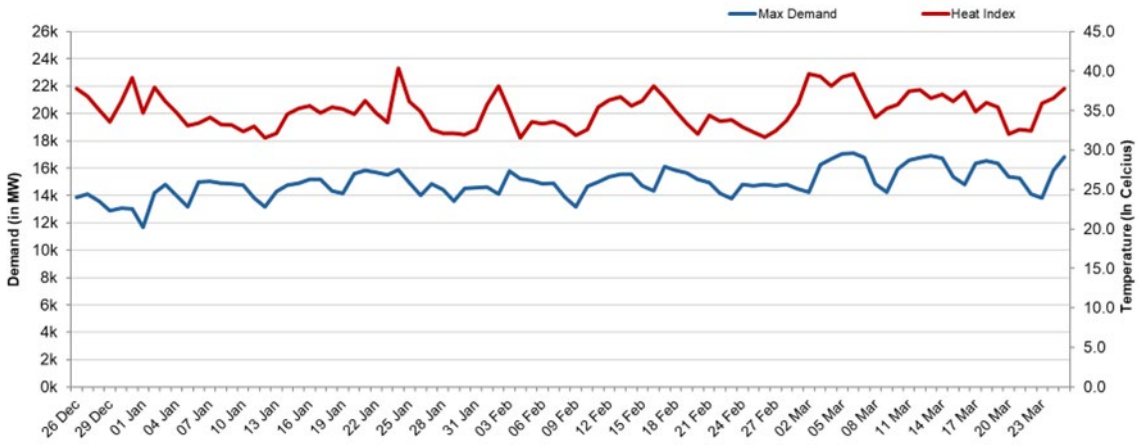

Figure 12. Daily Max Demand and Max Heat Index[4], Q1-2025

III. Market Price Outcome

A. Market Prices

The load-weighted average prices (LWAP) during Q1-2025 was recorded at PHP 3,825.41/MWh which demonstrated an upshift trend, attributable to the uptick of demand that started in the March billing period. This surge resulted in a 100.74% increase in the LWAP compared to February billing month. Despite the increase in March billing period, on a quarterly comparison, Q1-2025 remains to be lower by 11% compared to Q4-2024.

[4] Visual Crossing Corporation: https://www.visualcrossing.com/weather-history/Philippines/us/ - Maximum feels like temperature

Meanwhile, the 5-min per interval LWAP exhibited fluctuating patterns, primarily influenced by the interplay between supply and demand across the system. Notably, during Q1-2025, price spikes occurred during off-peak hours on 10 January 2025, Friday. Two distinct price spikes were recorded at 2130h, affecting the Luzon and Visayas grids, independently.

The price spike in Luzon was primarily driven by a supply reduction following the forced outage of GNPower Dinginin Coal Plant - Unit 2 with 668 MW rated capacity, which began at 2115h and persisted until 0608h on 11 January 2025 due to high temperature in the boiler reheater tubes.

Meanwhile, the spike in Visayas was caused by increased power exports to Luzon, which continued until the High Voltage Direct Current (HVDC) line reached its maximum capacity of 420 MW.

The elevated market prices observed around 01 to 04 March are consistent with the earlier discussions on supply and demand dynamics, particularly the tightening of supply margins due to simultaneous planned and forced outages coupled with the increasing demand due to high ambient temperatures. These conditions resulted in reduced effective supply during critical trading intervals, thereby exerting upward pressure on market prices. The occurrence likewise triggered the imposition of the Secondary Price Cap (SPC) which will be further discussed in the succeeding sections.

Conversely, a total of 1,526 trading intervals—equivalent to 6% of all intervals—recorded zero or negative prices, with the majority occurring during holiday periods brought about by extremely low demand.

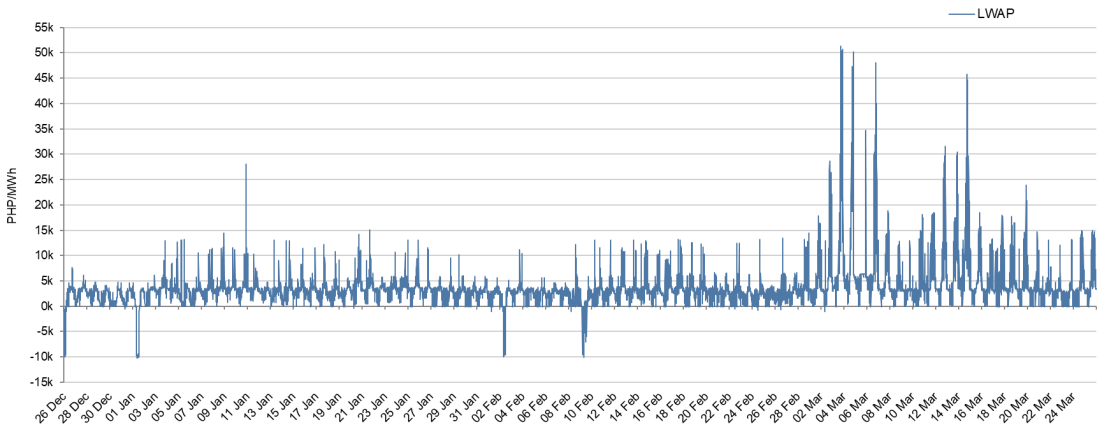

Figure 13. System: Market Price Trend, Q1-2025

B. Price Distribution

During Q1-2025, as illustrated in Figure 14, LWAP was predominantly low, with 82% of trading intervals showing prices within PHP 0/MWh to 5,000/MWh. This highlights the relatively low-price levels prevalent throughout the quarter, influenced by lower demand, high available supply, and lower price offers.

The escalation in market prices during the March billing period was largely driven by a significant increase in capacity on outage and increasing demand trend, most notably the forced outage of the 668 MW coal-fired unit GNPower Dinginin Coal Plant - Unit 1 due to a boiler tube leak. This incident contributed to a 45.41% rise in coal outages compared to

February. Given that coal-fired generating units typically function as baseload resources, the unavailability of GNPower Dinginin Coal Plant - Unit 1—coupled with elevated system demand—necessitated the dispatch of higher marginal cost generating units, thereby exerting upward pressure on market clearing prices.

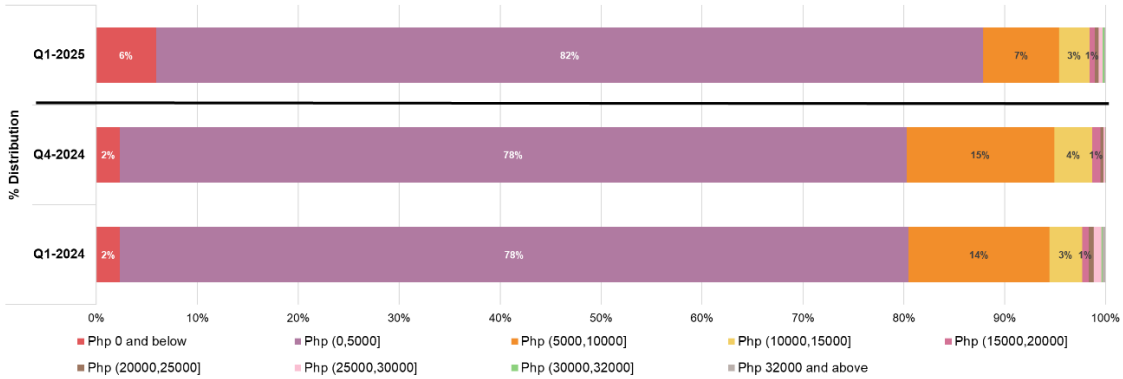

Figure 14. System: Market Price Band, Q1-2024, Q4-2024, and Q1-2025

Table 5 presents the tabular distribution of market prices for the billing months covered in this quarter.

Table 5. Details System: Market Price Band, Q1-2025

Price Range (Php/MWh)	% Distribution		
	January 2025	February 2025	March 2025
Php 0 and below	5%	9%	3%
Php (0,5000]	89%	87%	68%
Php (5000,10000]	5%	4%	15%
Php (10000,15000]	1%	1%	8%
Php (15000,20000]	0.01%	-	2%
Php (20000,25000]	-	-	1.3%
Php (25000,30000]	0.01%	-	1.2%
Php (30000,32000]	-	-	0.43%
Php 32000 and above	-	-	0.50%

C. Market Pricing Conditions

During Q1-2025, the WESM was mostly under normal pricing conditions for 24,794 trading intervals or at 96% of the time. However, other intervals were placed under various market pricing adjustments / corrections as follows:

i. Pricing Error Notice (PEN) [5]

There were 483 total trading intervals observed with system-wide PEN issuances during Q1-2025 which were related to inappropriate input data that subsequently affected the market outcomes.

It is worth noting that a total of 11 trading intervals affecting the Luzon and Mindanao grids were subject to PEN issuances, likewise due to inappropriate input data. During the same period, the Visayas region was placed under a market intervention event,

[5] Section 5 of the Price Determination Methodology provides that the Market Operator (MO) performed a pricing re-run upon issuance of pricing error notice, notwithstanding the application of an automatic pricing re-run.

wherein the market prices were automatically replaced by the calculated Administered Prices (APs).

ii. Price Substitution Methodology (PSM)[6]

As a result of severe congestion events in the electricity transmission network, PSM was applied on a system-wide basis across 113 trading intervals—reflecting a 65% reduction compared to Q4-2024. This reduction indicates fewer instances wherein market prices required adjustment to address extreme price separations, likely attributed to improvements in the transmission network infrastructure. The average price during the instances of PSM imposition was noted at PHP 3,015.16/MWh.

iii. Administered Price (AP)

Market Interventions (MIs) had its regular share in the pricing conditions throughout the billing months covered in this review. A recent MI was triggered by force majeure events affecting a total of fourteen (14) trading intervals resulting in regional impositions of AP following the SO declaration of MI in Visayas due to unimplementable RTD schedule, caused by the down state of the Visayas Inter-Control Center Communications Protocol (ICCP) data source.

The Administered Prices (APs) during the MI event in Visayas were observed to be higher as compared to prices before and after the incident.

Table 6. Generator Weighted Administered Prices on 08 February 2025 Market Intervention Events

Date	Affected Interval	Region	Price Before the MI (PHP/MWh)	Administered Price During the MI (PHP/MWh)			Price After the MI (PHP/MWh)
08 Feb 2025	14 intervals (1740h-1845h)	Visayas	3,393.63	▲ 69.64%	5,757.12	▲ 107.01%	2,781.11

D. Secondary Price Cap (SPC)[7]

In line with the Energy Regulatory Commission's (ERC's) issuance regarding the imposition of the Secondary Price Cap (SPC), a system-wide application of the SPC was recorded starting on 04 March 2025 at the 2040h trading interval and remained in effect continuously until 06 March 2025 at the 1655h trading interval, covering a total of 515 trading intervals. As discussed in Sections II and III.a, the SPC was triggered due to several outages that occurred staring 01 March 2025 that caused numerous price spikes until the rolling generator-weighted average price (GWAP) breached the PHP 9,000/MWh threshold set by the ERC.

During this period, market clearing prices were automatically capped at PHP 6,245/MWh as a protective measure to mitigate the sustained price surge and safeguard load market participants from excessive price exposure, with avenue for generators to apply for additional compensation subject to approval based on the regulations set by the ERC.

[6] Section 6.2.5 of the Price Determination Methodology provides the price substitution methodology shall be implemented in all the regions where the WESM is in operation. In cases where a region/s has no interconnection with other regions, or has no exchange of power with other regions, this region/s shall be separately assessed for the application of the price substitution methodology.

[7] ERC Resolution No. 7 Series of 2021, if the Cumulative Price Threshold (CPT) was breach on the 72nd hours regional/islanding, Secondary Price Cap (SPC) will be imposed

The prolonged application of the SPC reflects underlying market conditions such as elevated demand, reduced available supply, or a combination of both, contributing to persistently high market prices. This underscores the importance of monitoring market dynamics and ensuring sufficient generation availability to avoid triggering regulatory interventions.

Table 7 details the monthly price data for Q1-2025.

Table 7. Monthly Pricing Condition for Q1-2025

		Normal		Pricing Error Notice		Price Substitution Methodology		Secondary Price Cap		Administered Price	
Region/Grid	Billing Month	Count/Total No. of Trading Interval/s	%	Count/Total No. of Trading Interval/s	%	Count/Total No. of Trading Interval/s	%	Count/Total No. of Trading Interval/s	%	Count/Total No. of Trading Interval/s	%
Luzon	January 2025	8,652	96.91%	264	2.96%	12	0.13%	0	0.00%	0	0.00%
	February 2025	8,692	97.36%	144	1.61%	92	1.03%	0	0.00%	0	0.00%
	March 2025	7,453	92.42%	86	1.07%	10	0.12%	515	6.39%	0	0.00%
Visayas	January 2025	8,652	96.91%	264	2.96%	12	0.13%	0	0.00%	0	0.00%
	February 2025	8,690	97.33%	133	1.49%	91	1.02%	0	0.00%	14	0.16%
	March 2025	7,453	92.42%	86	1.07%	10	0.12%	515	6.39%	0	0.00%
Mindanao	January 2025	8,652	96.91%	264	2.96%	12	0.13%	0	0.00%	0	0.00%
	February 2025	8,693	97.37%	144	1.61%	91	1.02%	0	0.00%	0	0.00%
	March 2025	7,453	92.42%	86	1.07%	10	0.12%	515	6.39%	0	0.00%

IV. Generator Offer Pattern

This section examines generator-trading participants' offer patterns, as submitted to the WESM via the Market Participant Interface (MPI), in accordance with WESM Rules Clause 3.5.

As illustrated in Figure 15, the offer price patterns of coal-fired power plants remained consistent with the preceding quarter, with a significant portion of capacity being offered at or below PHP 0/MWh. This trend reflects the typical operational strategy of coal plants, which function as baseload generators committed to high dispatch levels to secure the delivery of their contracted quantities. The prevalence of zero or negative offers may also be influenced by bilateral contract obligations or cost recovery mechanisms that are independent of spot market revenues.

Figure 15. Coal Power Plants Offer Pattern – Q4-2024 and Q1-2025

Similarly, natural gas power plants exhibited offer behavior predominantly concentrated at PHP 0/MWh and below, as illustrated in the market data. This pattern aligns with their role in baseload and mid-merit dispatch and is often driven by long-term bilateral contracts or regulatory cost-recovery mechanisms that minimize their exposure to spot market price volatility. The strategy of offering zero or negative prices ensures inclusion in the dispatch stack, maintaining reliability while fulfilling contract obligations.

Moreover, this offering trend may also be influenced by fuel supply agreements, take-or-pay clauses, and the need to maintain operational continuity in combined-cycle configurations, which require steady load factors to maintain efficiency.

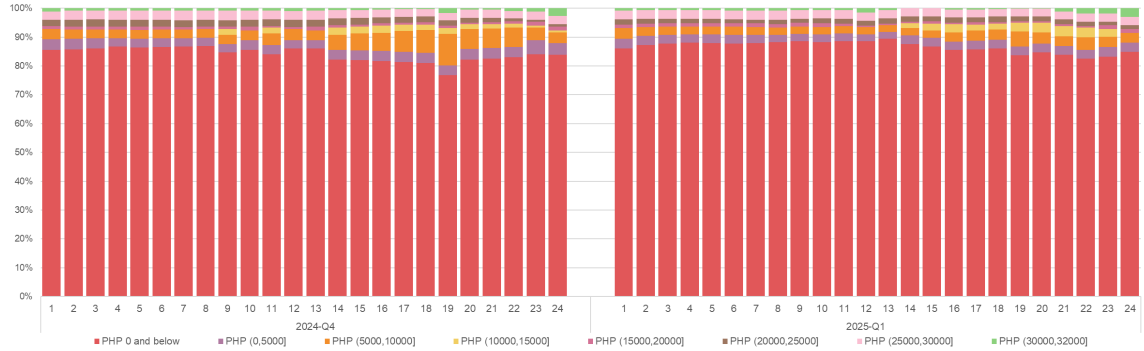

Figure 16. Natural Gas Power Plants Offer Pattern – Q4-2024 and Q1-2025

The offer behavior if Hydropower plants, as illustrated in Figure 17, showed slight variations compared to Q4-2024. Notably, the proportion of offers within the PHP 15,000–20,000/MWh price range during the 2000h–2400h interval declined, resulting in a more flattened offer profile across the 24-hour period. The average share of offers within this price range during evening hours decreased to 2%, down from 3% in Q4-2024.

A similar trend was observed in the PHP 20,000–25,000/MWh price range, where the offer distribution during the 1500h–2100h interval exhibited a flattening pattern. This resulted in a decrease in the 24-hour average share of offers within this price band to 13%, down from 17% in Q4-2024. These shifts may indicate operational adjustments driven by reservoir management strategies, variability in hydrological inflows, or efforts to optimize dispatch relative to anticipated price peaks. The afternoon and evening flattening may also suggest a more conservative deployment of water resources or a strategic response to dampened price volatility, contributing to a moderation in peak-hour supply injections.

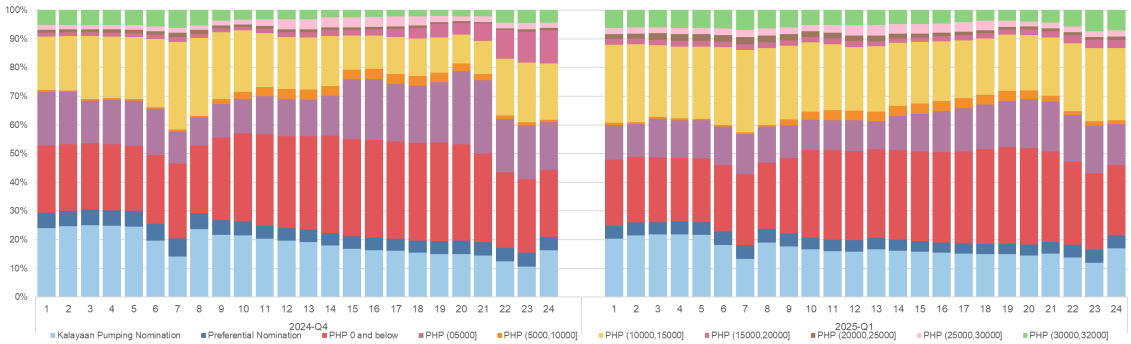

Figure 17. Hydro Power Plants Offer Pattern – Q4-2024 and Q1-2025

Regarding oil-based power plants, their offers remained generally positioned in higher price levels, primarily due to naturally high operational and fuel costs. These units typically serve as peaking plants, intended to operate during periods of peak demand when rapid response capabilities are required to address immediate supply shortfalls.

Consistent with their cost structure, oil-based generators predominantly submitted offers in the upper price bands. However, a notable shift in offer behavior was observed during the quarter. The proportion of offers in the PHP 30,000–32,000/MWh range declined by an average of 9%, while those in the PHP 25,000–30,000/MWh band rose by an average of 7%. This movement suggests a moderate softening in overall price levels.

This trend was also reflected in an increase in offers within the PHP 0–25,000/MWh range, which rose by an average of 4%, alongside a 2% uptick in offers at PHP 0/MWh and below. These changes indicate a broader shift toward more competitive offer strategies among oil-based generators.

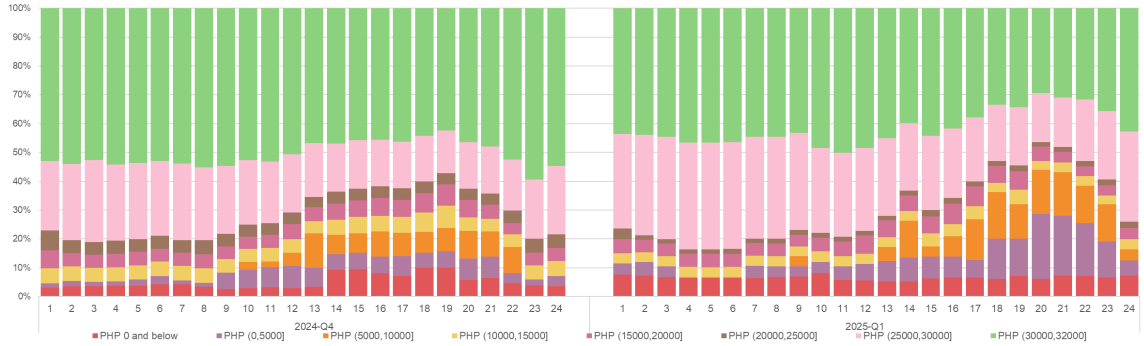

Figure 18. Oil-based Power Plants Offer Pattern – Q4-2024 and Q1-2025

V. STRUCTURAL COMPETITION INDICES

A. Residual Supply

Market Residual Supply Index (Market RSI)[8] plotted against the corresponding number of pivotal supplier/s in the market is shown in Figure 19.

During the period in review, the market exhibited RSIs ranging from 93.98% to 116.87%, with an average of 100.38% per trading interval—reflecting 2% increase when compared to Q4-2024.

Notably, the average market prices for intervals where RSI below 100% was PHP 4,952/MWh, whereas intervals with RSIs above 100% recorded a lower average price of PHP 2,495/MWh. This demonstrates the typical inverse relationship between RSI and market prices.

It is also worth noting that when the RSI peaked at 116.87%, the corresponding market price was negative PHP 9,637/MWh. Conversely, when the RSI was at its minimum recorded at 93.98%, the price was at PHP 6,249.70/MWh, underscoring the correlation between the supply, demand, and prices. Table 7 presents the occurrences of both minimum and maximum RSI values along with their corresponding market prices, and vice versa. As previously discussed, holidays typically exhibit lower demand levels. On 26 December 2024, the highest RSI was recorded, while 01 January 2025 registered the lowest market price. Additionally, 03 March 2025 recorded the highest price, coinciding with elevated levels of capacity on outage. Furthermore, 08 February 2025, which fell on a Saturday, saw the lowest RSI value during the review period.

[8] For a generator, the Residual Supply Index (RSI) is a dynamic continuous index measured as ratio of the available generation without that generator to the total generation required to supply the demand. The Market RSI is measured as the lowest RSI among all generators in the market. A Market RSI less 100% indicates the presence of pivotal generator/s or supplier/s.

Table 8. RSI vs LWAP, Q1-2025

	RSI		Date and Time Interval	Price		Date and Time Interval
Max	116.87	(9,637.43)	12/26/2024 3:45	51,285.70	96.08	3/3/2025 18:15
Min	93.98	6,249.70	2/8/2025 17:40	(10,182.50)	112.32	1/1/2025 9:20

The increase in instances of RSIs above 100% was primarily driven by the lower demand observed during the Christmas and New Year holidays. This seasonal drop in demand, accounting for approximately 2% of the overall rise in RSI led to an increase in negative prices, a trend that persisted towards the end of the billing period and contributed to higher overall RSI values.

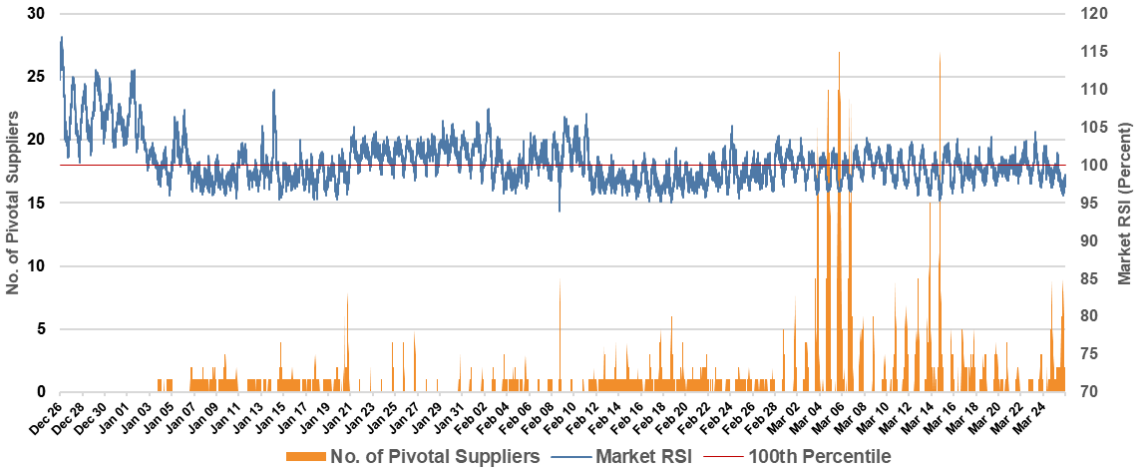

Figure 19. Market RSI vs. Pivotal Suppliers, Q1-2025

B. Pivotal Suppliers[9]

Figure 20 presents the top 10 system-wide pivotal suppliers in the market during the billing quarter in review. The GNP Dinginin Coal-Fired Thermal Power Plant (CFTPP) remained the most pivotal plant for Q1-2025 similar with Q4-2024, being pivotal in 40% of the 10,347 trading intervals for the quarter.

Meanwhile, the two (2) natural gas plants operated by the First Gen Corporation (FGC) group, including the Sta. Rita Natural Gas Power Plant (NGPP), recorded an increase in pivotal supplier instances to the Ilijan NGPP, which is part of the San Miguel Corporation (SMC) group. Ilijan, previously the second-highest pivotal plant highlights the strategic role these plants play in the group's energy supply strategy, ensuring they can meet demand and maintain a stable electricity supply across the market.

Additionally, it is worth noting that seven (7) out of the ten (10) pivotal suppliers were coal-fired power plants, while three (3) were natural gas power plants. It should be highlighted that according the MPG, SMC holds the highest number of generators which can exercise market power in the market.

[9] The Pivotal Supply Index (PSI) measures how critical a particular generator is in meeting the total demand at a particular time. It is a binary variable (1 for pivotal and 0 for not pivotal) which measures the frequency that a generating is pivotal for a particular period.

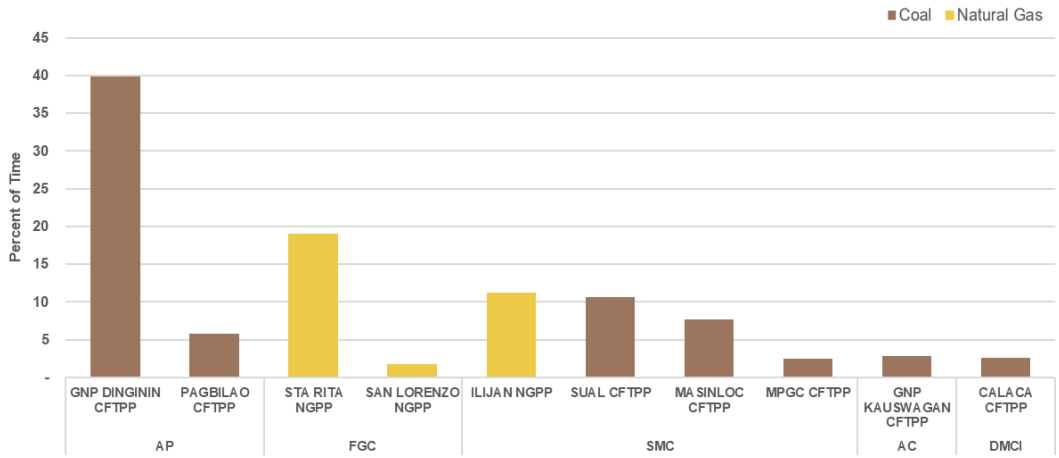

Figure 20. Top 10 System: Pivotal Suppliers, Q1-2025

C. Market Concentration

i. Market Share

In terms of market share, the five (5) major participant groups continued to lead based on registered capacity, offered capacity, and actual generation. The SMC group maintained the largest share of registered capacity, underscoring its strong market position, which also topped in terms of offered capacity, reflecting the operational readiness and availability of its generating units during the review period. This high level of offered capacity translated into the highest share in actual generation, indicating an effective dispatch of its available supply.

Although the First Gen Corporation (FGC) group maintained its percentage share in actual generation, its spot market exposure increased, reaching a level comparable to that of the SMC group—the current highest—signaling increase capacities that may be offered under bilateral contracts. This rise in spot exposure also led to an increase in FGC's share in the Energy Trading Amount (ETA).

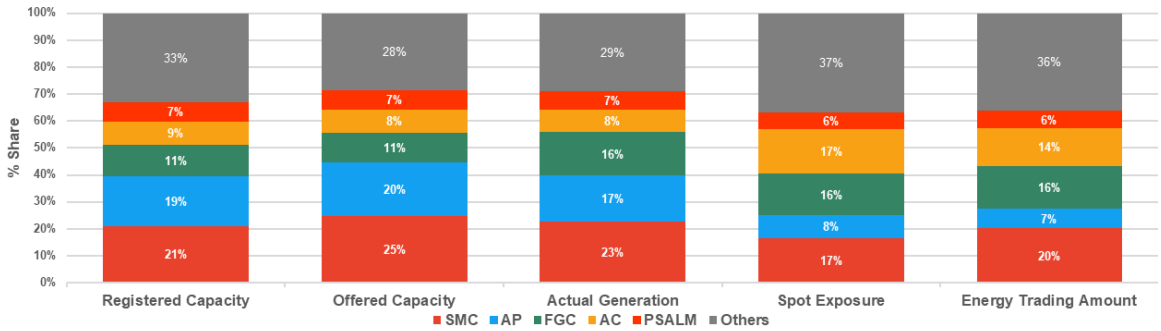

Figure 21. Market Share by Major Participant Group based on Registered Capacity, Offered Capacity, Actual Generation, Q1-2025'

ii. Herfindahl-Hirschman Index (HHI)

The Herfindahl-Hirschman Index (HHI) for major participant groups indicated a not concentrated market in Q1-2025 across all measures.

However, it was also observed that the top three (3) major participant groups, namely SMC, AP and FGC consistently contributed over 50% of the total Metered Quantity

(MQ). This dominance was primarily driven by their frequent dispatch, which significantly influenced the overall level of market concentration.

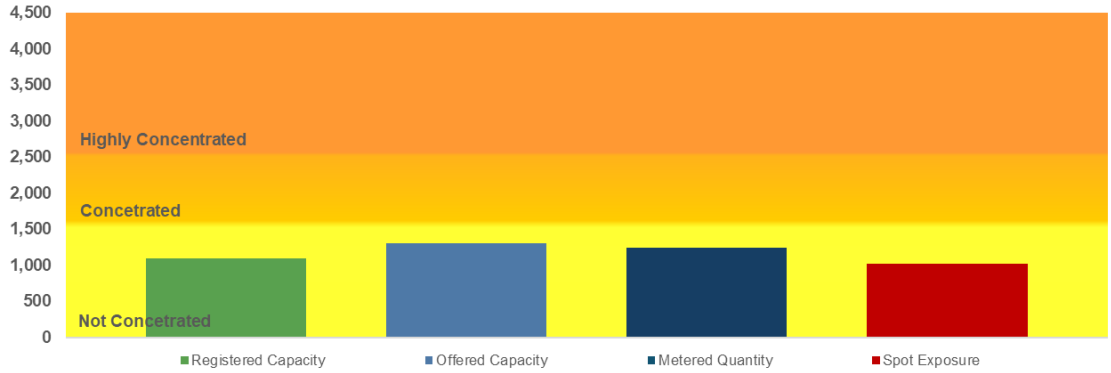

Figure 22. HHI based by Major Participant Grouping, Q1-2025

VI. Capacity Factor

The Capacity Factor, which measures the efficiency of a generating plant in producing electricity based on its metered output, averaged 42% during the quarter under review—slightly lower than the 45% recorded in the preceding quarter.

One contributing factor to the lower capacity factors was the decline in demand, combined with prevailing offer prices, which reduced the need for dispatch and electricity generation from power plants.

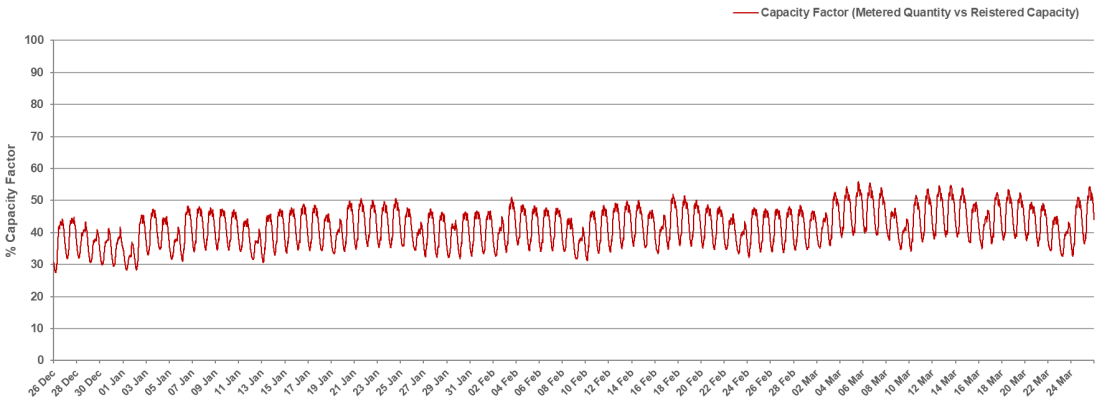

Figure 23. System: Capacity Factor (Metered Quantity vs Registered Capacity), Q1-2025

By resource-type, baseload power plants were the most frequently dispatched in the WESM, indicating the highest utilization among all power sources. Within this category, geothermal power plants had the highest utilization rates, as illustrated in Figure 24. Their high utilization was primarily due to the priority dispatch classification of geothermal plants. While for coal plants, the preventive maintenance temporarily lowered coal generation capacity when compared to Q4-2024.

As a result, geothermal plants played a crucial role in maintaining a stable energy supply and compensating for the reduced coal power output during this period.

Increase in utilized capacity was also observed for natural gas, due to the resumption in operation of large plants following the fuel gas supply restriction during the period. This

rise came at the expense of hydro power plants, which experienced a slight decrease in capacity factor. The combination of cool-dry and hot-dry season during the first quarter led to the slight decrease in capacity factor for hydro power plants resulting from declining reservoir levels in some dams[10].

Furthermore, biofuel, wind, solar, battery, and oil power plants exhibited slight variations in their capacity factors but generally maintained the same relative order as observed in Q4-2024.

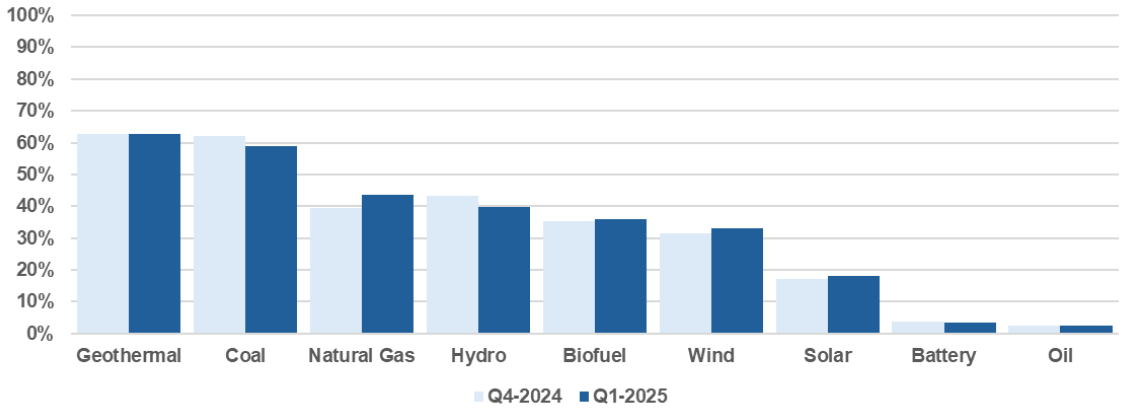

Figure 24. System Capacity Factor Per Resource Type (Registered Capacity vs Actual Generation) – Q4-2024 and Q1-2025

VII. Spot Exposure

The load-market participants' spot market transactions experienced a slight decrease during Q1-2025, averaging at 21%, compared to 24% in Q4-2024. This indicates that majority of total energy purchases remained covered by bilateral contracts.

As shown in Figure 25, a daily analysis indicates that spot market exposure increased during the first week of March, beginning 03 to 07 March 2025 (weekdays). This rise coincided with an 11% increase in demand compared to the previous week. The heightened demand and spot market exposure were primarily driven by a temperature as previously discussed in the previous section. Over the weekend of 08 to 09 March 2025, a decline in spot market exposure was observed, primarily attributed to a 9% reduction in demand, which coincided with a drop in ambient temperature.

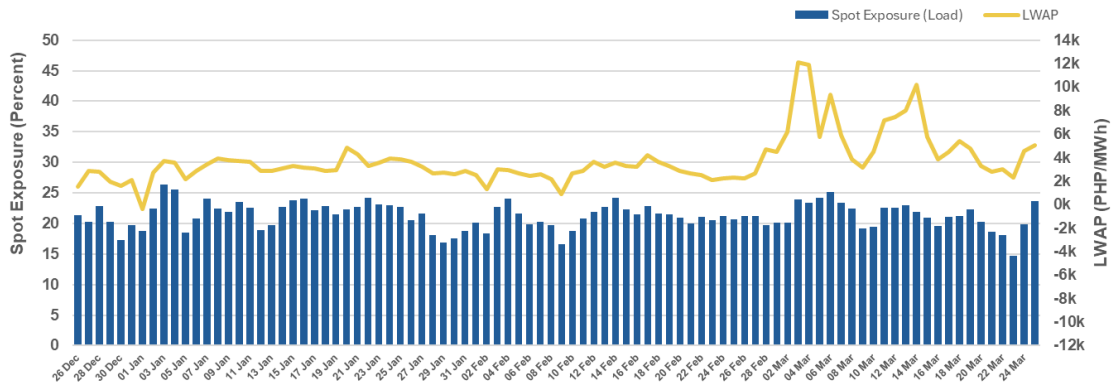

Figure 25. Daily Profile of Spot Market Exposure, Q1-2025

[10] PAG-ASA Dam Information: https://www.pagasa.dost.gov.ph/flood

Figure 26 illustrates the hourly fluctuations in spot exposure alongside the corresponding average hourly prices. It shows that spot exposure peaks at 0700h, 1200h, and 2000h, which are the morning, midday, and evening peaks, respectively. However, these peaks in spot exposure are associated with lower prices. Notably, a spike in electricity prices was observed in the market at the 1900h trading interval, driven by tightening supply margins due to the sudden loss of generation from solar power plants and the need to dispatch fast-ramping power plants to keep up with the increasing demand during the evening peak period.

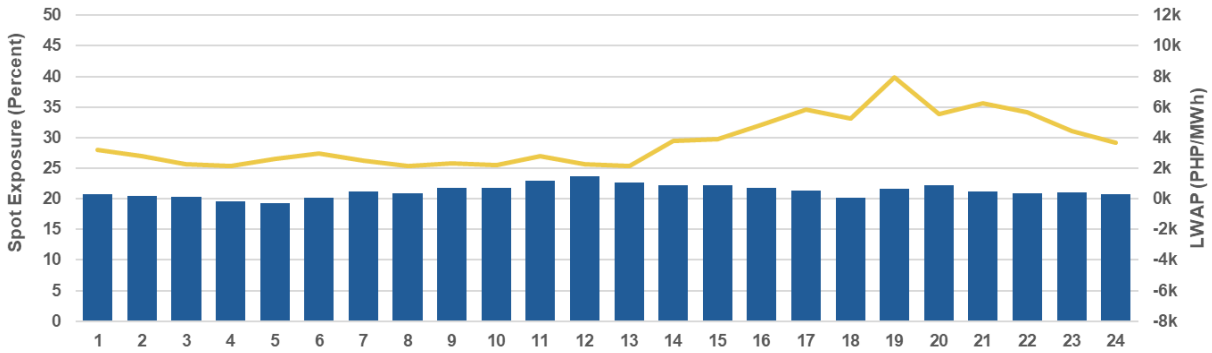

Figure 26. Hourly Profile of Spot Market Exposure, Q1-2025

Philippine Electricity Market Corporation

Annex A. Plants with Change in Capacity

Plant Type	Resource ID	Facility Name	Registered Capaciaty		Quarter-on-Quarter Change (in MW)
			2024-Q4	2025-Q1	
Luzon					
NATG	03EERI_G02	Batangas Combined Cycle Power Plant Unit 2	440	421.9	-18.10
NATG	03EERI_G01	Batangas Combined Cycle Power Plant Unit 1	440	420.6	-19.40
COAL	01PETRON_G01	184.400 MW Refinery Solid Fuel-Fired Boiler Power Plant (RSFFBPP)	140	183.3	43.30
HYD	01ANGAT_M	Angat Hydrolectric Power Plant Unit M	200	148.9	-51.10
COAL	01MPGC_U04	Mariveles Coal-fired Thermal Power Plant Unit 4	150	137	-13.00
COAL	01MPGC_U01	Mariveles Coal-Fired Power Plant (CFPP) - 150.025 MW Unit 1	150	135	-15.00
COAL	01MPGC_U02	Mariveles Coal-fired Thermal Power Plant Unit 2	150	133	-17.00
COAL	01MPGC_U03	Mariveles Coal-fired Thermal Power Plant Unit 3	150	133	-17.00
SOLR	01MEGASOL_G01	56.578 MWp Gamu Solar Power Project	46.2	41.2	-5.00
HYD	01ANGAT_A	Angat Hydroelectric Power Plant Unit A	38.7	40.7	2.00
HYD	03CALIRY_G01	Caliraya Hydro Electric Power Plant	28	39.3	11.30
BAT	01MSINLO_BAT	Masinloc Battery Energy Storage System	10	30	20.00
OIL	01TPCBUNK_G01	18.6 MW Bunker C-Fired Diesel Power Plant	17.9	18.1	0.20
Visayas					
WIND	08SLWIND_G01	54.0 MW San Lorenzo Wind Power Plant	54	52.9	-1.10
BIOF	06BISCOM_G01	30.000 MW Biomass Cogeneration Power Plan	30	12.7	-17.30
Mindanao					
COAL	11STEAG_U01	232 MW Mindanao Coal Fired Thermal Power Plant 1	116	105	-11.00
COAL	11STEAG_U02	232 MW Mindanao Coal Fired Thermal Power Plant 2	116	105	-11.00
OIL	11MNRGY_G02	Diesel Power Plant (Wartzila)	26	25	-1.00
COAL	10PPEI_U01	25 MW CFB Coal-Fired Thermal Power Plant	20	24.1	4.10
BIOF	11CRYSSUG_G01	14.9MW Biomass Cogeneration Plant	12	8	-4.00
OIL	10IDPP_G01	Iligan Diesel Power Plant	102	40.5	-61.50

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Annex B-1. Capacity Profile by Category

	4th Quarter 2024 (26 Sep to 25 Dec 2024)		1st Quarter 2025 (26 Dec Sep 2024 to 25 Mar 2025)		Quarter-on-Quarter % Change
	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap	
Capacity Offered / Nominated	19,689	66%	19,998	67%	1.57%▲
Capacity Not Offered / Nominated	4,558	15%	4,749	16%	4.19%▲
Capacity on Commissioning	1,119	4%	1,048	4%	6.38%▼
Capacity on Outage	4,312	15%	4,118	14%	4.51%▼

	January 2025 (26 Dec 2024 to 25 Jan 2025)		February 2025 (26 Jan to 25 Feb 2025)		March 2025 (26 Feb to 25 Mar 2025)	
	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap
Capacity Offered / Nominated	19,985	67%	20,472	68%	19,487	65%
Capacity Not Offered / Nominated	4,687	16%	4,774	16%	4,791	16%
Capacity on Commissioning	1,227	4%	1,143	4%	744	2%
Capacity on Outage	4,066	14%	3,532	12%	4,823	16%
Registered Capacity (end of the billing Month	29,965	100%	29,922	100%	29,846	100%

Philippine Electricity Market Corporation

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Annex B-2. Capacity Profile by Plant Type

Offered/Nominated Capacity by Plant Type

	4th Quarter 2024 (26 Sep to 25 Dec 2024)		1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025)		Quarter-on-Quarter % Change
	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap	
Coal	10,246.83	52%	9,794.94	49%	4.41%▼
Natural Gas	2,563.14	13%	3,133.30	16%	22.24%▲
Geothermal	1,101.84	6%	1,098.85	5%	0.27%▼
Hydro	2,477.92	13%	2,598.59	13%	4.87%▲
Oil Based	2,189.98	11%	2,125.20	11%	2.96%▼
Wind	147.29	1%	171.81	1%	16.64%▲
Solar	378.19	2%	473.26	2%	25.14%▲
Biofuel	159.99	1%	162.82	1%	1.77%▲
Battery Storage	424.57	2%	438.79	2%	3.35%▲

Effective Supply by Plant Type

	4th Quarter 2024 (26 Sep to 25 Dec 2024)		1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025)		Quarter-on-Quarter % Change
	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap	
Coal	7,832.89	51%	7,163.70	48%	8.54%▼
Natural Gas	2,072.40	14%	2,455.91	16%	18.51%▲
Geothermal	563.58	4%	564.43	4%	0.15%▲
Hydro	2,294.21	15%	2,265.43	15%	1.25%▼
Oil Based	1,505.61	10%	1,437.77	10%	4.51%▼
Wind	164.28	1%	164.88	1%	0.37%▲
Solar	359.78	2%	451.96	3%	25.62%▲
Biofuel	98.73	1%	89.89	1%	8.95%▼
Battery Storage	325.35	2%	334.51	2%	2.82%▲

RTD Capacity by Plant Type

	4th Quarter 2024 (26 Sep to 25 Dec 2024)		1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025)		Quarter-on-Quarter % Change
	Average (in MW)	% of RegCap	Average (in MW)	% of RegCap	
Coal	7,432.09	62%	6,676.11	58%	10.17%▼
Natural Gas	1,830.32	15%	2,215.28	19%	21.03%▲
Geothermal	562.65	5%	562.73	5%	0.01%▲
Hydro	1,576.36	13%	1,309.21	11%	16.95%▼
Oil Based	23.30	0%	22.31	0%	4.26%▼
Wind	164.25	1%	164.87	1%	0.38%▲
Solar	359.16	3%	451.54	4%	25.72%▲
Biofuel	98.67	1%	89.88	1%	8.91%▼
Battery Storage	0.52	0%	1.48	0%	185.75%▲

Philippine Electricity Market Corporation

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Annex C-1.1. Capacity on Outage by Plant Type (Quarterly)

	4th Quarter 2024 (26 Sep to 25 Dec 2024)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Coal	730	12/15/2024 0:00	2,845	11/23/2024 0:20	1,826
Natural Gas	440	11/26/2024 15:05	3,048	10/21/2024 15:35	1,308
Geothermal	118	10/1/2024 15:35	484	11/16/2024 19:20	189
Hydro	161	11/15/2024 17:35	716	11/26/2024 13:20	335
Oil-based	467	10/9/2024 8:35	798	11/1/2024 10:10	528
Wind	19	11/7/2024 19:15	262	11/7/2024 23:30	82
Solar	2	11/28/2024 6:10	190	10/1/2024 1:50	40
Biofuel	25	12/2/2024 20:15	161	11/18/2024 16:40	69
Battery Storage	20	10/2/2024 8:40	110	11/8/2024 6:25	53

	1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025)					**Quarter-on-Quarter % Change**
	Min		**Max**		**Average**	
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)	
Coal	759	2/6/2025 0:00	3,850	1/11/2025 0:10	2,162	18.46%▲
Natural Gas	190	1/15/2025 10:35	1,596	1/4/2025 0:00	672	48.64%▼
Geothermal	141	12/27/2024 1:10	429	3/9/2025 10:55	245	29.38%▲
Hydro	123	1/1/2025 20:15	967	2/25/2025 0:40	422	25.70%▲
Oil-based	468	12/26/2024 0:00	683	3/3/2025 19:45	553	4.67%▲
Wind	13	2/26/2025 5:20	183	3/15/2025 6:35	107	30.06%▲
Solar	8	3/24/2025 17:50	114	2/26/2025 18:15	21	47.54%▼
Biofuel	33	2/12/2025 10:05	212	2/24/2025 14:20	71	2.49%▲
Battery Storage	30	1/14/2025 13:00	80	1/14/2025 7:20	53	0.33%▲

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Annex C-1.2. Capacity on Outage by Plant Type (Monthly)

	January 2025 (26 Dec 2024 to 25 Jan 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Coal	1,600	1/16/2025 8:20	3,850	1/11/2025 0:10	2,251
Natural Gas	190	1/15/2025 10:35	1,596	1/4/2025 0:00	725
Geothermal	141	12/27/2024 1:10	305	1/25/2025 20:45	192
Hydro	123	1/1/2025 20:15	514	1/20/2025 9:25	226
Oil-based	468	12/26/2024 0:00	663	1/18/2025 8:45	537
Wind	50	1/3/2025 11:50	150	12/27/2024 8:15	65
Solar	13	1/14/2025 6:15	80	1/13/2025 0:00	27
Biofuel	53	1/24/2025 0:00	125	1/13/2025 9:10	75
Battery Storage	30	1/14/2025 13:00	80	1/14/2025 7:20	58

	February 2025 (26 Jan to 25 Feb 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Coal	759	2/6/2025 0:00	3,033	1/26/2025 1:35	1,741
Natural Gas	190	1/28/2025 10:30	1,040	2/14/2025 7:35	407
Geothermal	203	2/3/2025 16:00	347	2/24/2025 16:50	260
Hydro	256	2/10/2025 17:50	967	2/25/2025 0:40	537
Oil-based	515	2/22/2025 18:55	656	2/1/2025 8:20	585
Wind	37	1/27/2025 17:35	53	2/22/2025 10:45	48
Solar	9	2/24/2025 0:10	68	2/8/2025 17:35	12
Biofuel	33	2/12/2025 10:05	212	2/24/2025 14:20	73
Battery Storage	50	1/26/2025 0:00	80	2/21/2025 7:20	50

	March 2025 (26 Feb to 25 Mar 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Coal	1,100	3/24/2025 20:40	3,768	3/2/2025 10:10	2,531
Natural Gas	263	3/5/2025 2:25	1,391	3/22/2025 9:10	819
Geothermal	188	3/21/2025 7:50	429	3/9/2025 10:55	286
Hydro	386	2/28/2025 14:00	652	3/21/2025 10:10	511
Oil-based	480	3/17/2025 17:50	683	3/3/2025 19:45	535
Wind	13	2/26/2025 5:20	183	3/15/2025 6:35	115
Solar	8	3/24/2025 17:50	114	2/26/2025 18:15	22
Biofuel	38	3/18/2025 8:05	109	3/11/2025 12:20	64
Battery Storage	50	2/26/2025 0:00	50	2/26/2025 0:00	50

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Annex C-2.1. Capacity on Outage by Category (Quarterly)

	4th Quarter 2024 (26 Sep to 25 Dec 2024)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Planned Outage	145	12/17/2024 17:05	1,824	10/13/2024 7:15	1,192
Maintenance Outage	274	11/8/2024 22:15	2,027	12/17/2024 13:10	1,069
Forced Outage	906	9/27/2024 4:15	4,496	10/26/2024 9:30	2,050

	1st Quarter 2025					**Quarter-on-Quarter % Change**
	Min		**Max**		**Average**	
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)	
Planned Outage	754	12/26/2024 0:05	2,496	3/7/2025 14:50	1,644	37.88%▲
Maintenance Outage	108	1/23/2025 12:55	1,956	12/31/2024 12:20	797	25.46%▼
Forced Outage	704	2/13/2025 17:20	3,242	3/22/2025 11:35	1,676	18.23%▼

Annex C-2.2. Capacity on Outage by Category (Monthly)

	January 2025				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Planned Outage	754	12/26/2024 0:05	2,479	1/8/2025 9:45	1,547
Maintenance Outage	108	1/23/2025 12:55	1,956	12/31/2024 12:20	980
Forced Outage	901	1/5/2025 22:15	2,419	1/13/2025 0:05	1,539

	February 2025				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Planned Outage	1,225	1/31/2025 0:05	2,281	2/18/2025 8:05	1,688
Maintenance Outage	113	2/7/2025 14:55	1,090	2/21/2025 21:00	445
Forced Outage	704	2/13/2025 17:20	2,869	1/29/2025 17:30	1,399

	March 2025				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
Planned Outage	1,143	3/21/2025 0:05	2,496	3/7/2025 14:50	1,704
Maintenance Outage	560	3/4/2025 20:30	1,375	3/10/2025 23:55	983
Forced Outage	882	2/26/2025 11:15	3,242	3/22/2025 11:35	2,135

Annex D-1. Supply and Demand (Quarterly)

	4th Quarter 2024 (26 Sep to 25 Dec 2024)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
System Demand	9,286	12/25/2024 6:40	17,438	9/26/2024 14:10	13,791
Reserve Schedule	1,447	11/10/2024 5:05	2,274	11/21/2024 14:05	2,065
Demand plus Reserve Schedule	11,079	12/25/2024 6:40	19,684	9/26/2024 14:10	15,855
Effective Supply	12,078	10/25/2024 4:05	20,215	9/26/2024 13:50	16,729

	1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025)					**Quarter-on-Quarter % Change**
	Min		**Max**		**Average**	
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)	
System Demand	8,822	12/26/2024 4:25	17,090	3/6/2025 14:50	13,139	4.96%▼
Reserve Schedule	1,379	3/5/2025 18:30	2,214	3/12/2025 13:35	1,927	7.12%▼
Demand plus Reserve Schedule	10,606	12/26/2024 4:25	19,248	3/6/2025 14:50	15,066	5.24%▼
Effective Supply	12,450	1/1/2025 7:00	19,803	3/7/2025 13:55	16,119	3.79%▼

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Annex D-2. Supply and Demand (Monthly)

	January 2025 (26 Dec 2024 to 25 Jan 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
System Demand	8,822	12/26/2024 4:25	15,899	1/24/2025 14:25	12,645
Reserve Schedule	1,419	1/1/2025 10:45	2,176	12/27/2024 17:50	1,928
Demand plus Reserve Schedule	10,606	12/26/2024 4:25	17,896	1/24/2025 14:25	14,572
Effective Supply	12,450	1/1/2025 7:00	18,922	1/24/2025 14:25	15,785

	February 2025 (26 Jan to 25 Feb 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
System Demand	10,042	2/10/2025 4:00	16,137	2/17/2025 14:35	13,033
Reserve Schedule	1,405	2/4/2025 3:45	2,187	2/20/2025 14:40	1,882
Demand plus Reserve Schedule	11,558	2/10/2025 4:00	18,237	2/17/2025 14:35	14,915
Effective Supply	13,002	2/10/2025 3:50	19,118	2/17/2025 14:30	15,969

	March 2025 (26 Feb to 25 Mar 2025)				
	Min		**Max**		**Average**
	(in MW)	Date and Time Interval	(in MW)	Date and Time Interval	(in MW)
System Demand	10,507	3/23/2025 7:05	17,090	3/6/2025 14:50	13,802
Reserve Schedule	1,379	3/5/2025 18:30	2,214	3/12/2025 13:35	1,977
Demand plus Reserve Schedule	12,304	3/23/2025 7:00	19,248	3/6/2025 14:50	15,779
Effective Supply	13,482	3/24/2025 4:00	19,803	3/7/2025 13:55	16,656

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Annex E. Load Weighted Average Prices

Load Weighted Average Prices (Quarterly)

	4th Quarter 2024 (26 Sep to 25 Dec 2024) (in PHP/MWh)			1st Quarter 2025 (26 Dec 2024 to 25 Mar 2025) (in PHP/MWh)			Quarter-on-Quarter % Change
	Min	Max	Average	Min	Max	Average	
System	(9,930.21)	39,754.49	4,297.49	(10,182.50)	51,285.70	3,825.41	10.99%▼

Load Weighted Average Prices (Monthly)

	January 2025 (26 Dec 2024 to 25 Jan 2025)			February 2025 (26 Jan to 25 Feb 2025)			March 2025 (26 Feb to 25 Mar 2025)		
	Min	Max	Average	Min	Max	Average	Min	Max	Average
System	(10,182.50)	28,091.44	3,094.71	(10,016.07)	13,169.18	2,806.41	(994.02)	51,285.70	5,633.69
Luzon	(10,130.35)	32,592.66	3,127.12	(10,224.96)	13,127.08	2,787.06	(1,003.76)	56,965.49	5,794.32
Visayas	(10,130.35)	32,592.66	3,127.12	(10,224.96)	13,127.08	2,787.06	(1,003.76)	56,965.49	5,794.32
Mindanao	(10,130.35)	32,592.66	3,127.12	(10,224.96)	13,127.08	2,787.06	(1,003.76)	56,965.49	5,794.32

Zonal Prices (Monthly)

	January 2025 (26 Dec 2024 to 25 Jan 2025)	February 2025 (26 Jan to 25 Feb 2025)	March 2025 (26 Feb to 25 Mar 2025)
Luzon			
Northern Luzon	3,134.68	2,820.81	5,834.60
Metro Manila	3,160.44	2,826.11	5,758.56
Southern Luzon	3,108.13	2,760.35	5,531.40
Visayas			
Bohol	3,318.38	2,958.87	5,827.09
Cebu	3,309.24	2,942.15	5,720.48
Leyte	3,318.92	2,966.64	5,908.25
Negros	3,245.29	2,899.80	5,705.17
Panay	3,372.55	3,037.24	5,861.99
Mindanao			
Lanao	2,556.95	2,632.52	4,276.36
North Central	2,620.54	2,738.37	4,500.08
North-East	2,868.10	2,997.23	4,959.69
North-West	2,945.21	3,044.93	5,073.89
South-East	2,732.71	2,883.54	4,687.75
South-West	2,818.03	2,988.96	4,812.13