MONTHLY MARKET ASSESSMENT REPORT

26 October to 25 November 2024

JANUARY 2025

Document Information Classification: Public

The information contained in this document is based on data that are subject to continuous verification by the Philippine Electricity Market Corporation (PEMC). The same information is subject to change as updated figures come in.

ENERGY MARKET

SUMMARY OF OBSERVATIONS

- **Declaration of Market Intervention event** by the System Operator on 13 November 2024 for the Visayas grid, affecting nineteen (19) trading intervals due to the unavailability of real-time data from the Visayas System Operator due to the down state of the Visayas Inter-Control Center Communications Protocol (ICCP) data source. The Administered Price (AP) during the MI event in Visayas were observed higher as compared to prices before the incident.

- **Notable Outage** of Ilijan 1 and Sual 1 persisted until the end of the billing period with total rated capacity on outage of 1,247 MW.

AT A GLANCE

Total Registered Capacity (in MW)

29,771.6 **0.83%**

Previous Month: 29,527.1 MW

Capacity Offered/Nominated (in MW

19,328 64.92% of the total registered capacity

Previous Month: 19,786 MW

Capacity Not Offered/Nominated (in MW)

4,433 14.89% of the total registered capacity

Previous Month: 4,554 MW

Capacity of Plants on Commissioning (in MW)

997 3.35% of the total registered capacity

Previous Month: 1,049 MW

Capacity on Outage (in MW)

4,861 16.33% of the total registered capacity

Previous Month: 4,115 MW

Load Weighted Average Price (LWAP) (in PHP/MWh)

4,602.59 **0.24%**

Previous Month: 4,613.74

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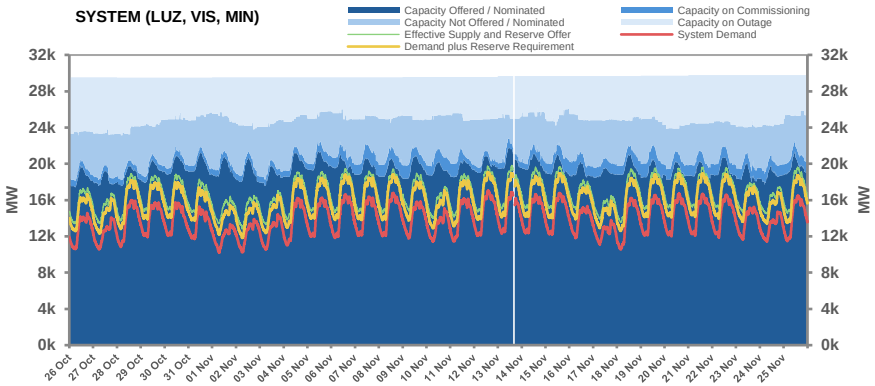
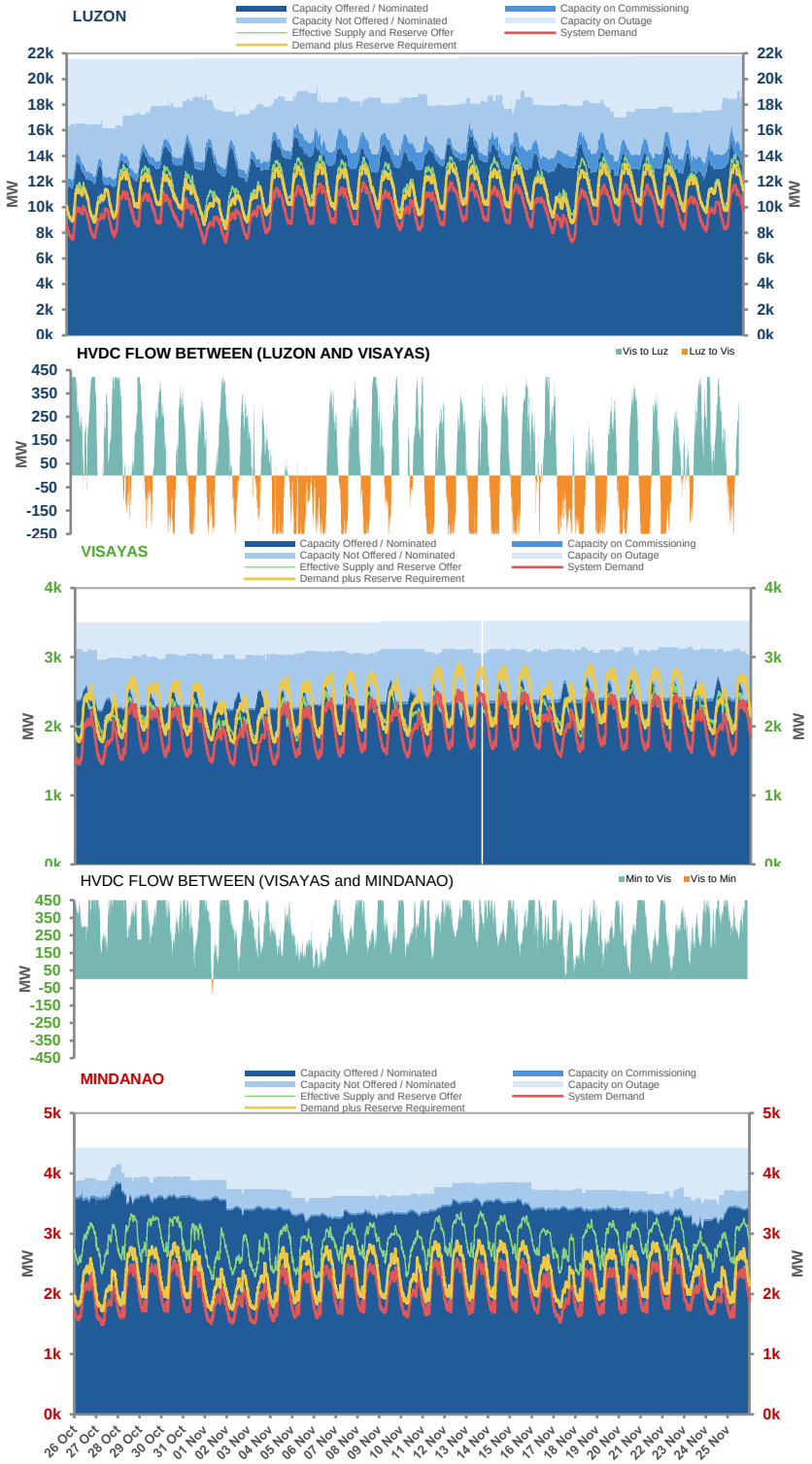
MARKET OUTCOME
CAPACITY PROFILE



Particulars	Min		Max		Ave	% Change
	(in MW)	Date and time Interval	(in MW)	Date and time Interval	(in MW)	
Effective Supply						
System	12,820.96	02/11/2024 06:25	19,822.18	13/11/2024 14:05	16,640.20	2.20%▼
Luzon	8,631.35	02/11/2024 06:25	14,086.97	13/11/2024 14:05	11,606.28	2.94%▼
Visayas	1,788.90	05/11/2024 03:45	2,613.76	20/11/2024 13:45	2,175.33	3.66%▼
Mindanao	2,236.58	01/11/2024 08:30	3,367.75	13/11/2024 15:40	2,863.03	2.30%▲
Demand Plus Reserve Requirement						
System	11,825.90	02/11/2024 06:20	19,093.42	12/11/2024 14:20	15,853.70	2.24%▼
Luzon	8,314.69	02/11/2024 07:05	13,351.34	12/11/2024 14:20	11,240.60	2.67%▼
Visayas	1,753.65	03/11/2024 05:40	2,896.94	12/11/2024 13:40	2,319.65	1.25%▼
Mindanao	1,716.71	27/10/2024 06:35	2,897.45	22/11/2024 14:30	2,297.17	0.94%▼
Outage						
System	3,522.00	06/11/2024 08:30	6,420.40	27/10/2024 15:30	4,860.86	18.13%▲
Luzon	2,274.90	06/11/2024 08:30	5,464.70	27/10/2024 15:30	3,759.01	16.70%▲
Visayas	360.20	23/11/2024 06:35	553.50	27/10/2024 00:45	437.37	79.71%▲
Mindanao	268.00	27/10/2024 23:25	936.70	24/11/2024 12:45	664.07	2.12%▲

In a system-wide perspective, the effective supply declined by an average of 2.21%, primarily due to an 18% increase in capacities on outage during the billing period under review. Additionally, a 2% decrease in the average system demand was recorded likely due to the national holidays observed in November 2024.

The flow of power from Visayas to Luzon was noted for fifty-five percent (55%) of the time, with an average transfer of around 121 MW (28% of the total HVDC capacity). Moreover, the Mindanao to Visayas HVDC power flow was noted for 99.8% of the time, with an average flow of 312 MW (69% of the total HVDC capacity).



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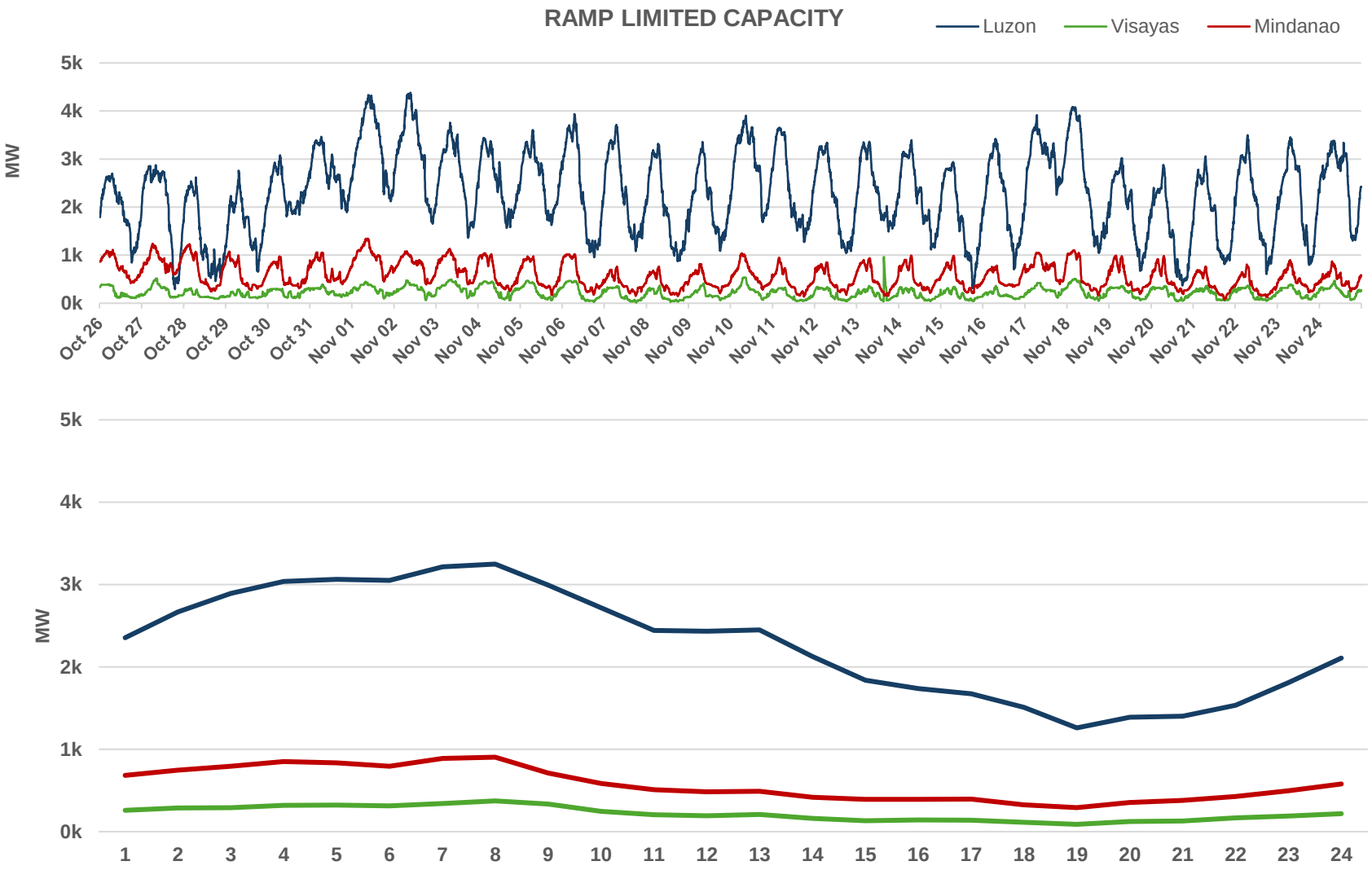
MARKET OUTCOME
CAPACITY PROFILE



Particulars	Min		Max		Ave	% Change
	(in MW)	Date and time Interval	(in MW)	Date and time Interval	(in MW)	
Ramp Limited Capacity						
System	575.56	15/11/2024 18:05	6,037.06	01/11/2024 09:30	3,082.08	3.24%▼
Luzon	293.02	27/10/2024 19:05	4,381.49	02/11/2024 09:25	2,289.92	1.78%▼
Visayas	14.3430	07/11/2024 18:10	961.83	13/11/2024 15:35	220.45	12.29%▼
Mindanao	75.65	21/11/2024 17:55	1,346.42	01/11/2024 08:30	571.92	5.63%▼

Regional ramp-limited capacities were observed on a per interval basis, with the highest observed average constraints constantly occurring at the 0800h and lowest at the 1900h trading interval, across all three regions. These limitations were primarily due to resource and technical factors.

The increase in outages across the three regions resulted in a decline in average ramp-limited capacity. While this is the case, it should be noted that the effective supply also declined.

Overall, in a system-wide perspective, ramp-limited capacities declined by 3%.

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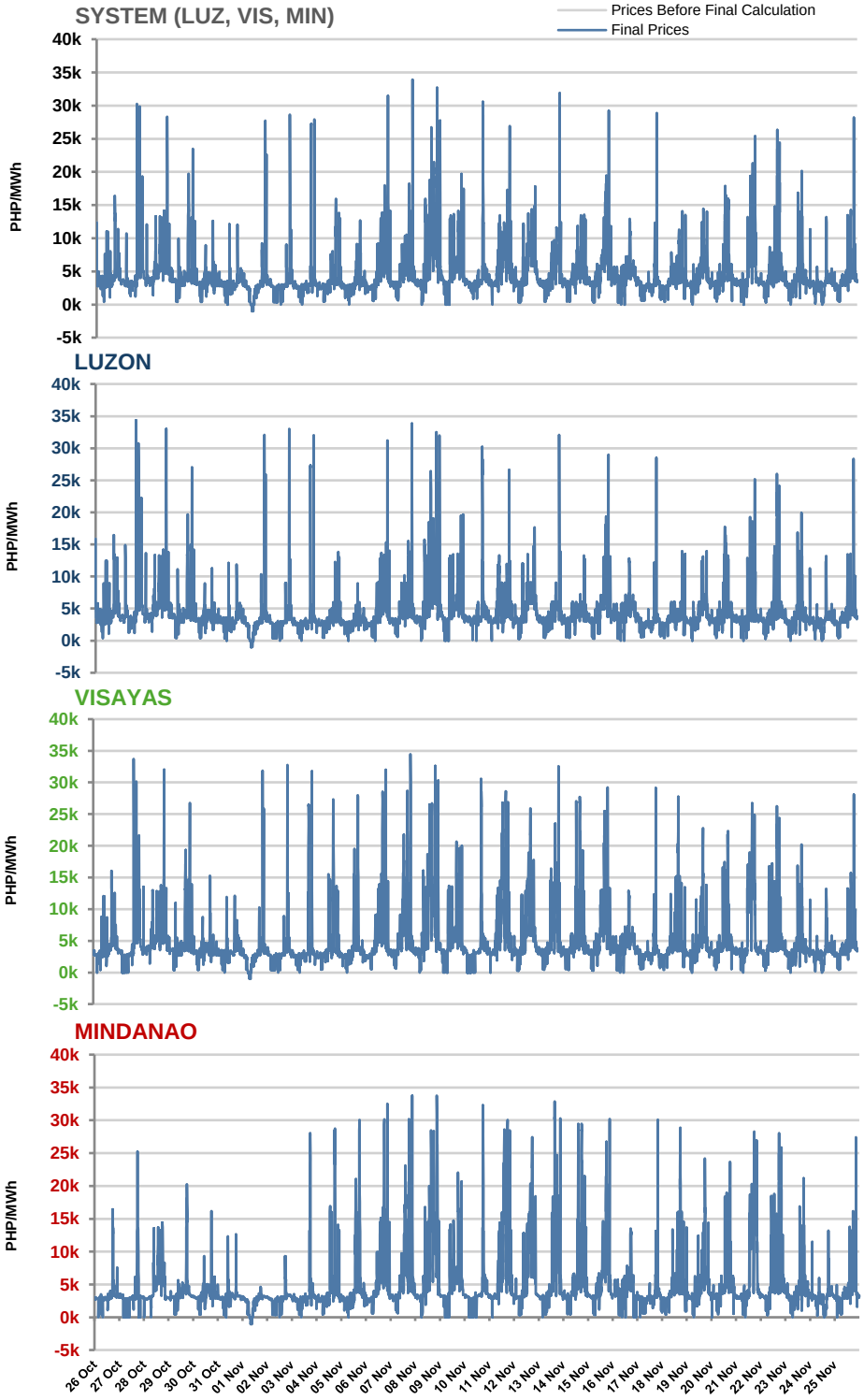
MARKET OUTCOME

MARKET PRICE

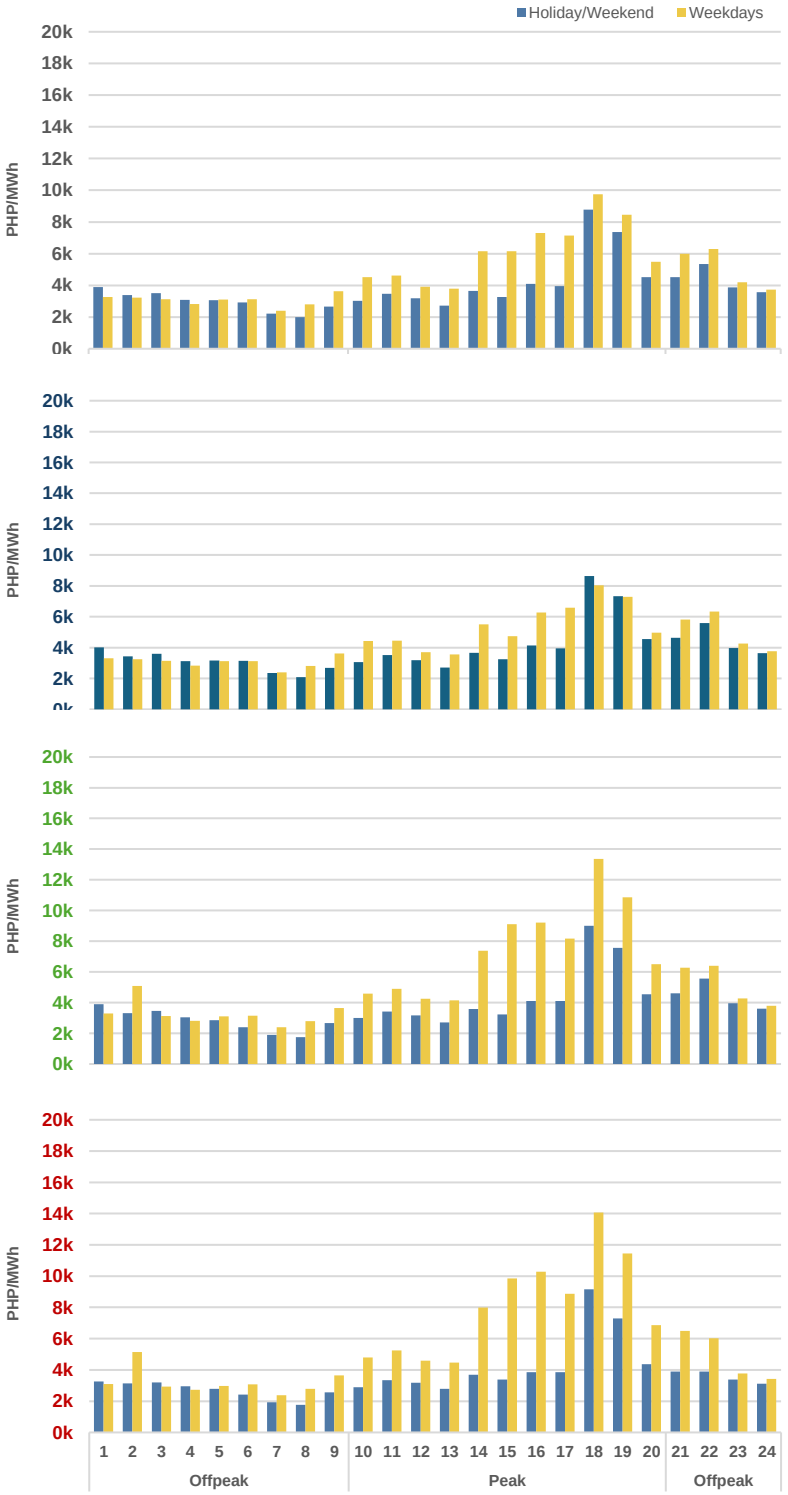
SYSTEM (LUZ, VIS, MIN)



LUZON

VISAYAS

MINDANAO



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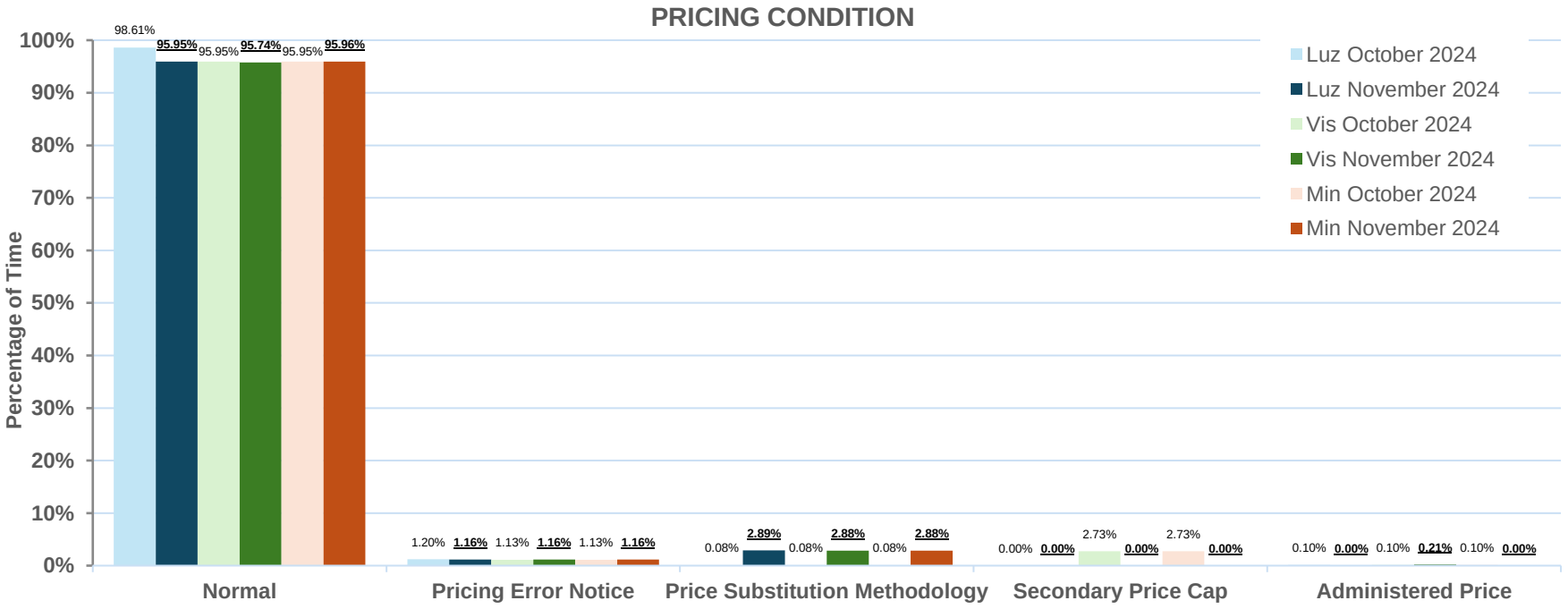
MARKET OUTCOME
MARKET PRICE



Despite high prices in the Luzon grid, the system load-weighted average price (LWAP) decreased by 0.24% compared to the previous billing month. Similarly, the Visayas and Mindanao regions experienced lower prices compared to the previous month. Although market prices reached PHP 9,000/MWh or higher for 7% of the time, this high prices did not persist for the 72-hour period required to trigger the Secondary Price Cap (SPC); therefore no SPC was imposed for the billing month in review.

Futhermore, comparing the market prices on a per day type, weekdays still exhibited higher prices than weekends, on average. This trend may be attributed to the generally higher electricity demand during weekdays, driven by regular activities such as work, school, and other electricity-intensive operations.

In terms of zonal prices, all zonal prices within each region were generally consistent with the regional average. The completion of the Cebu-Negros-Panay backbone and the Cebu-Bohol submarine cable have contributed to this normalization of zonal prices with the regional prices.

Particulars	Min		Max		Ave	% Change
	(PHP/MWh)	Date and time Interval	(PHP/MWh)	Date and time Interval	(PHP/MWh)	
Load Weighted Average Price (LWAP)						
System	-1,032.72	01/11/2024 08:05	33,938.87	07/11/2024 21:05	4,602.59	0.24%▼
Luzon	-1,029.35	01/11/2024 08:05	34,355.09	27/10/2024 15:30	4,374.35	8.62%▲
Northern Luzon					4,357.93	8.09%▲
Metro Manila					4,443.11	8.24%▲
Southern Luzon					4,306.28	7.89%▲
Visayas	-1,010.79	01/11/2024 08:05	34,481.74	07/11/2024 21:05	5,129.13	21.21%▼
Bohol					5,257.95	28.11%▼
Cebu					5,127.75	23.86%▼
Leyte					5,154.89	24.97%▼
Negros					5,183.97	23.91%▼
Panay					5,489.49	21.28%▼
Mindanao	-1,072.37	01/11/2024 09:10	33,778.83	08/11/2024 21:05	5,198.53	7.85%▼
Lanao					4,651.90	9.86%▼
North Central Mindanao					4,981.78	8.42%▼
North-East Mindanao					5,546.65	9.40%▼
North-West Mindanao					5,526.22	10.16%▼
South-East Mindanao					5,308.20	8.71%▼
South-West Mindanao					5,399.97	8.25%▼

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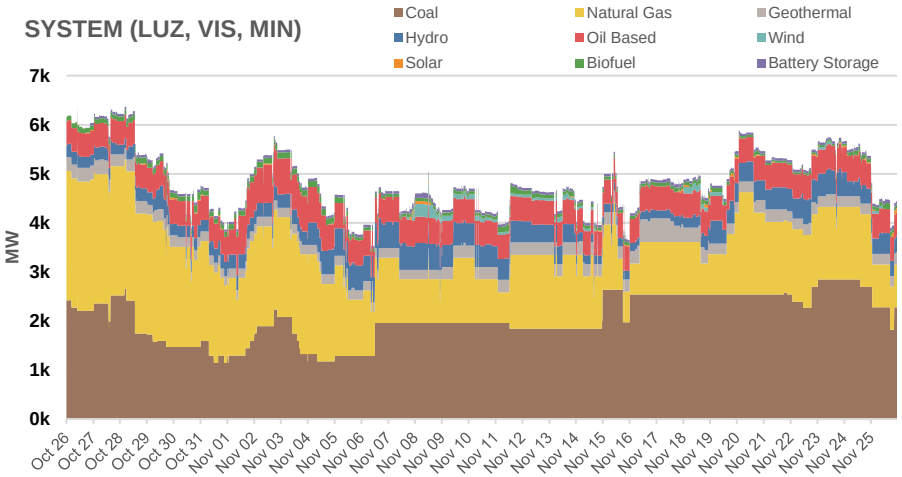
MARKET OUTCOME

CAPACITY ON OUTAGE

PER PLANT TYPE

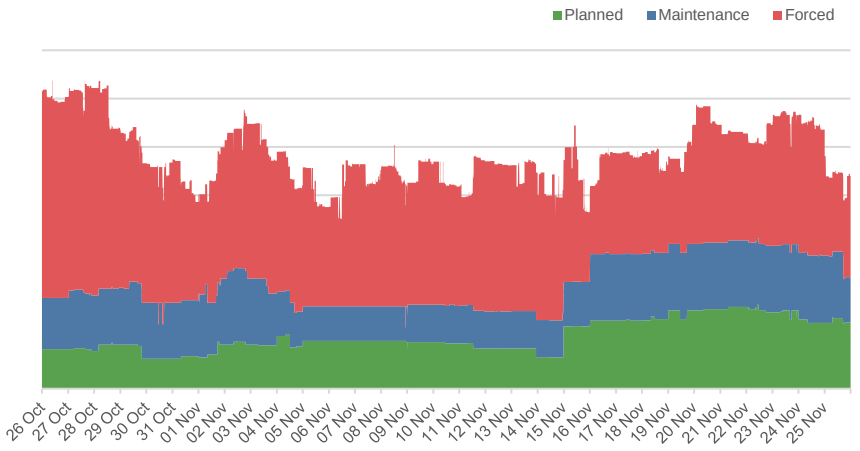


Particulars	Min		Max		Ave	% Change
	(in MW)	Date and time Interval	(in MW)	Date and time Interval	(in MW)	
Coal	1,143.60	31/10/2024 12:00	2,844.90	23/11/2024 00:25	2,052.95	31.20%▲
Natural Gas	453.00	08/11/2024 22:15	2,683.20	26/10/2024 21:15	1,519.33	3.41%▲
Geothermal	192.90	29/10/2024 00:35	484.30	16/11/2024 19:25	239.51	50.74%▲
Hydro	161.20	15/11/2024 17:40	615.80	06/11/2024 14:55	353.13	11.90%▲
Oil Based	483.30	26/10/2024 00:05	798.20	01/11/2024 10:15	526.91	1.98%▲
Wind	18.80	07/11/2024 19:20	262.20	07/11/2024 23:35	87.54	89.48%▲
Solar	5.00	31/10/2024 08:15	85.00	25/11/2024 19:05	29.97	45.66%▼
Biofuel	39.80	20/11/2024 08:05	161.10	18/11/2024 16:45	83.65	36.73%▲
Battery Storage	50.00	26/10/2024 21:00	110.00	08/11/2024 06:30	52.50	28.85%▲

On average, most types of power plants have experienced increases in outages during the billing month of November when compared to the previous month. Notably, the only exception to this trend was solar power plants, which recorded a decline in outages.

In terms of capacity on outage, coal-fired power plants accounted for the highest percentage share. Significant outages for this period were from Sual 1 (Coal plant) and Ilijan 1 (Natural Gas plant). Together, these two facilities represent a combined rated capacity of 1,247 MW.

PER CATEGORY



Particulars	Min		Max		Ave	% Change
	(in MW)	Date and time Interval	(in MW)	Date and time Interval	(in MW)	
Planned	622.70	29/10/2024 20:00	1,739.40	22/11/2024 09:55	1,090.03	25.00%▼
Maintenance	274.20	08/11/2024 22:15	1,524.20	02/11/2024 02:20	1,090.67	6.38%▲
Forced	1,410.30	16/11/2024 00:15	4,495.90	26/10/2024 09:30	2,679.37	63.86%▲

Based on category, only planned outages showed a decline compared to the previous billing month, indicating that many plants have completed their annual preventive maintenance activities. The major contributing factor to the planned outage category was the outage of the Sual 1 power plant.

In contrast, both forced outages and maintenance outages increased this month. Notably, the forced outage increased by 63%, mostly contributed by Ilijan 1 power plant due to gas supply restriction.

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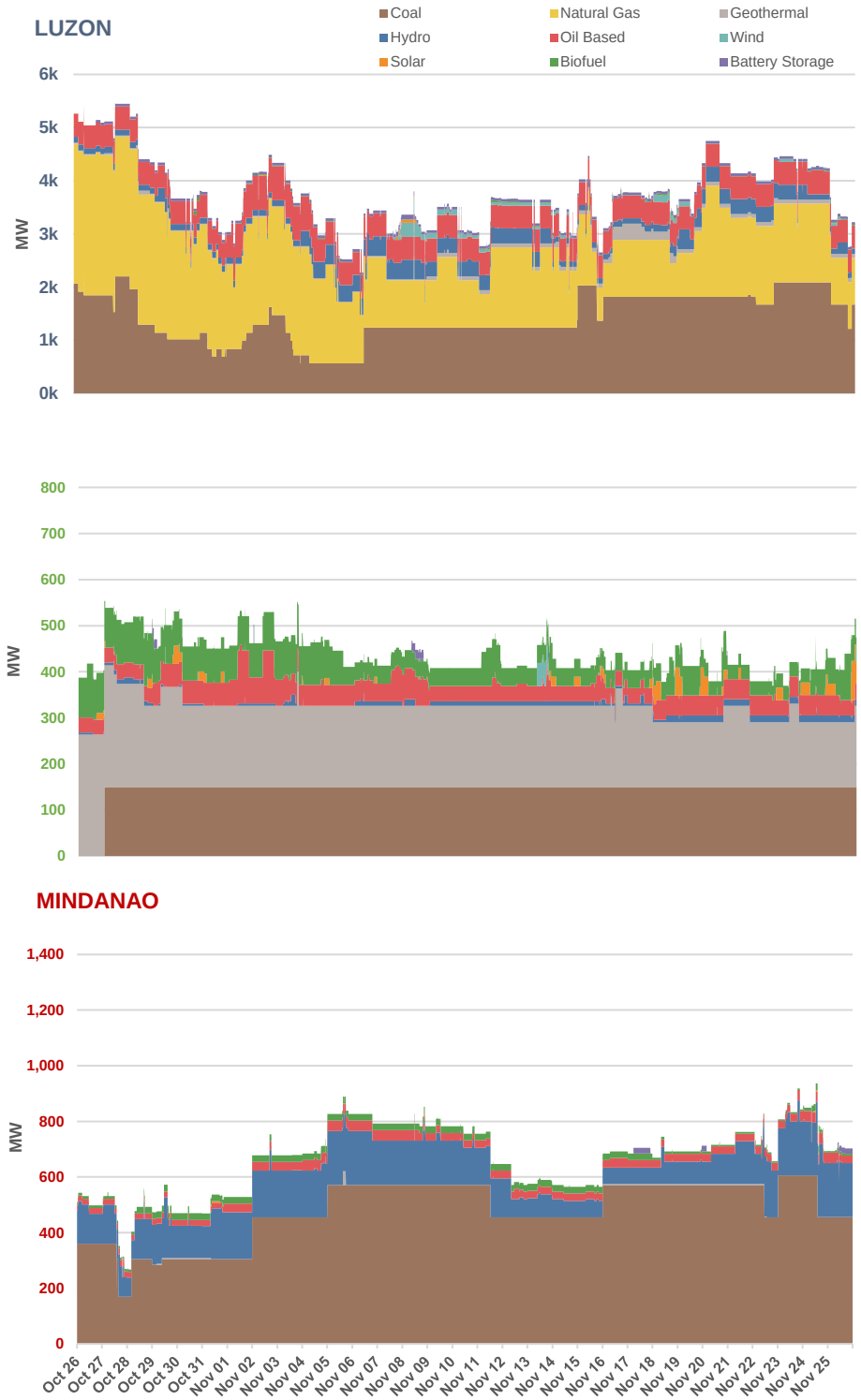
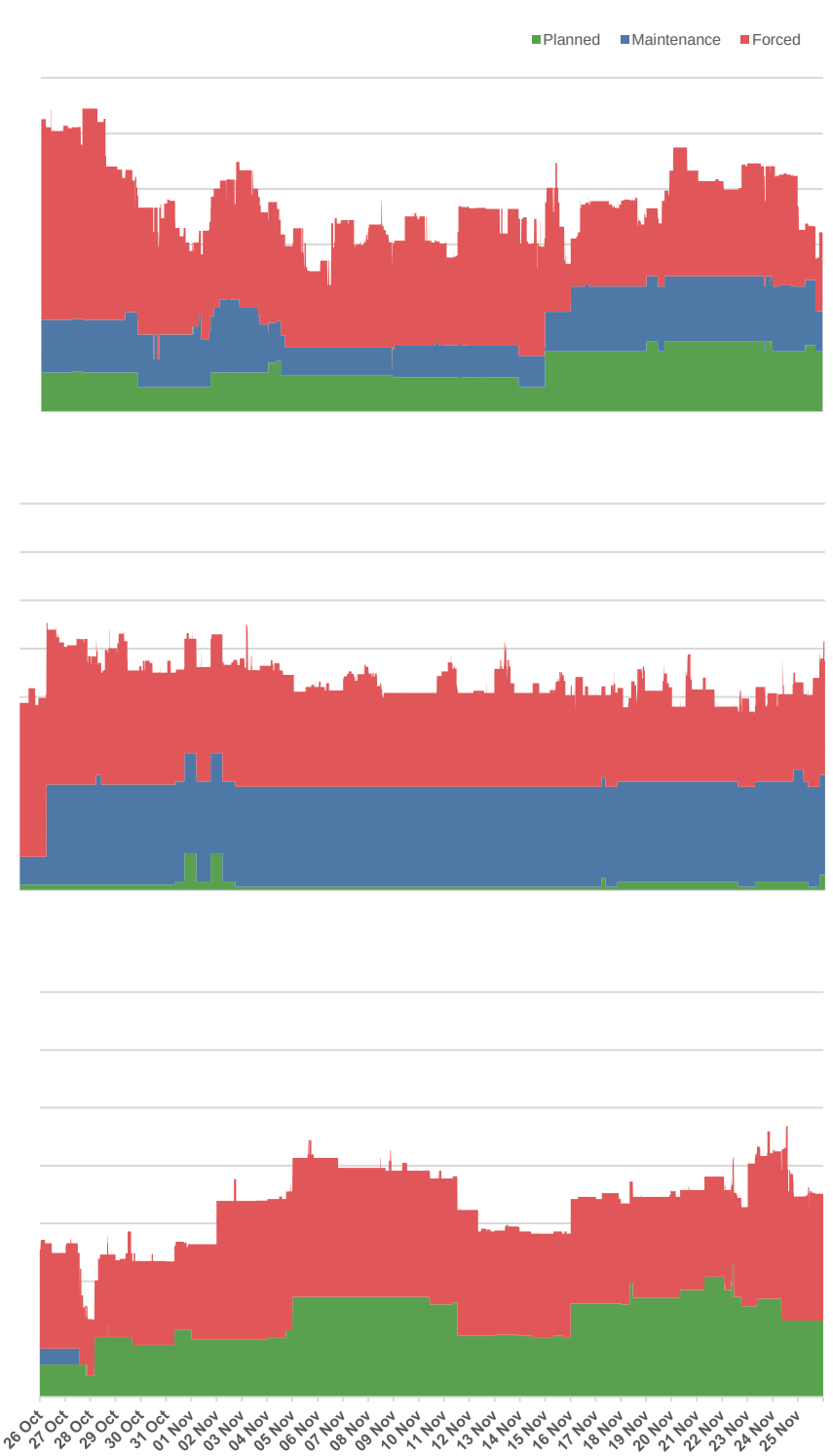
MARKET OUTCOME

CAPACITY ON OUTAGE

PER PLANT TYPE



PER CATEGORY



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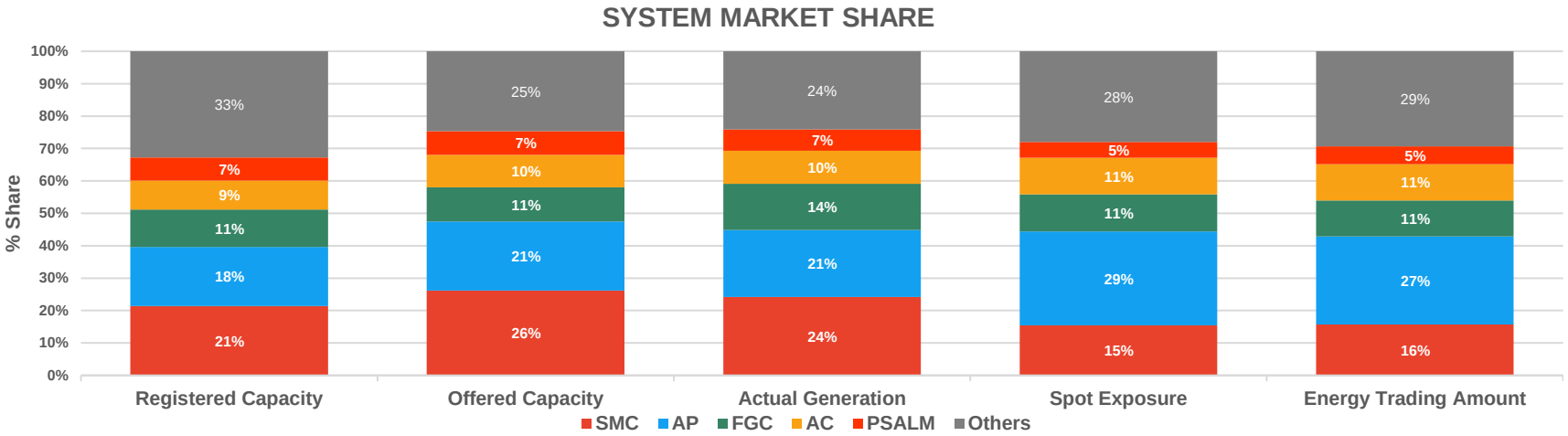
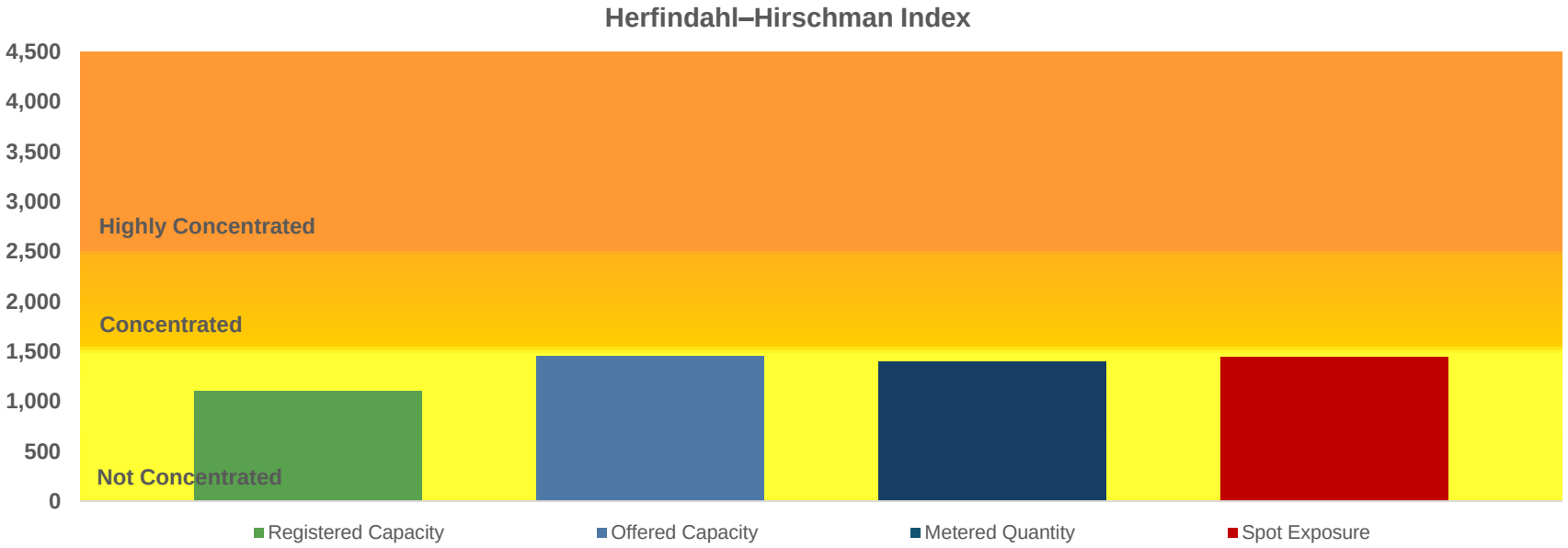
MARKET OUTCOME

STRUCTURAL COMPETITION



San Miguel Corporation (SMC) had the highest percentage share in the registered, offered capacity, and actual generation, suggesting that most of its capacity was frequently dispatched during the period. Additionally, SMC's spot exposure is only 15% which suggests that most of SMC's traded energy was tied to bilateral contracts. On another note, Aboitiz Power (AP) had the highest in terms of spot exposure in the market having 29% share of the total spot exposure. The graph also illustrates the disparity between the percentage share per ETA and spot market exposure, due to varying resulting market prices.



Based on the Herfindahl-Hirschman Index (HHI), the level of market concentration for all measures in the November 2024 billing period was not concentrated.

The relatively low HHI values suggest that market power is distributed among multiple participants, rather than being concentrated under the control of a single or handful entities or major groups. This indicates a competitive market environment with minimal risk of monopolistic or oligopolistic influence.

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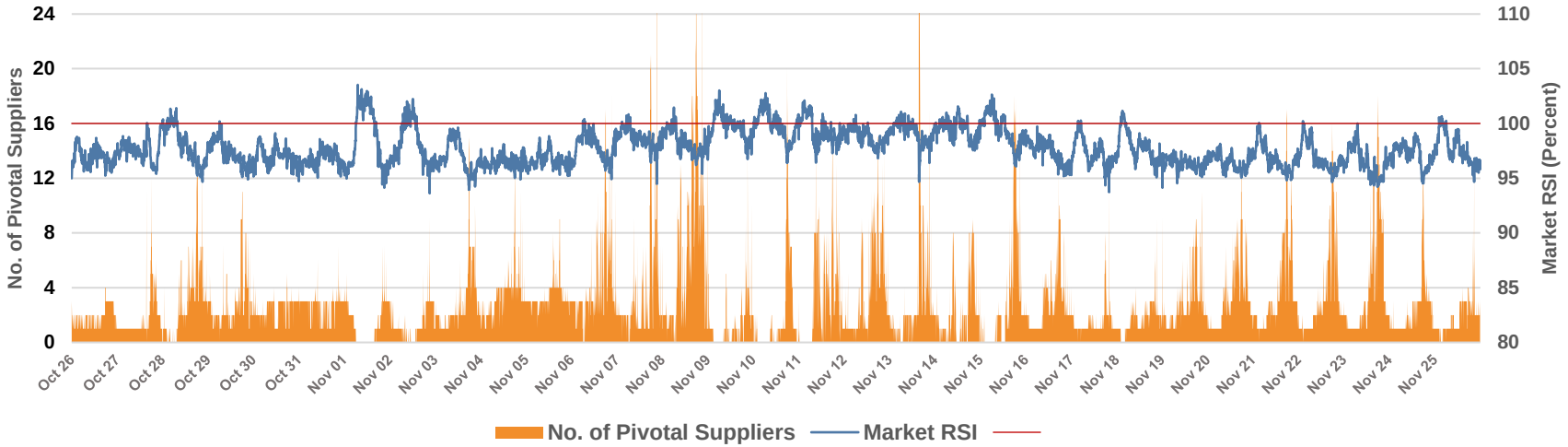
MARKET OUTCOME

STRUCTURAL COMPETITION

SYSTEM Residual Supply Index

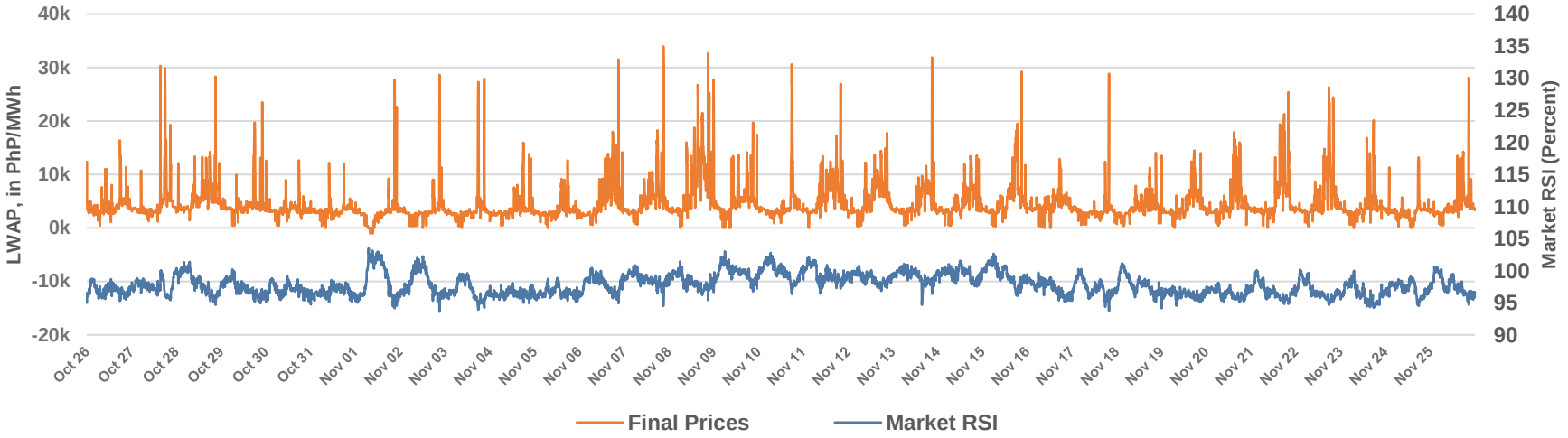


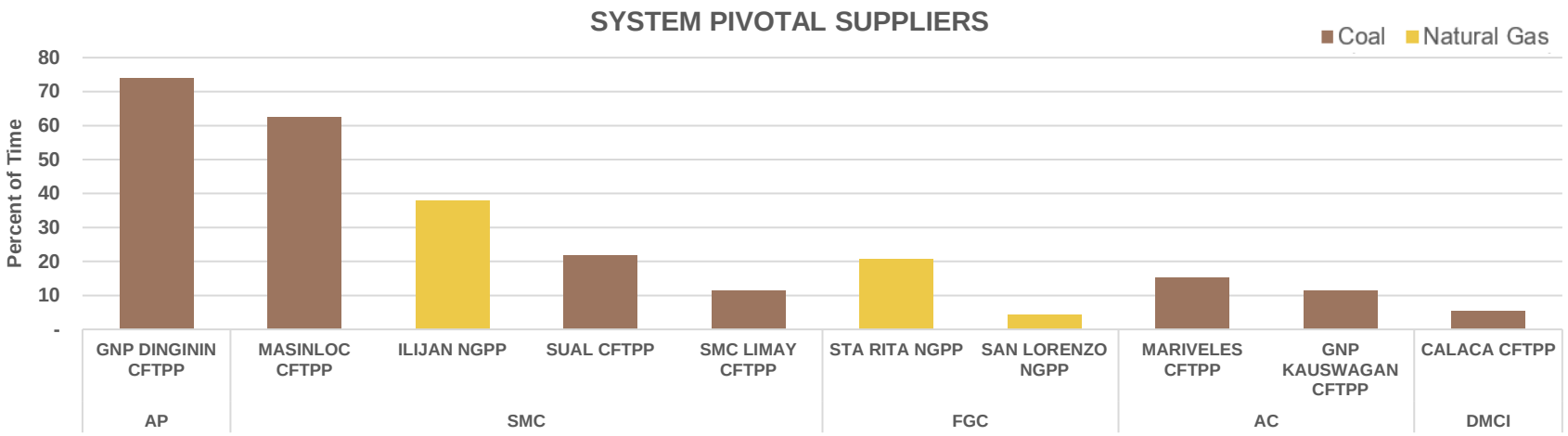
Residual Supplier Index (RSI) below 100 indicates a tight supply situation with presence of pivotal plant of certain market participants. For November 2024 billing period, RSIs below 100 was recorded 90% of the time with an average price at PHP 4,789/MWh. Conversely, when RSIs were 100 or above (10% of time), it suggests a more competitive market with ample supply and an average price being significantly lower at PHP 2,805/MWh. Despite the increase of RSI falling below the 100 mark, the computed load weighted average price (LWAP) decreased by 0.24% compared to the previous month.

RSI		Price	Time Interval
Max	103.52	(101.70)	01/11/2024 07:05
Min	93.61	28,653.77	02/11/2024 21:05

Price		RSI	Time Interval
Max	33,938.87	94.49	07/11/2024 21:05
Min	(1,032.72)	102.46	01/11/2024 08:05

RSI VS Price

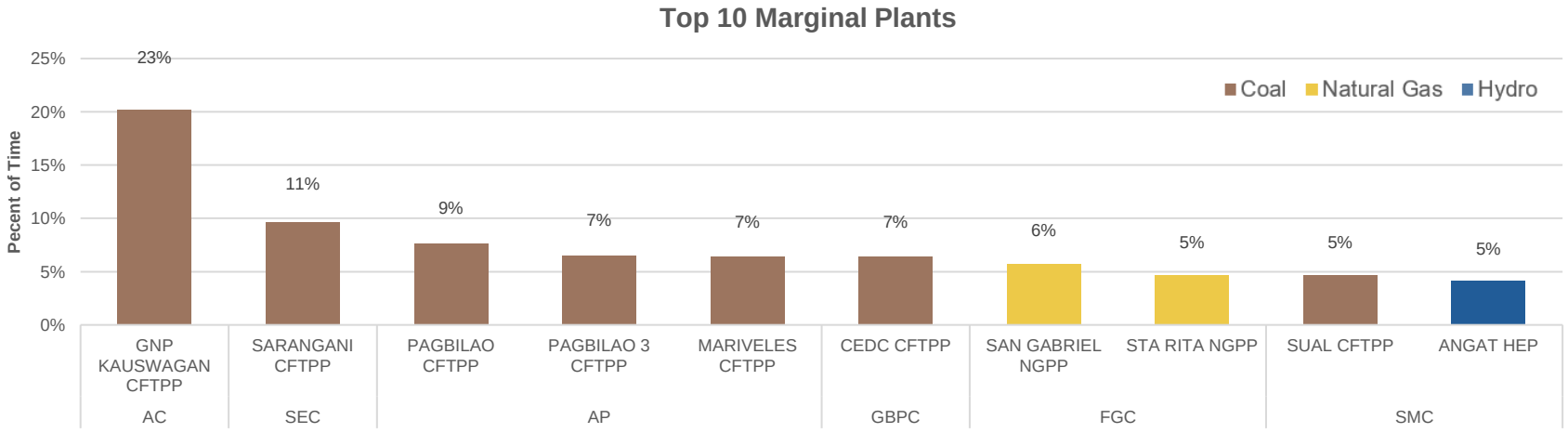




The GNP Dinginin Coal-Fired Thermal Power Plant (CFTPP) was a pivotal plant for the November billing period with a total of 6,598 trading intervals or 74% of the time for the whole billing period in review. A pivotal plant is one whose capacity is required to meet the demand for a trading interval. Without the contribution of such a supplier, the grid may experience shortages or instability.

Meanwhile, Masinloc CFTPP which was consistently the 4th pivotal supplier for the previous months came in second for a total of 5,577 trading intervals for the November 2024 billing period or 62% of the total trading intervals. Masinloc's role as a pivotal plant had significantly increased compared to the previous months mainly due to the outage of Ilijan 1 and Sual 1 – these plants all belong to one (1) market participant group, SMC.

The presence of both plants as critical suppliers emphasizes their role in preventing shortfalls and maintaining grid reliability. Additionally, it is important to highlight that seven out of ten pivotal suppliers were coal-fired power plants, while the remaining three plants were natural gas power plants.



During the November 2024 billing period, the GNP Kauswagan CFTPP served as the marginal plant in 23% of the total trading intervals. However, it was noted that the plant was the marginal plant only in the Mindanao region (for 50% of the intervals) and in the Visayas region (for 16% of the intervals), due to constraints on the Mindanao-Visayas and Luzon-Visayas HVDCs, respectively.The plant served as a pivotal supplier 11% of the time in the system-wide.

Similar pattern was observed among pivotal suppliers system-wide, with seven out of the top ten pivotal suppliers being coal-fired power plants.

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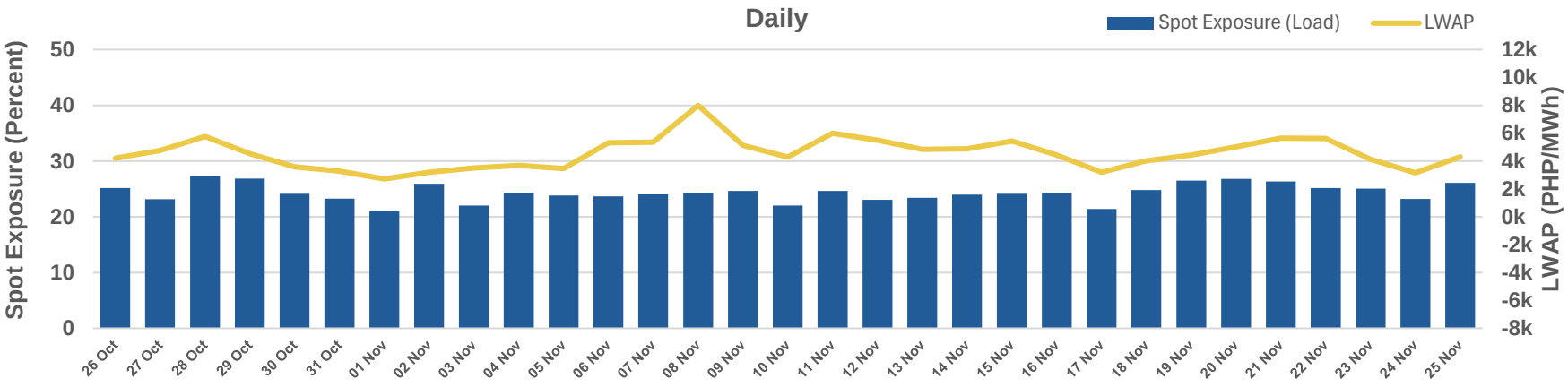
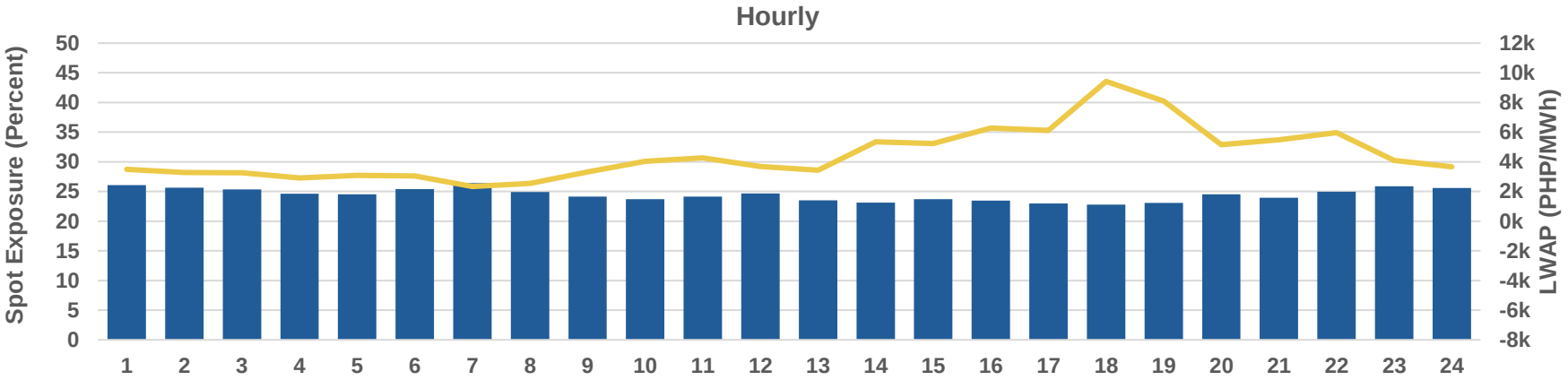
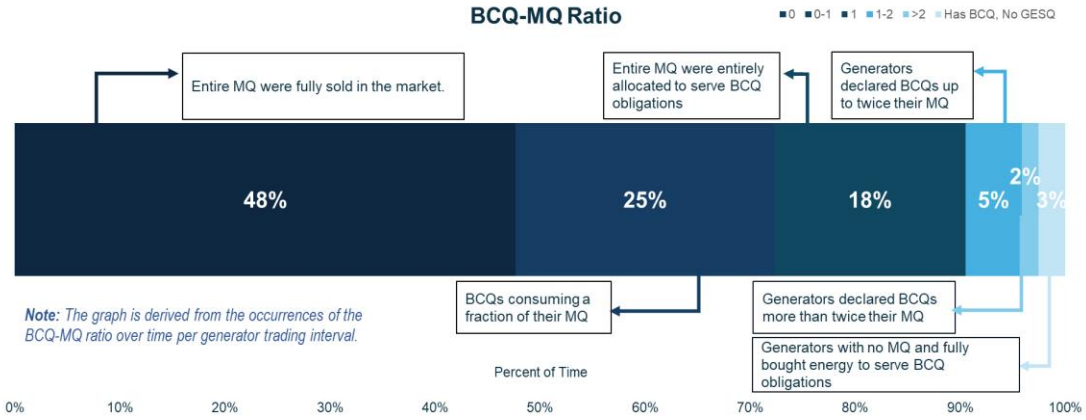
MARKET OUTCOME
SPOT EXPOSURE





The average spot quantities of load participants for the November 2024 billing period was noted at 24.33%, with an accompanying average price of PHP 4,602/MWh. Notably, the spot exposure exhibited variations based on the type of day, with weekdays recording an average of 24.83% at an average price of PHP4,949/MWh while weekends/holidays registered an average of 23.44% at an average price of PHP 3,909/MWh.

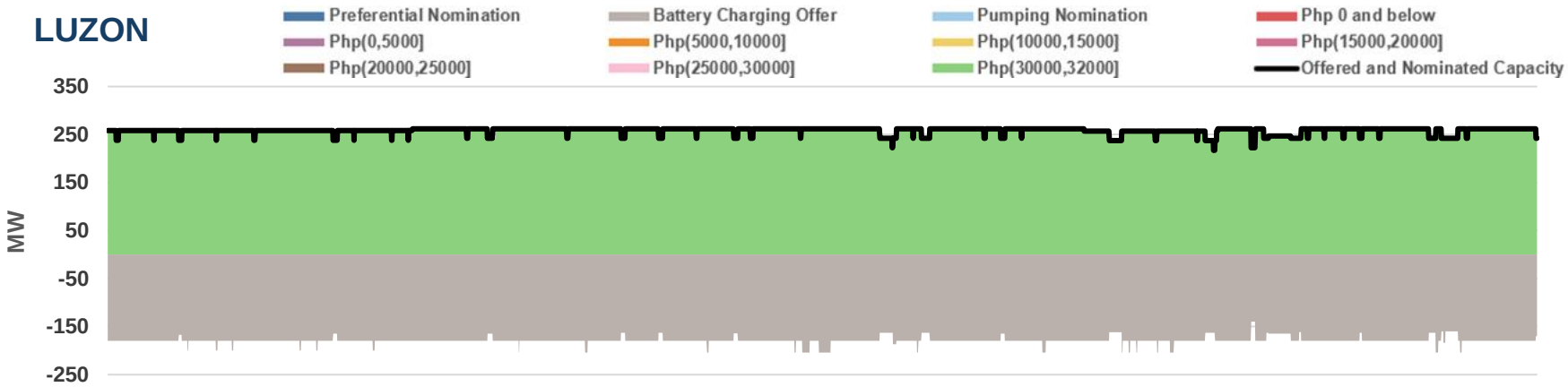


For the November 2024 billing period, majority of the metered quantities were still covered by the BCQ declarations of generator-trading participants in the market.

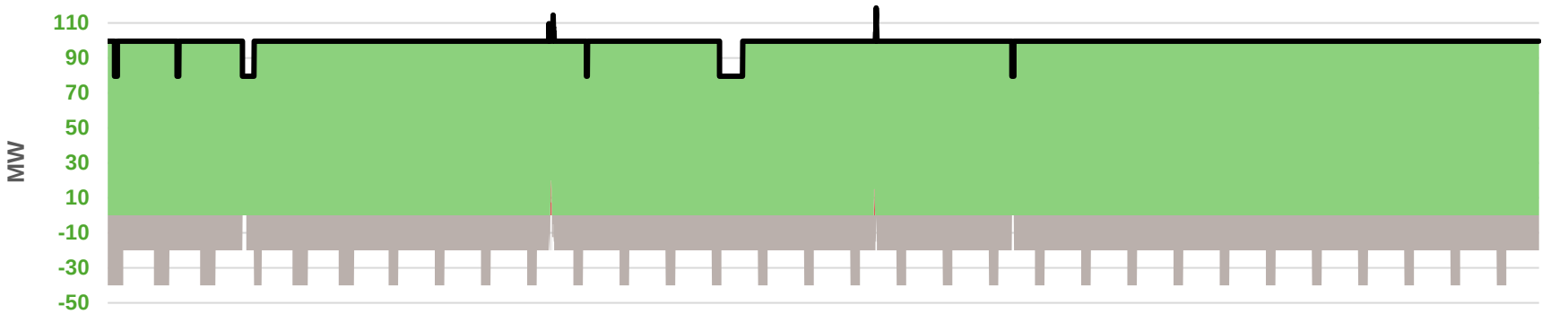
MARKET OUTCOME
OFFER PATTERN ANALYSIS

BATTERY

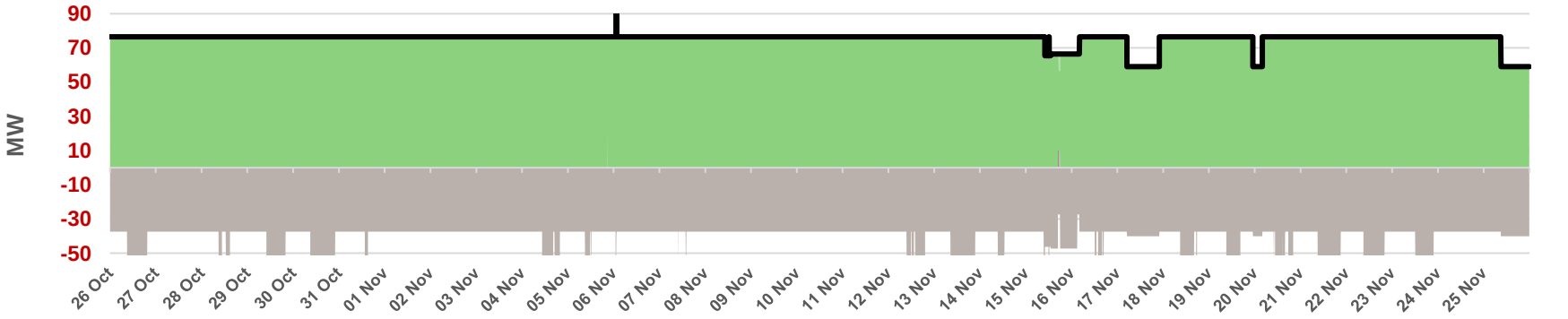
LUZON



VISAYAS



MINDANAO



Battery energy storage system (BESS) offers across all three regions remain concentrated in the PHP (30,000, 32,000]/MWh price range during the period under review.

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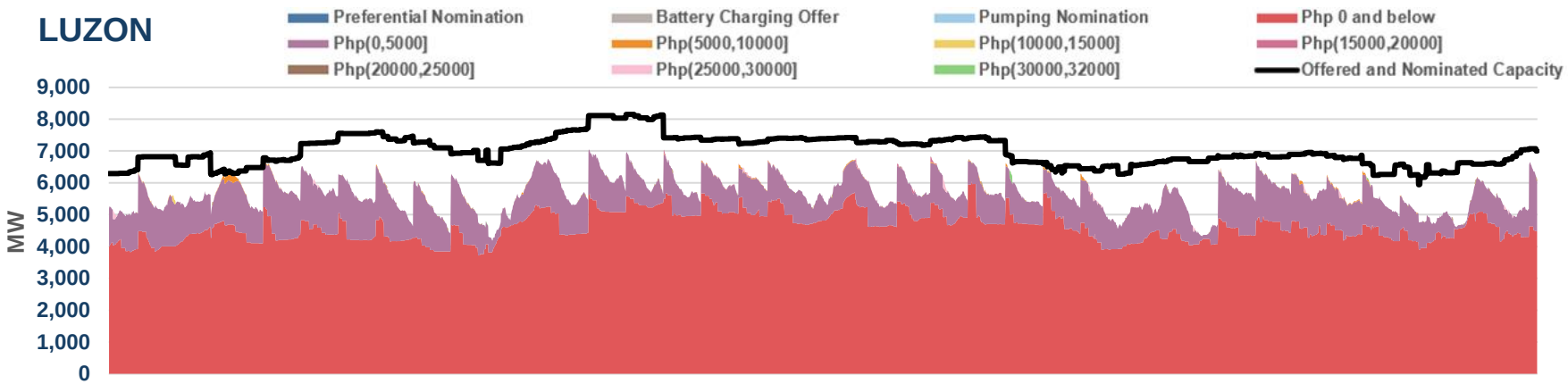
MARKET OUTCOME

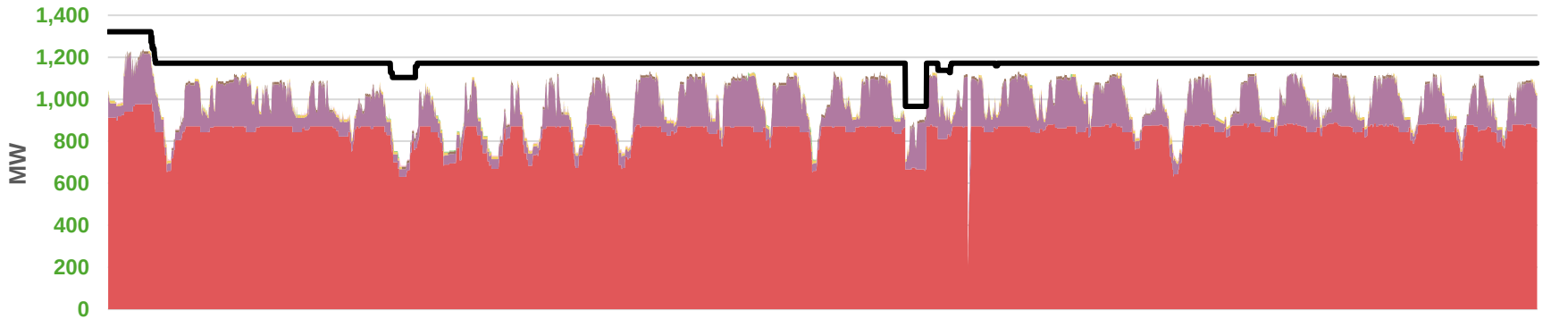
OFFER PATTERN ANALYSIS

COAL

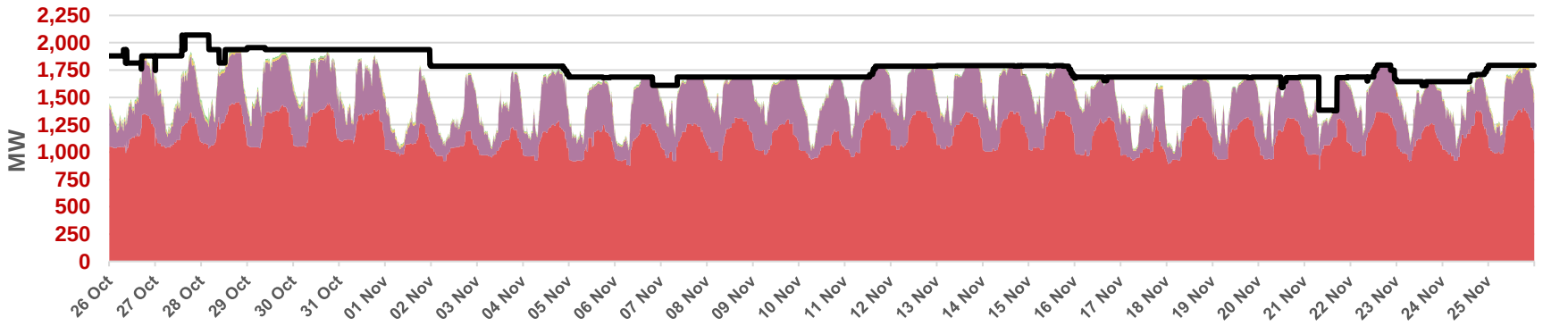
LUZON



VISAYAS



MINDANAO



Coal power plants offers across all three regions remain predominantly in the PHP 0 and below price range during the period under review. This offering behavior suggests that a substantial portion of their generation capacities are committed to long-term bilateral contracts. As baseload plants, coal power facilities are intended to provide consistent and reliable electricity supply.

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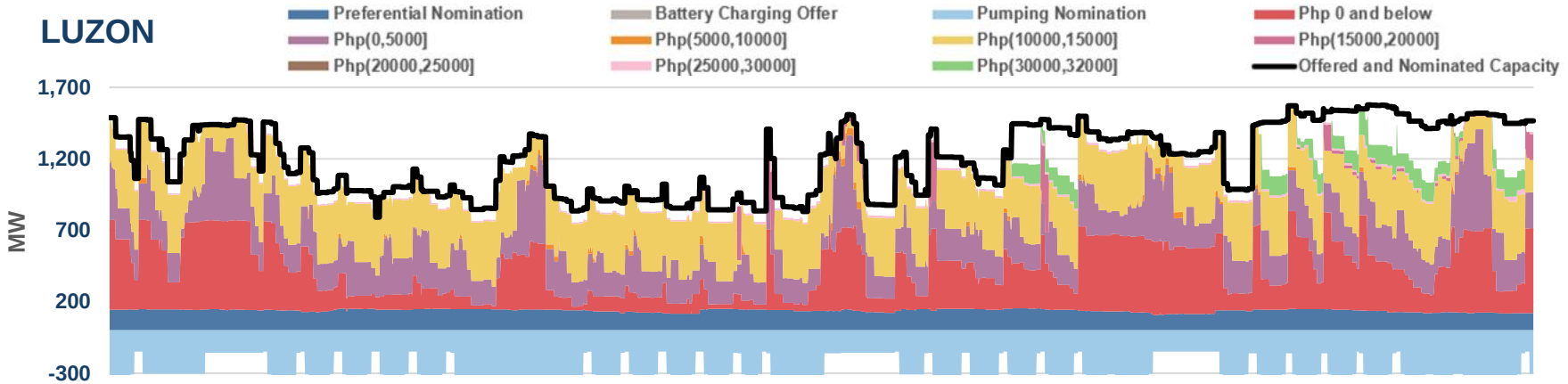
MARKET OUTCOME

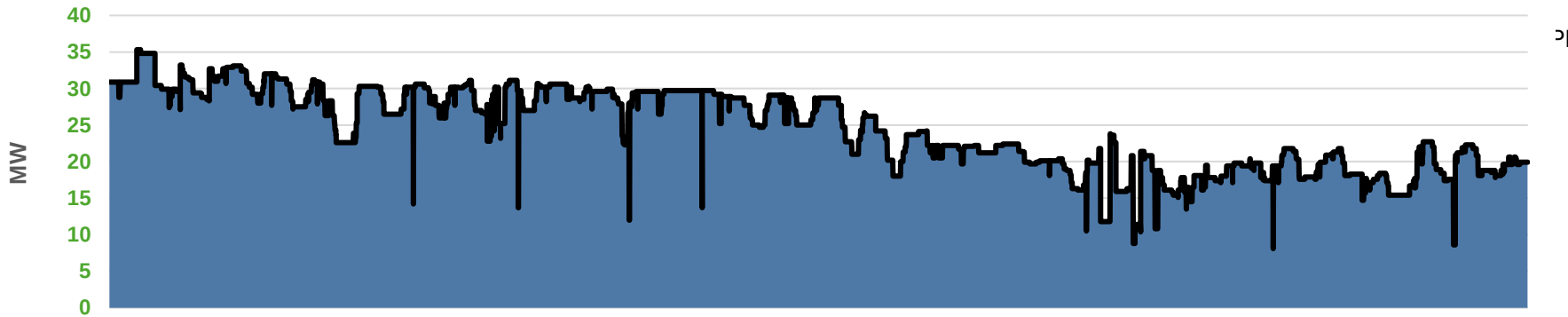
OFFER PATTERN ANALYSIS

HYDRO

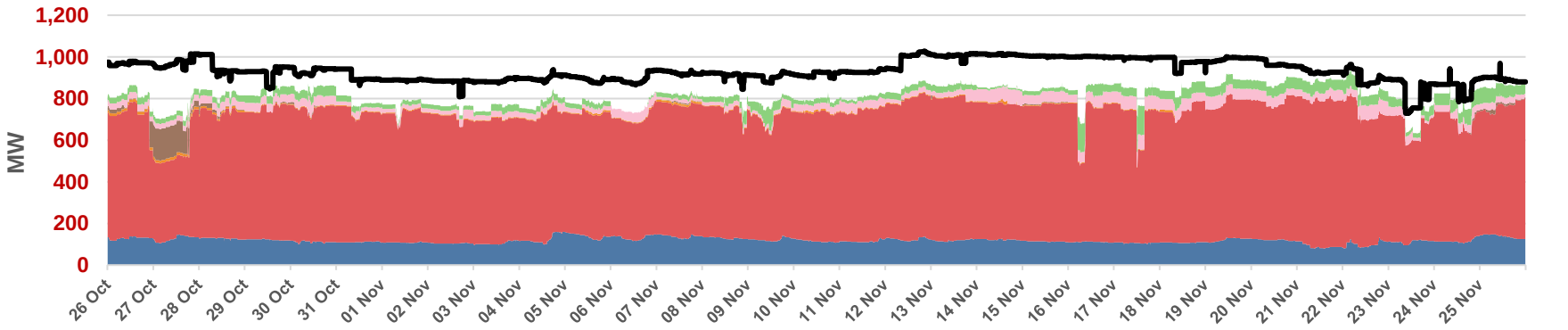
LUZON



VISAYAS



MINDANAO



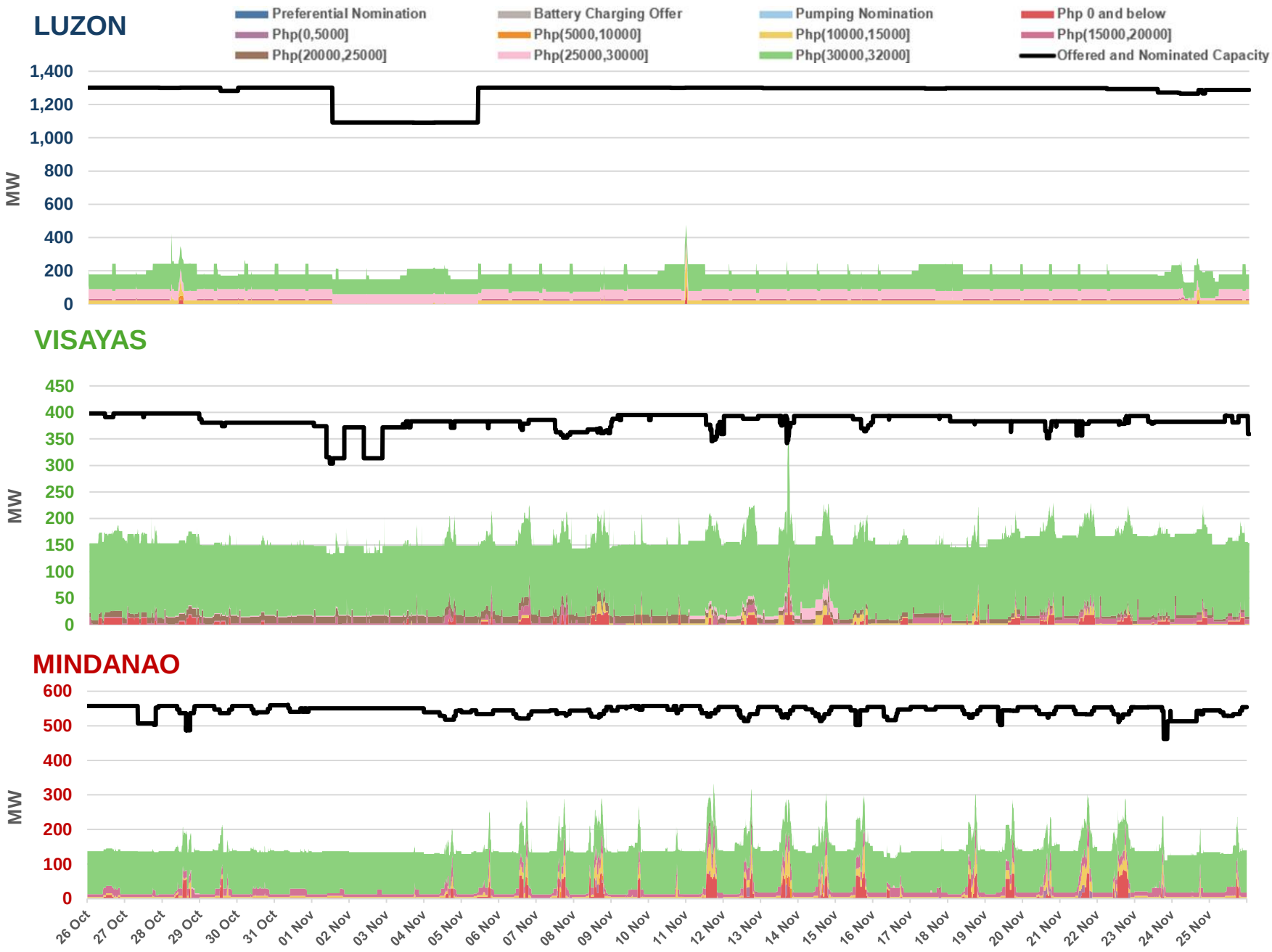
Hydro power plants exhibited a diverse range of offer behaviors across the three regions during the period under review, reflecting their operational flexibility and the varying market dynamics in each region: Luzon hydro power plants displayed a broader variation in their offers; All Visayas hydro power plants registered as preferential plants; and Mindanao hydro power plants offers were concentrated in the PHP 0 and below price range with most of their capacity committed to bilateral contracts.

Public

MARKET OUTCOME

OFFER PATTERN ANALYSIS

OIL



Offers from oil-based power plants across all three regions remain predominantly in the high price range during the period under review. Similar to battery, pricing strategy aligns with the role these plants play in the energy market, particularly in addressing specific operational and market needs such ancillary service and peak demand response. Moreover, lower price range offer from oil-based plants was due to commitment to delivery capacities that are covered by contracts.

RESERVE MARKET

SUMMARY OF OBSERVATIONS

- Across all regions, Mindanao recorded the lowest monthly average price, while Visayas had the highest average price caused by the lack of available supply for reserves.
- On 17 December 2024, the Energy Regulatory Commission (ERC) has issued ERC Resolution No. 16, Series of 2024 setting for the interim offer price cap (PhP25,000/MWh) as a mitigating measures for the Reserve Market. The implementation commenced on 30 December 2024 for the dispatch interval 08:00H. Further, consistent with the Resolution and as initially set out under DOE Advisory No. 2024-01-001-SEC, the Floor Price will continue to be at PhP0/MWh.

AT A GLANCE

Total Registered Capacity (in MW)

5,440.4 **0.65%**

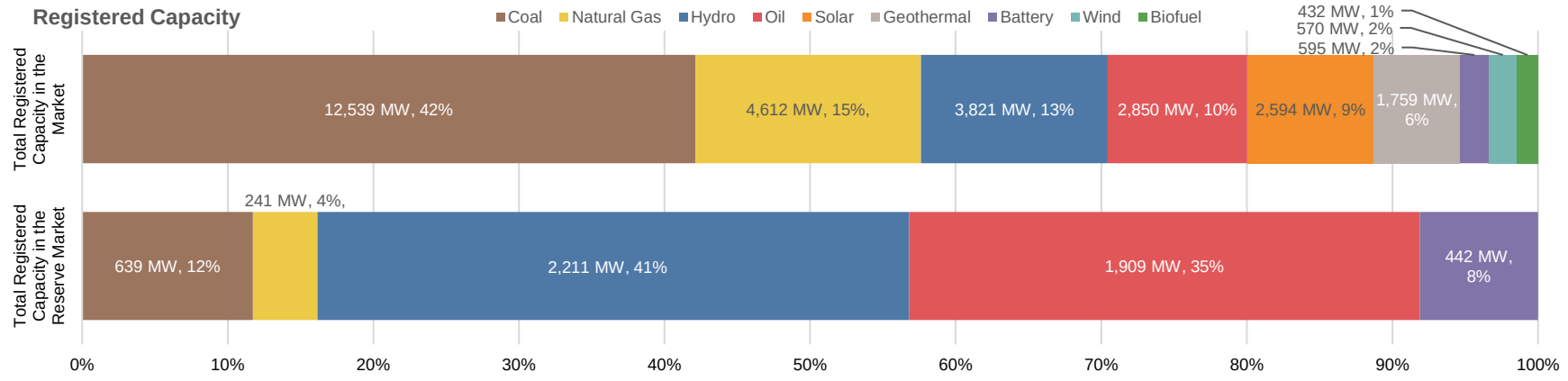
Previous Month: 5,405 MW

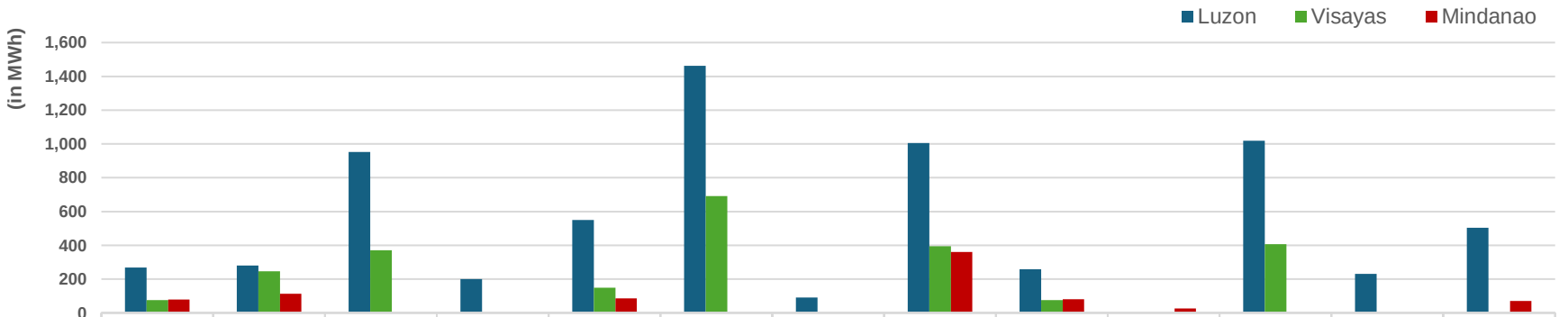
Region	Average Price (PHP/MWh)	% Change
Regulating Up		
Luzon	12,862.89	98.75%▲
Visayas	22,351.54	3.99%▲
Mindanao	8,686.19	25.23%▲
Regulating Down		
Luzon	10,650.40	1.22%▲
Visayas	27,612.12	5.07%▲
Mindanao	8,349.61	34.94%▲
Contigency		
Luzon	2,695.93	74.38%▼
Visayas	7,727.38	70.60%▼
Mindanao	2,563.82	58.57%▼
Dispatchable		
Luzon	1,475.46	32.94%▼
Visayas	3,207.09	34.14%▼
Mindanao	147.24	78.04%▼

Public

MARKET OUTCOME

RESERVE MARKET





	BAT	COAL	HYD	NATG	OIL	HYD	NATG	OIL	BAT	COAL	HYD	NATG	OIL
	Contingency					Dispatchable			Regulating Up/Down				
Luzon	267.4	280	953	200	550	1463	91	1005	258	0	1019	230	504
Visayas	75	246	370.8	0	148	691.5	0	394	75	0	406.5	0	0
Mindanao	79.5	112.5	0	0	85.5	0	0	359.5	80	26	0	0	70

Of the total registered capacity of 29,771.6 MW, approximately 18% (5,440.4 MW) are certified to participate in both the wholesale electricity market and the reserve market. This capacity is primarily sourced from coal, natural gas, hydro, oil, and battery power plants, due to specific reserve market requirements.

Particulars	Min (in PHP/MW)	Max (in PHP/MW)	Ave (in PHP/MW)	% Change
Regulating Up				
Luzon	0.00	32,000.00	12,862.89	98.75%▲
Visayas	12,000.00	32,000.00	22,351.54	3.99%▲
Mindanao	0.00	32,000.00	8,686.19	25.23%▲
Regulating Down				
Luzon	0.00	32,000.00	10,650.40	1.22%▲
Visayas	12,000.00	32,000.00	27,612.12	5.07%▲
Mindanao	0.00	32,000.00	8,349.61	34.94%▲
Contigency				
Luzon	0.00	32,000.00	2,695.93	74.38%▼
Visayas	2,410.00	29,639.74	7,727.38	70.60%▼
Mindanao	0.00	32,000.00	2,563.82	58.57%▼
Dispatchable				
Luzon	40.02	31,500.00	1,475.46	32.94%▼
Visayas	5.00	31,900.00	3,207.09	34.14%▼
Mindanao	0.00	7,590.08	147.24	78.04%▼

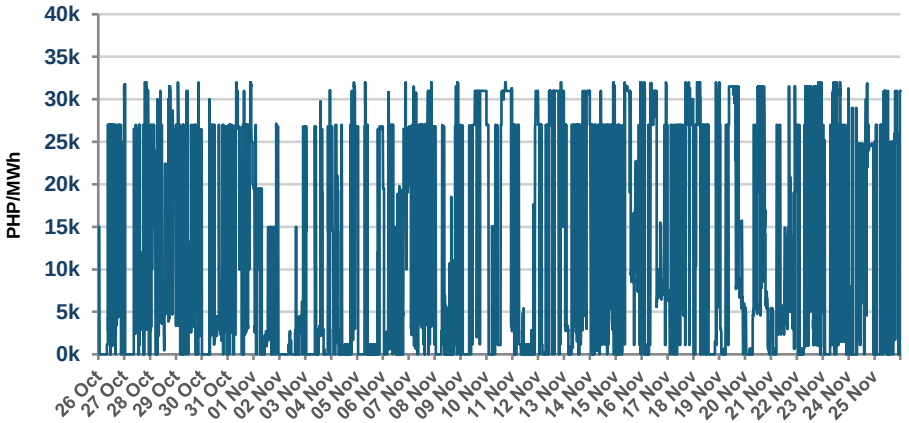
*Based on Reserve Settlement

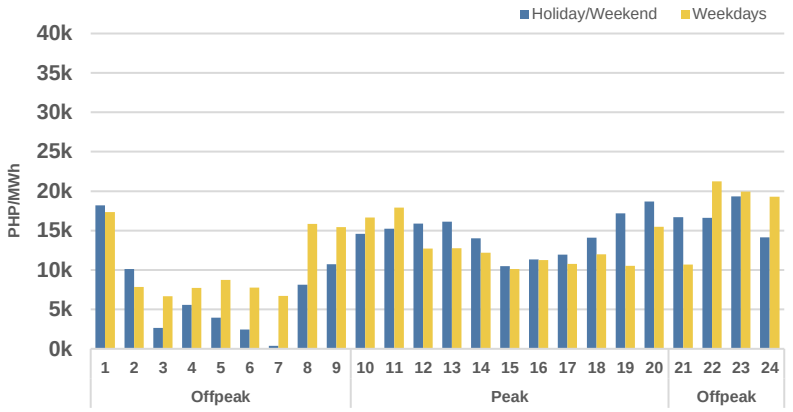
Public

MARKET OUTCOME
RESERVE MARKET

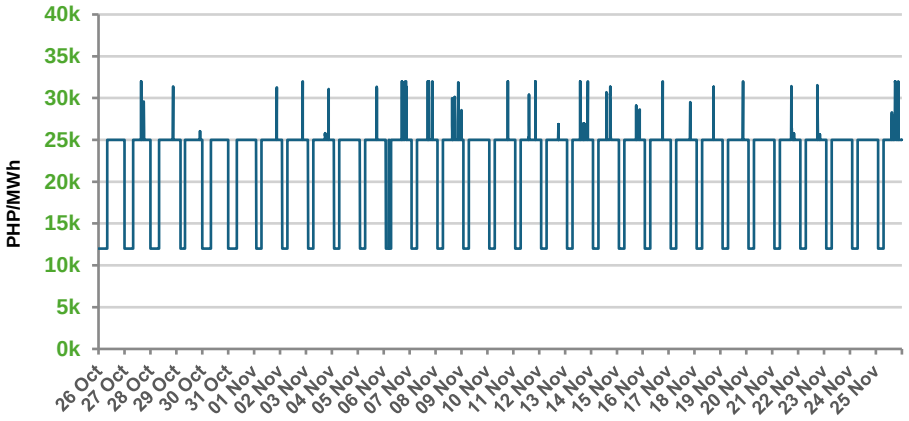
REGULATING UP

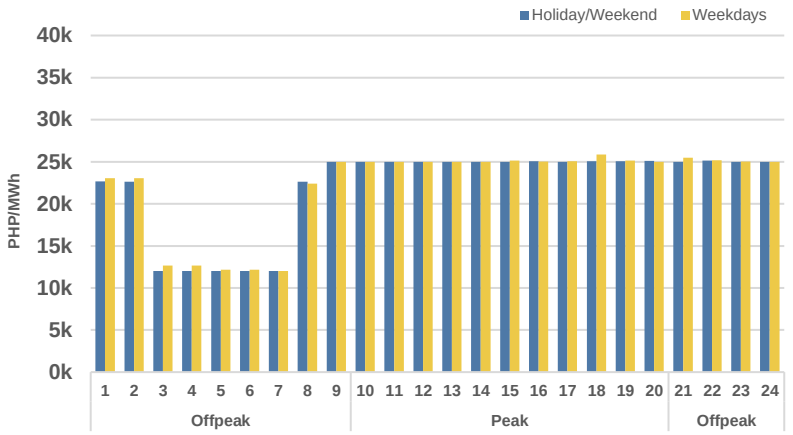
LUZON



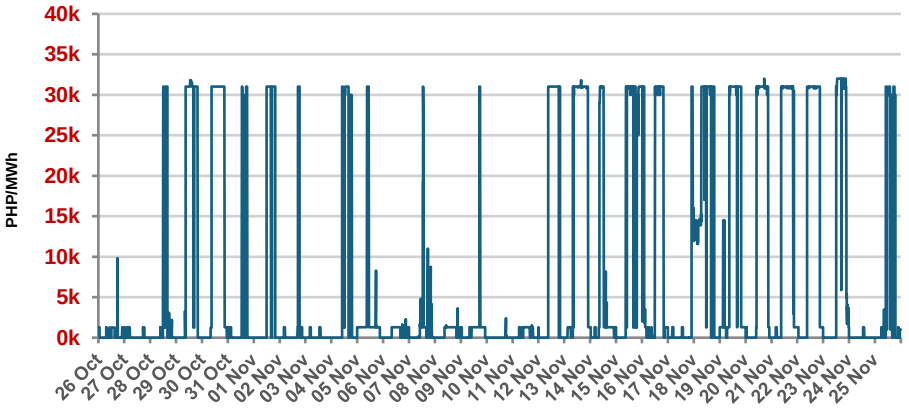


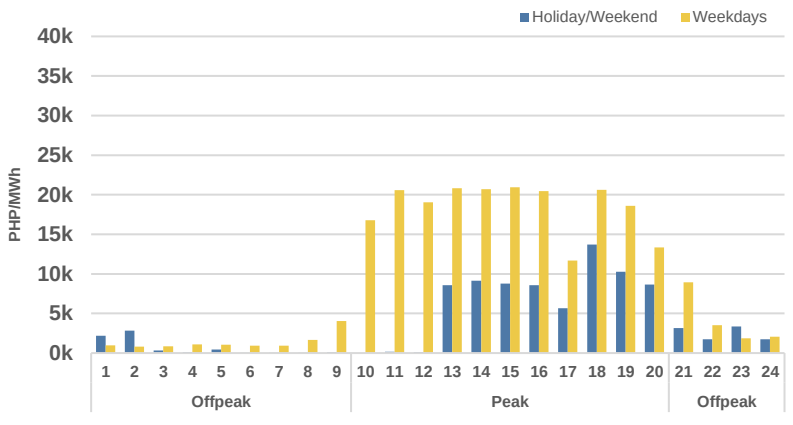
VISAYAS





MINDANAO

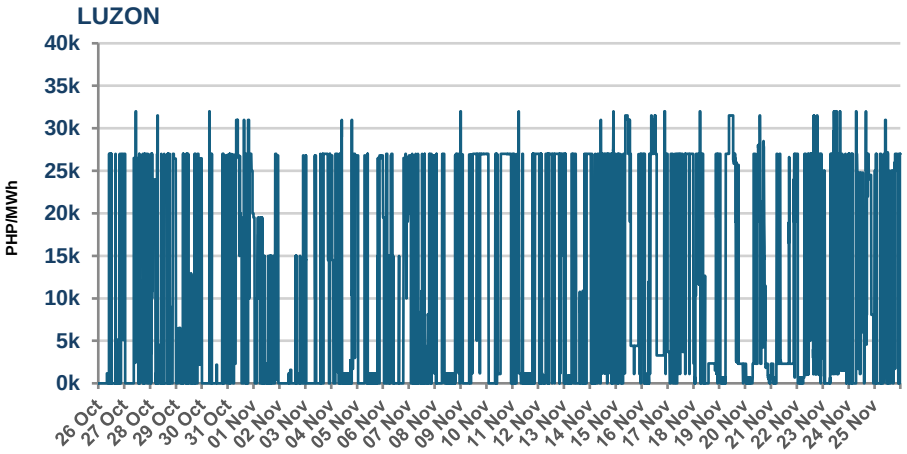


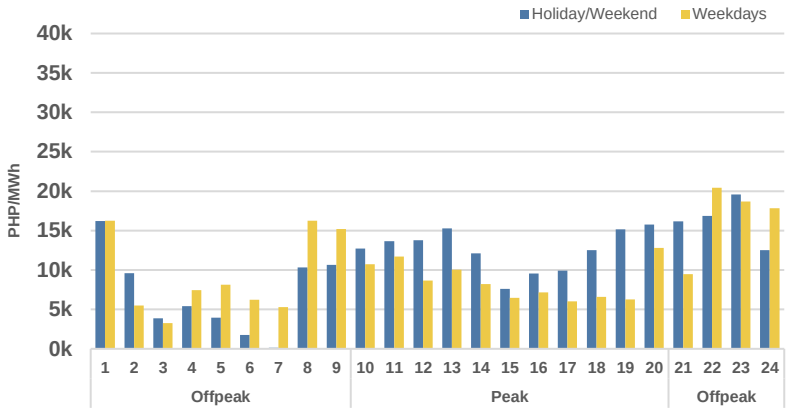


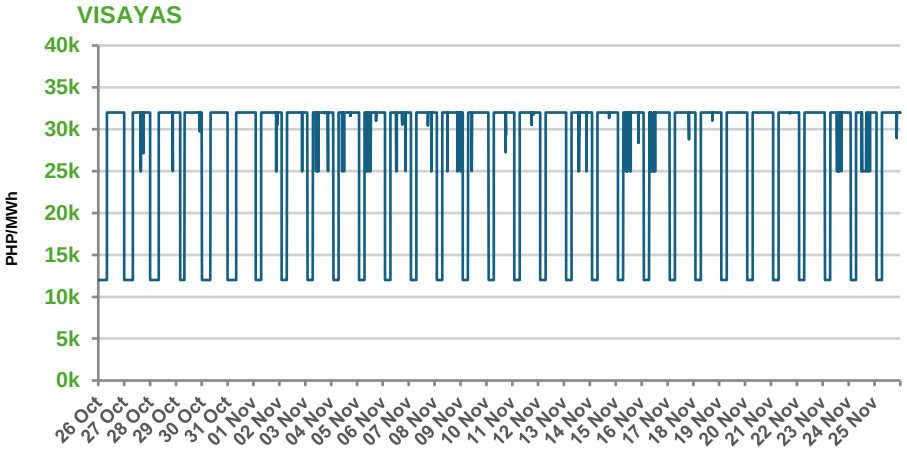
Public

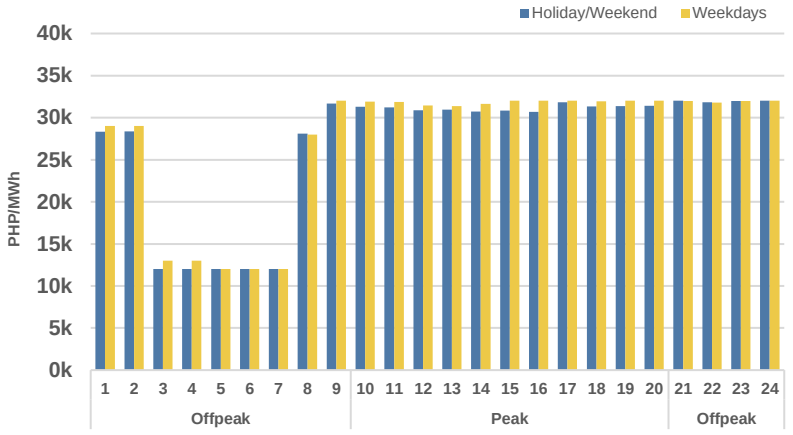
MARKET OUTCOME
RESERVE MARKET

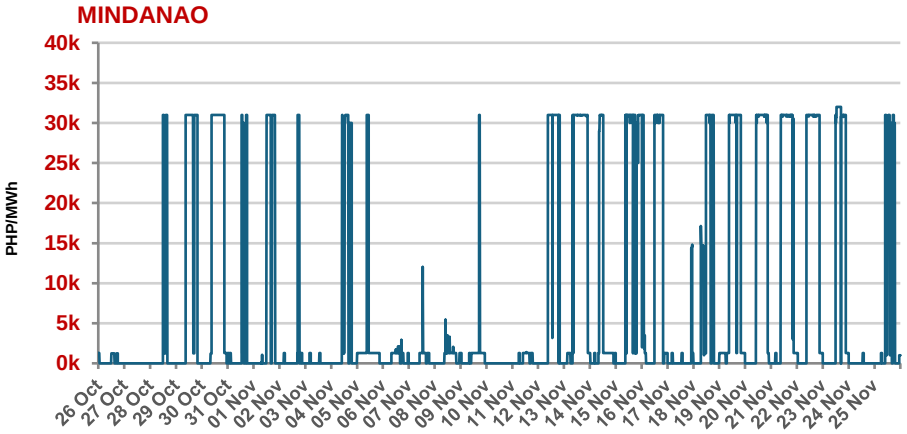
REGULATING DOWN

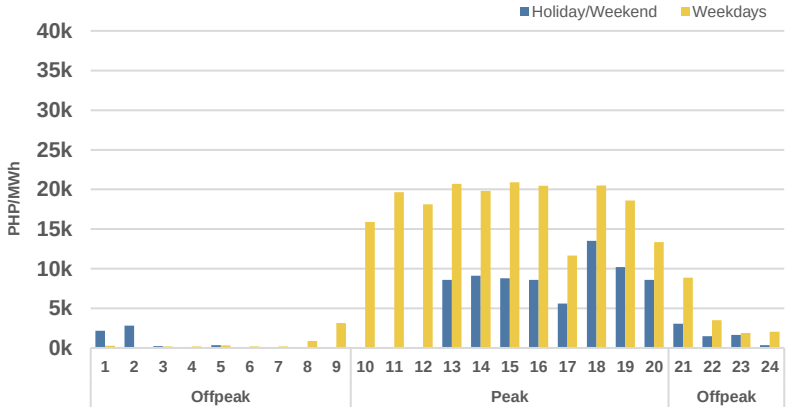










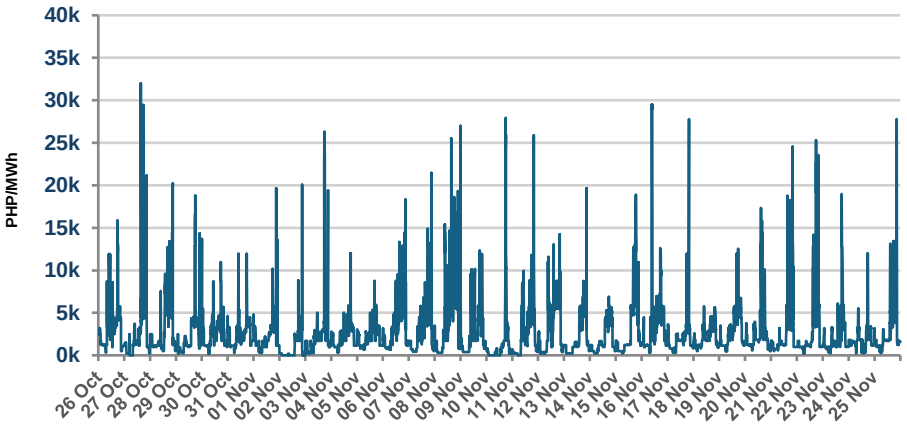


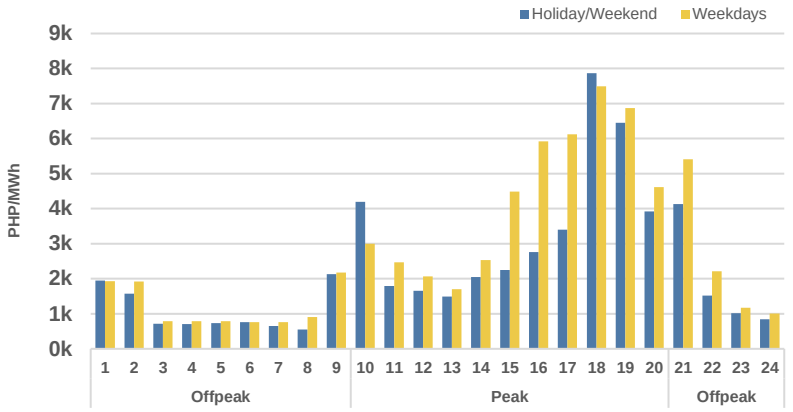
Public

MARKET OUTCOME
RESERVE MARKET

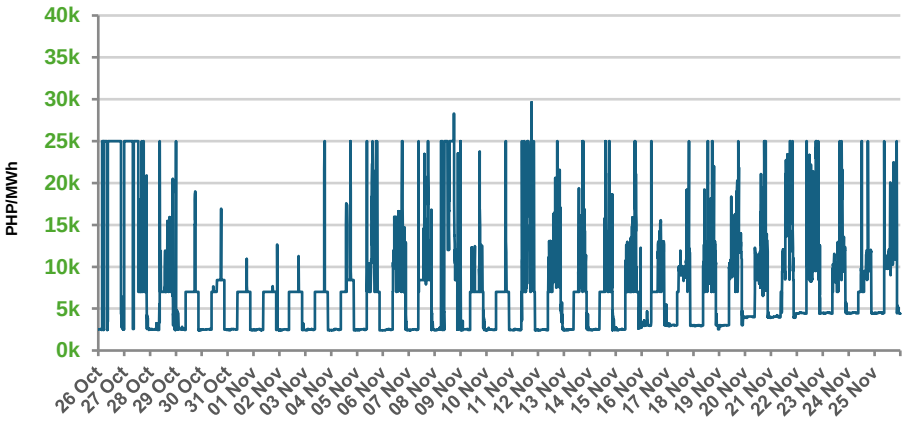
CONTINGENCY

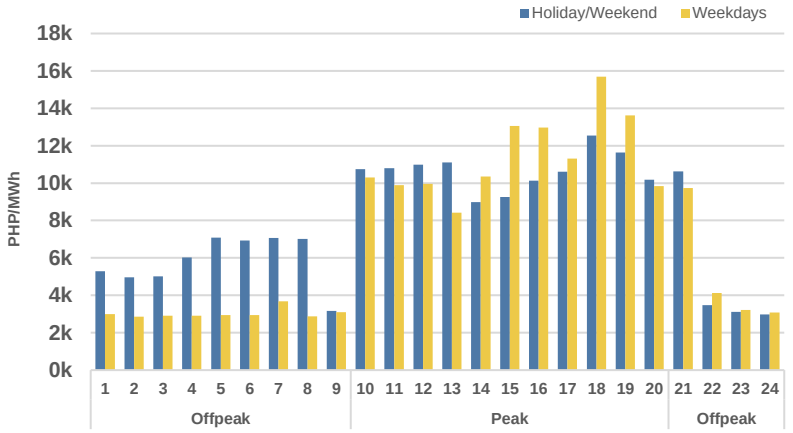
LUZON





VISAYAS





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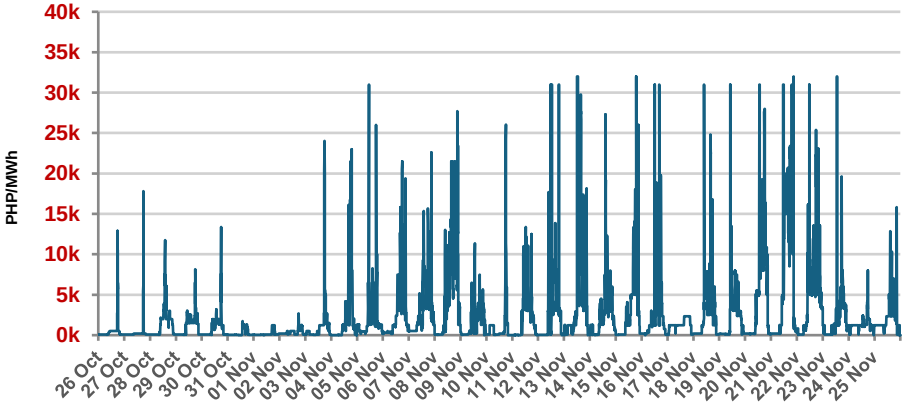
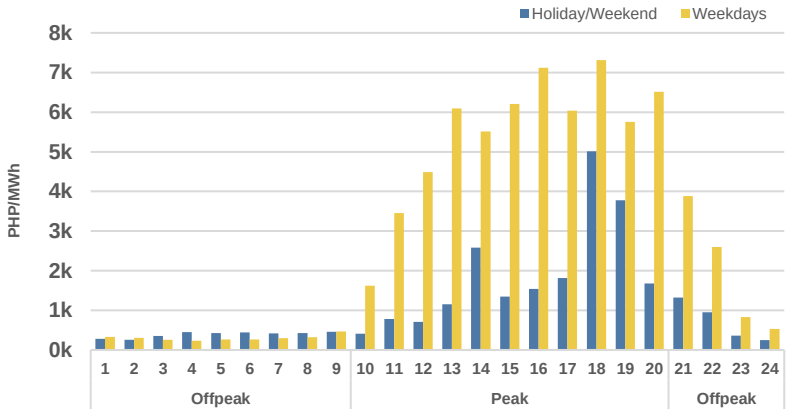


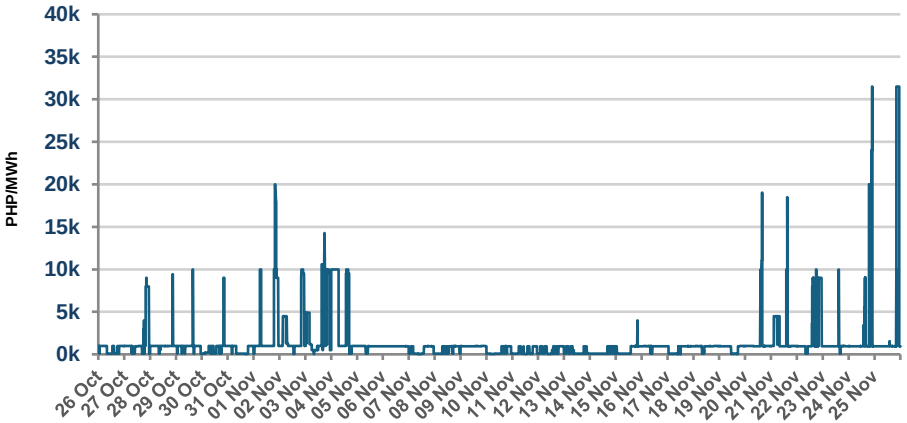


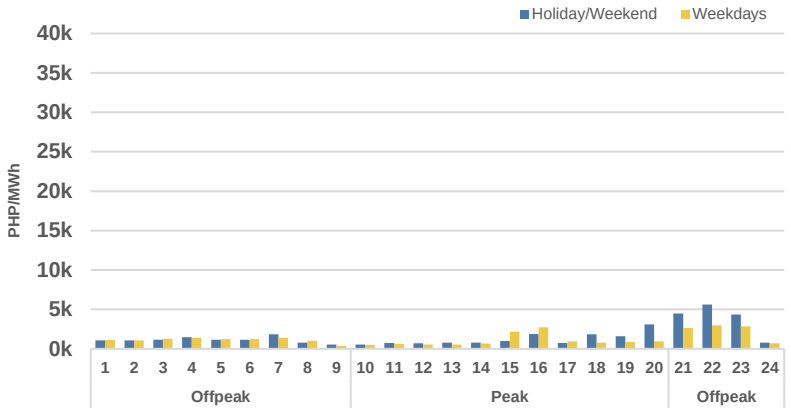
Public

MARKET OUTCOME
RESERVE MARKET

DISPATCHABLE

LUZON





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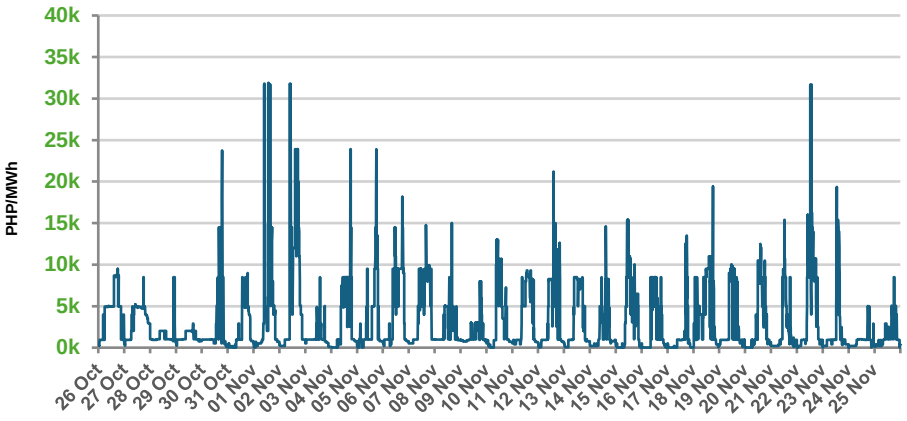

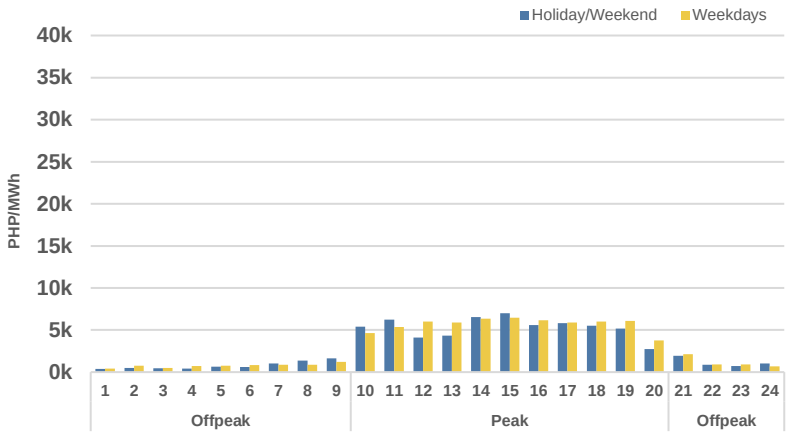

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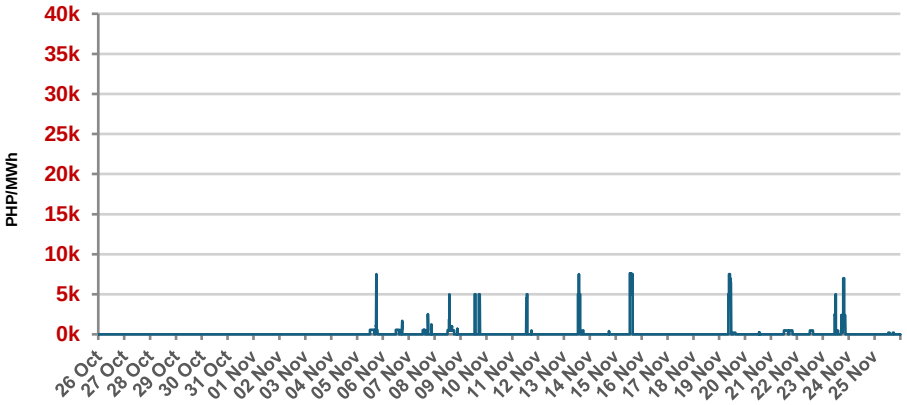

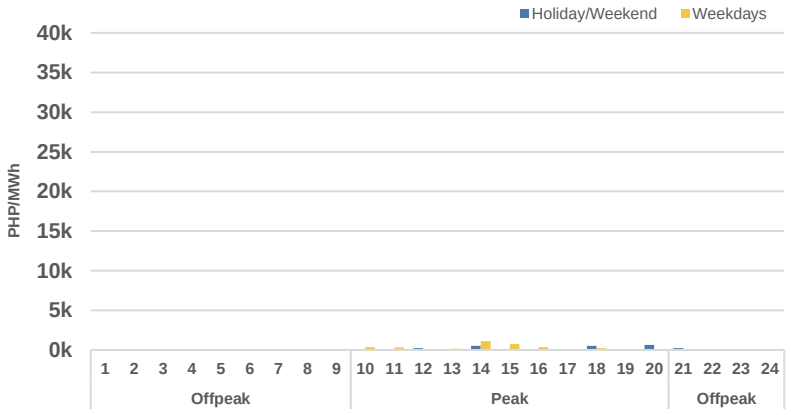

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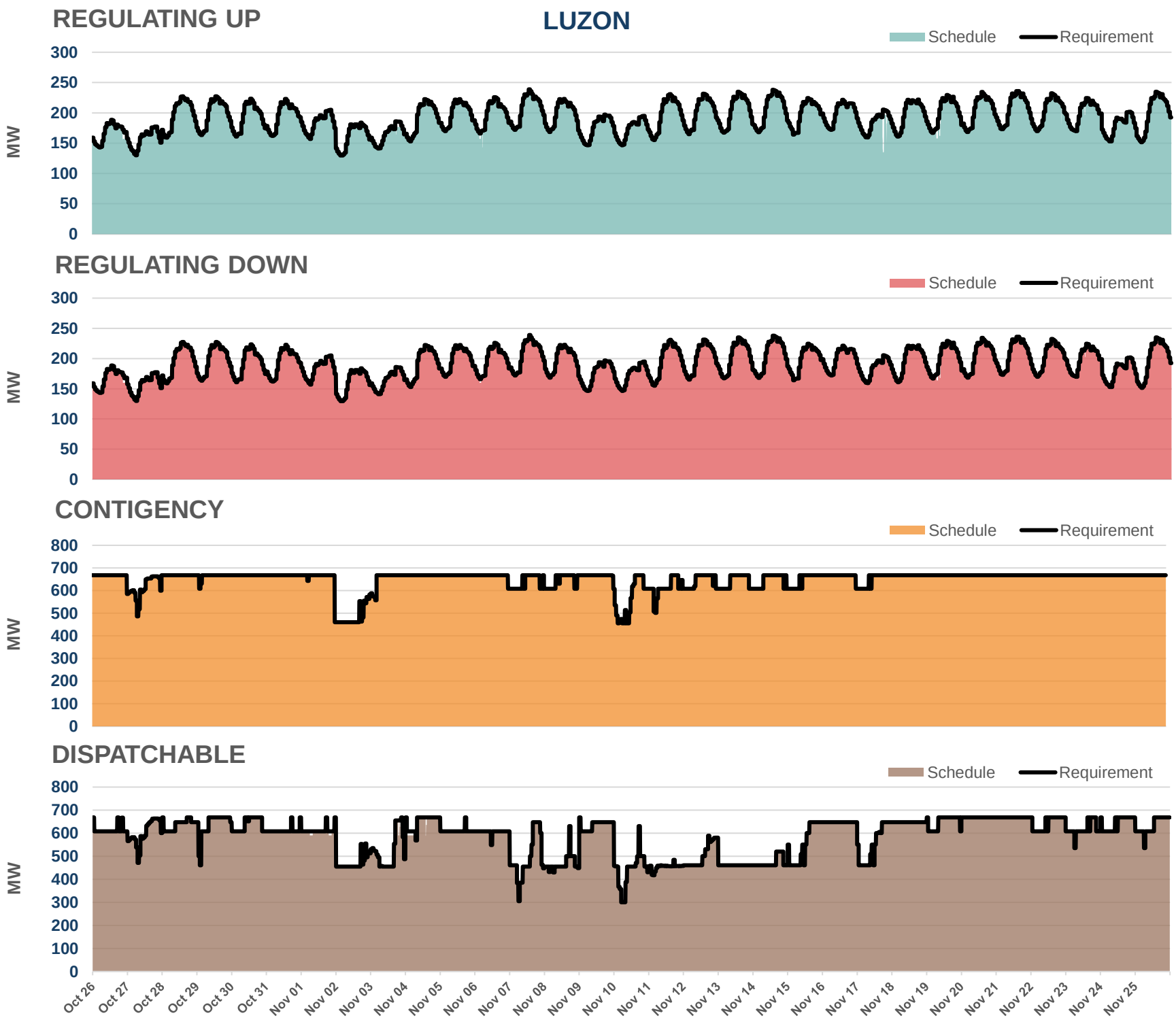
MARKET OUTCOME

RESERVE MARKET



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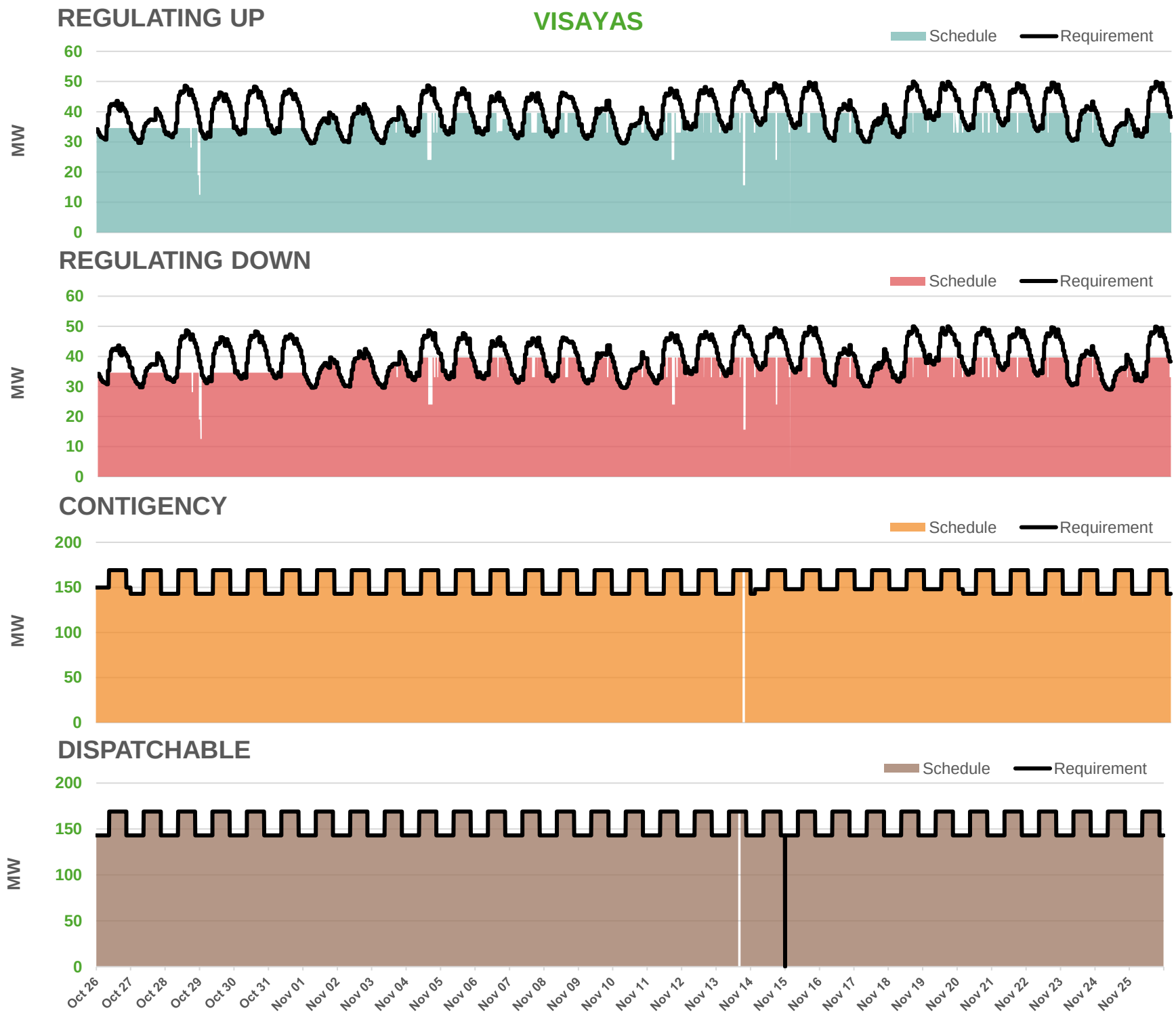


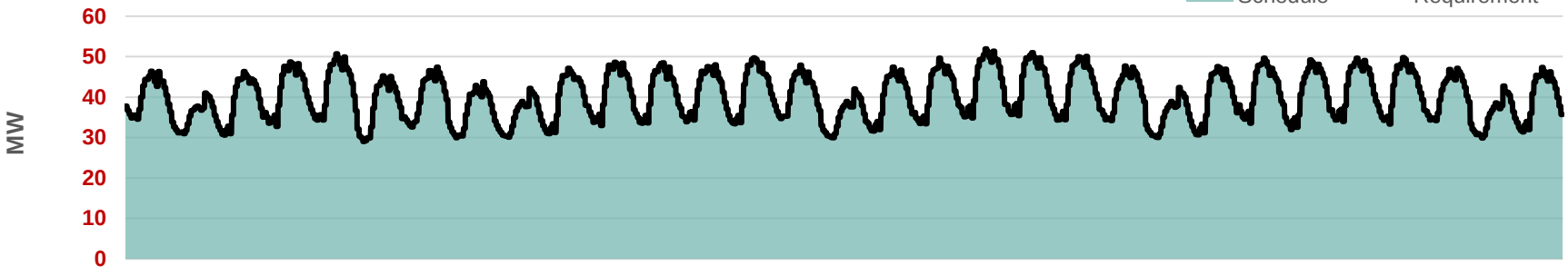
Public

MARKET OUTCOME

RESERVE MARKET

MINDANAO

REGULATING UP



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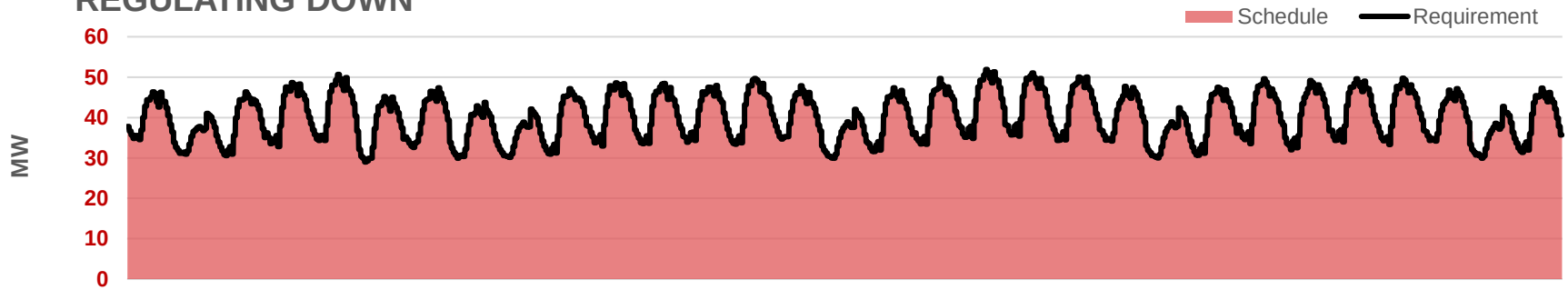

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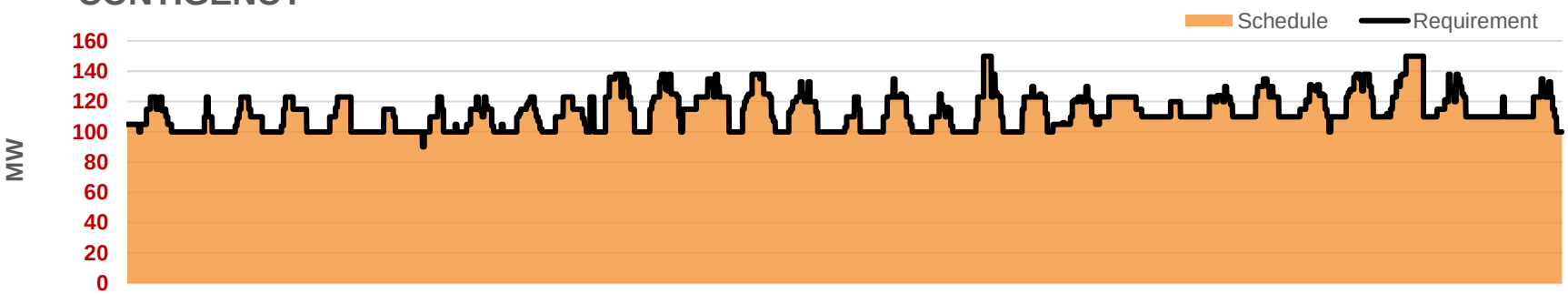

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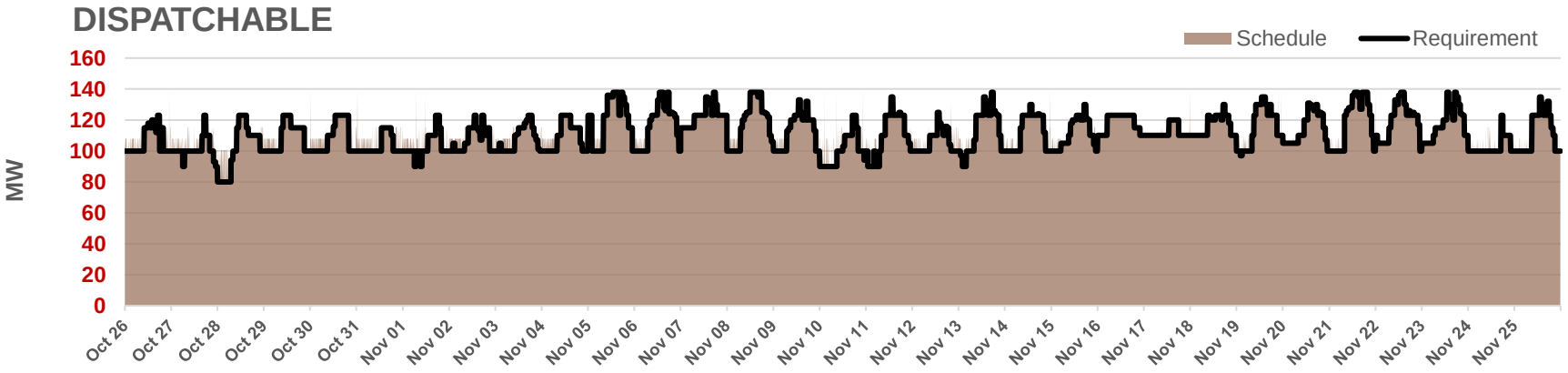
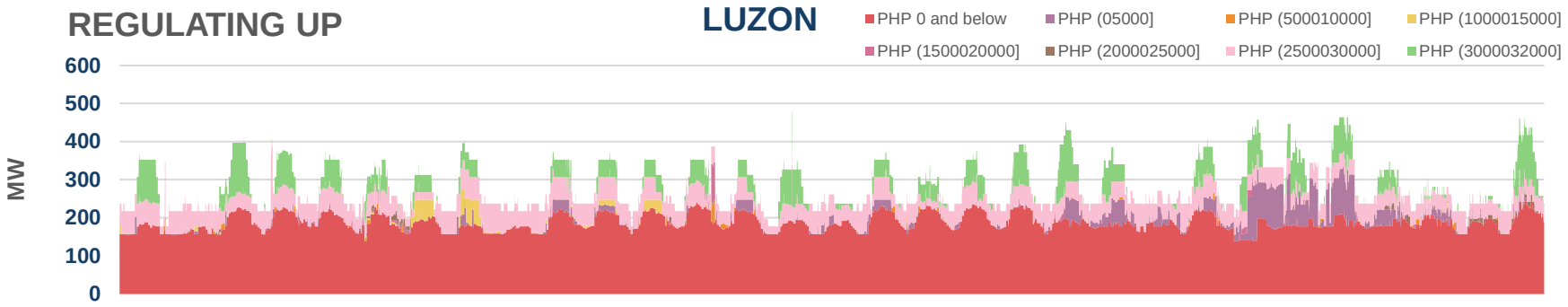


Public

MARKET OUTCOME

RESERVE MARKET - OFFER PATTERN

REGULATING UP



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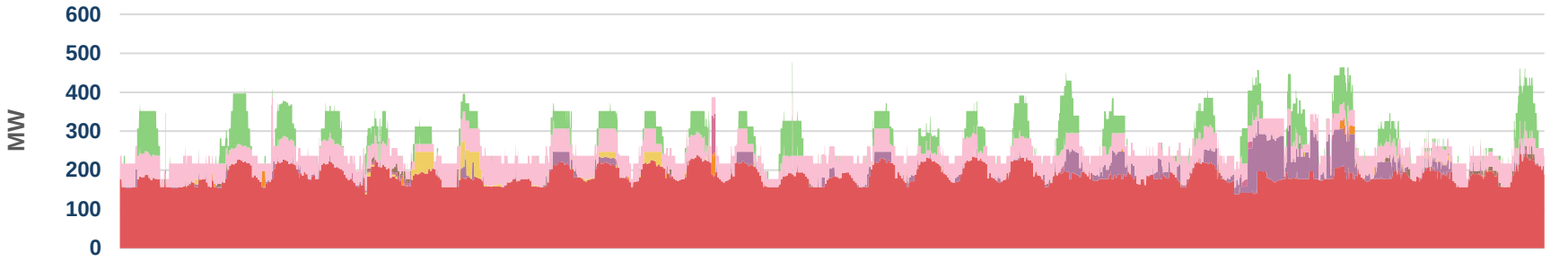

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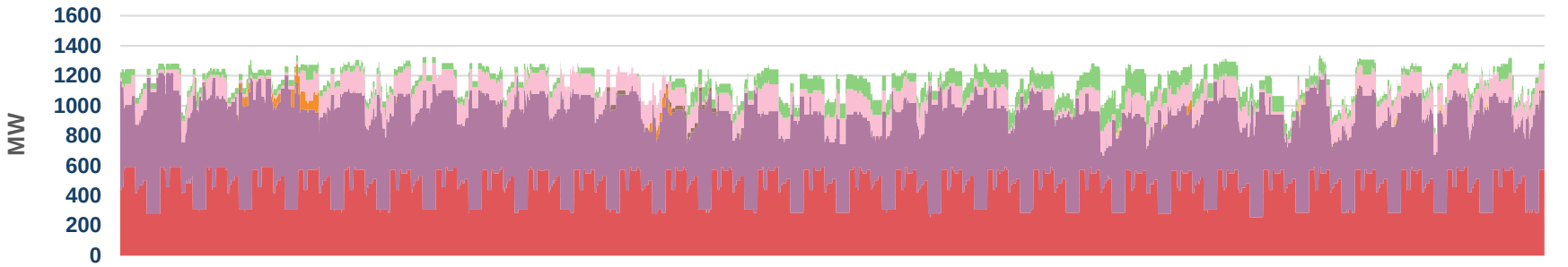

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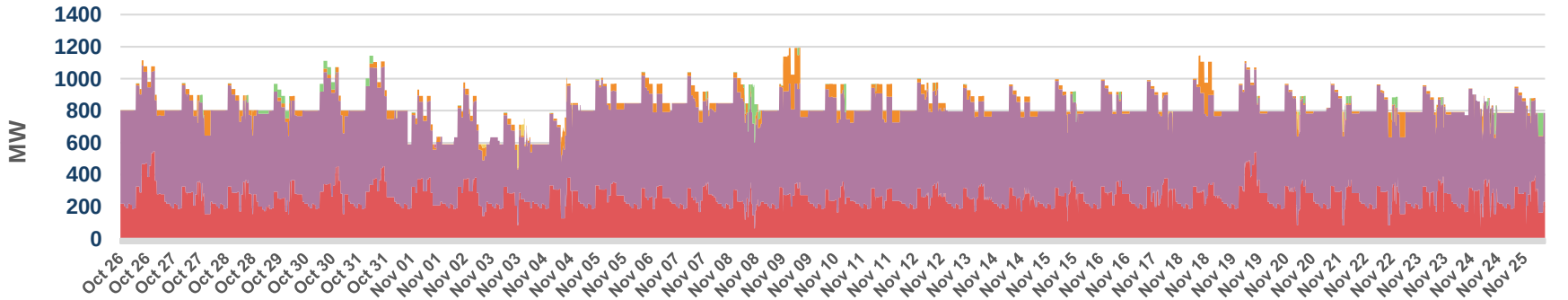
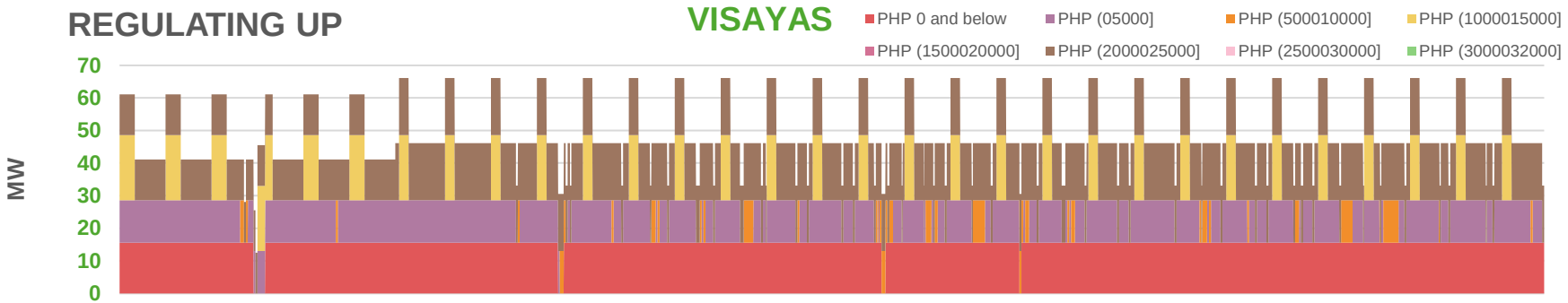


Public

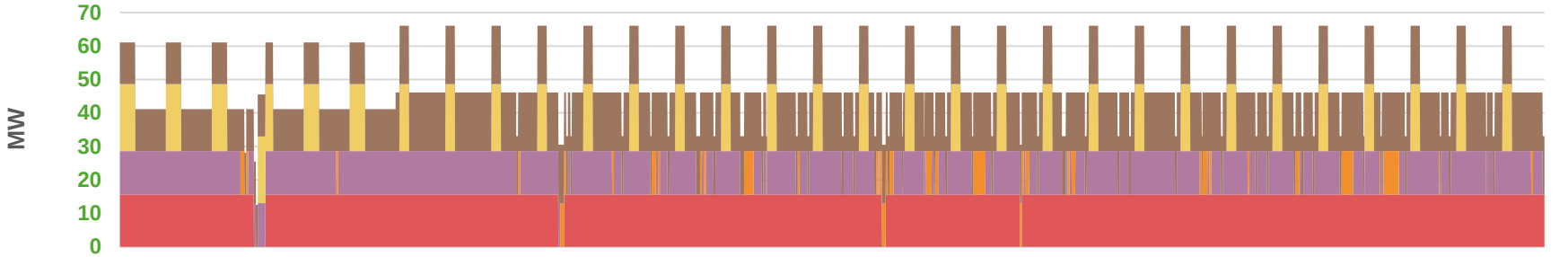
MARKET OUTCOME

RESERVE MARKET - OFFER PATTERN

REGULATING UP



REGULATING DOWN



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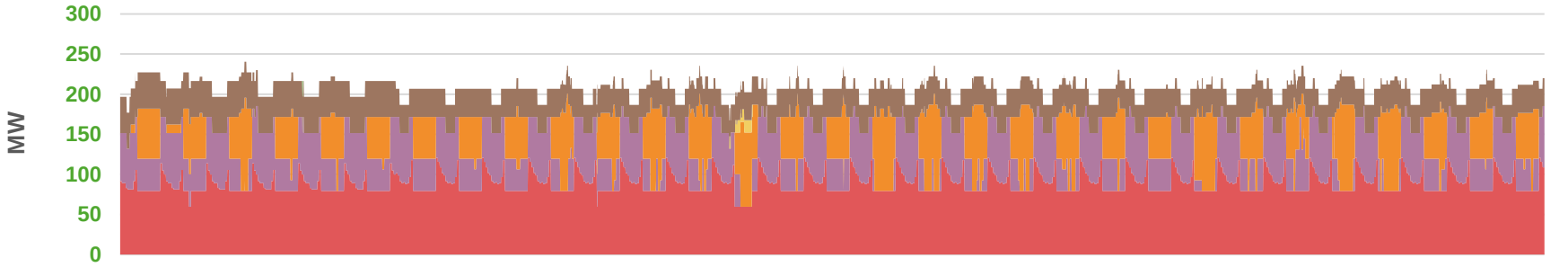

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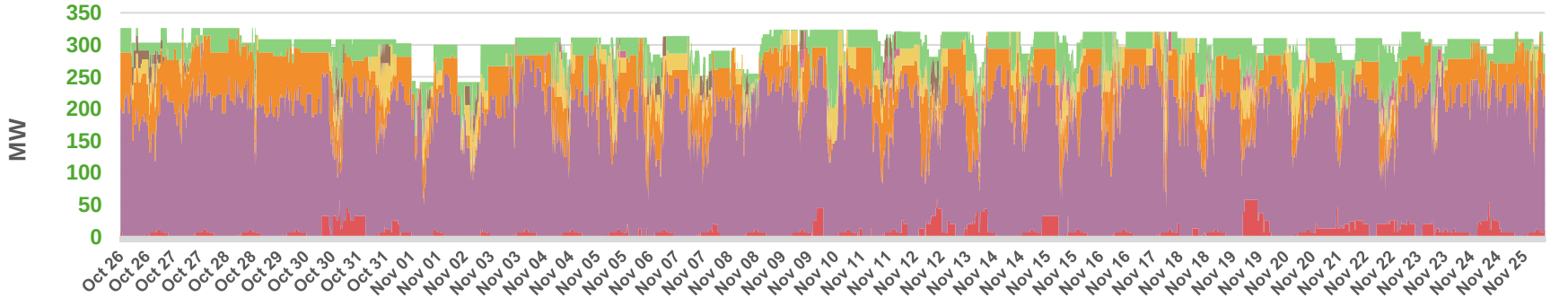

Public

MARKET OUTCOME

RESERVE MARKET - OFFER PATTERN



MARKET OUTCOME
ANNEX

Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Luzon							
BAT	LUMBAN BESS	50	26/10/2024 20:43			Forced Outage	Affected by the outage of DU during the passage of Typhoon Kristine draining their backup power of the controls of panels and relay which unable to operate this equipment.
BAT	MAGAPIT BESS	40	07/11/2024 18:51	08/11/2024 12:45	1	Forced Outage	Isolated after the tripping of Tuguegarao-Magapit 69kV line due to typhoon MARCE .
BIOF	VSGRIP	5.4	30/10/2024 17:26	31/10/2024 00:08	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	IPOWER 2	10.8	30/10/2024 17:26	31/10/2024 03:24	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	IPOWER	10.8	30/10/2024 17:26	31/10/2024 00:01	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	GRASSGOLD	10.8	30/10/2024 17:26	31/10/2024 00:07	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	GIFTC2	6	30/10/2024 17:26	31/10/2024 02:23	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	GIFTC	12	30/10/2024 17:26	31/10/2024 01:30	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
BIOF	ACN	3.2	30/10/2024 17:53			Forced Outage	Unplanned outage. Reason for verification with plant.
BIOF	IPOWER 2	10.8	01/11/2024 12:01	05/11/2024 15:26	4	Forced Outage	Affected by the autoreclosing of Cabanatuan-Fatima 69kV line.
BIOF	IBEC	18	11/11/2024 09:06	12/11/2024 15:09	1	Forced Outage	Affected by the tripping of Santiago-Cauayan 69kV line due to typhoon NIKA.
BIOF	VSGRIP	5.4	12/11/2024 04:31	14/11/2024 08:01	2	Forced Outage	Ash handling problem.
BIOF	BBEC	5	16/11/2024 18:43	19/11/2024 13:26	3	Forced Outage	Affected by the tripping of Naga-Lagonoy 69kV line due to typhoon PEPITO.?
BIOF	IBEC	18	18/11/2024 01:49	19/11/2024 00:03	1	Forced Outage	Affected by the tripping of Santiago-Cauayan 69kV line due to the passage of typhoon PEPITO.?
BIOF	GRASSGOLD	10.8	23/11/2024 02:11	25/11/2024 16:01	2	Forced Outage	Emergency shutdown due to turbine control panel trouble.
BIOF	TRUST BIO	1.7	25/11/2024 15:57			Forced Outage	Emergency shutdown to conduct tuning due to high Hydrogen Sulfide content of Biogas Supply.
BIOF	IPOWER	10.8	25/11/2024 19:01			Maintenance Outage	Maintenance outage to correct steam leak at pressure reducer until November 27 2024.
COAL	PETRON 3	35	20/01/2024 17:26			Forced Outage	High furnace pressure and main steam piping rupture.
COAL	PBL2	b	20/09/2024 00:35			Planned Outage	Planned Outage until November 30 2024.
COAL	CLC2	300	24/10/2024 06:26	31/10/2024 07:05	7	Forced Outage	Main fuel trip.
COAL	CLC1	240	24/10/2024 08:32	28/10/2024 05:07	4	Forced Outage	Emergency shutdown due to coal silo trouble.
COAL	SLPGC 2	149.6	24/10/2024 10:15	04/11/2024 08:03	11	Forced Outage	The unit tripped. Cause of outage is under investigation.
COAL	SLPGC 1	150	24/10/2024 11:42	31/10/2024 11:39	7	Forced Outage	Emergency shutdown due to low vacuum on main turbine condenser.
COAL	PBL1	382	24/10/2024 16:00	26/10/2024 09:31	2	Forced Outage	Boiler tube leak.
COAL	SCPC 2	150	24/10/2024 22:39	26/10/2024 04:19	2	Forced Outage	Gas air heater motor trouble.
COAL	SLTEC 2	124	24/10/2024 23:46	29/10/2024 17:05	5	Forced Outage	Tripped due to low condenser vacuum.
COAL	MPGC 1	150	25/10/2024 04:41	29/10/2024 04:59	4	Forced Outage	Trip while on emergency shutdown due to Seawater cooling trouble.
COAL	GMAJESTIC	316	26/10/2024 09:13	27/10/2024 13:29	1	Forced Outage	Air preheater trouble.
COAL	DINGININ 1	668	27/10/2024 15:15	28/10/2024 13:04	1	Forced Outage	Tripped due to fault on turbine control system (TCS).
COAL	SLTEC 1	122	31/10/2024 00:01	03/11/2024 16:43	3	Forced Outage	Unplanned outage to facilitate the correction of low condenser vacuum.
COAL	MPGC 1	150	31/10/2024 23:47	01/11/2024 00:47	1	Maintenance Outage	On house load test operation.
COAL	MPGC 1	150	01/11/2024 01:01	03/11/2024 23:59	2	Maintenance Outage	On Maintenance Outage until November 3 2024.

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Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Luzon							
COAL	MPGC 2	150	01/11/2024 16:00	03/11/2024 15:58	2	Maintenance Outage	Maintenance outage related to the shutdown of Mariveles-MPGC 500KV line 1.
COAL	MPGC 4	150	01/11/2024 20:00	03/11/2024 14:24	2	Maintenance Outage	Maintenance outage related to the shutdown of Mariveles-MPGC 500KV line 1.
COAL	MSLC3	335	02/11/2024 17:14	03/11/2024 09:39	1	Forced Outage	The unit tripped due to the tripping BFWP-3A and BFWP-3B.
COAL	MPGC 1	150	04/11/2024 00:00	22/11/2024 01:26	18	Forced Outage	Extended outage.
COAL	DINGININ 1	668	06/11/2024 12:00	15/11/2024 17:50	9	Forced Outage	Emergency shutdown due to boiler tube leak.
COAL	SLPGC 2	149.6	14/11/2024 22:51			Maintenance Outage	Maintenance outage.
COAL	SUAL 1	647	14/11/2024 23:31			Planned Outage	Planned Outage.
COAL	SBPL	455	15/11/2024 23:50	16/11/2024 00:00	1	Forced Outage	Emergency shutdown due to high bypass pressure. On schedule planned outage at 0000H of Nov. 16 2024
COAL	SBPL	455	16/11/2024 00:01	25/11/2024 16:57	9	Maintenance Outage	Maintenance outage from November 16 - 25 2024
COAL	PBL3	420	22/11/2024 18:25	25/11/2024 00:54	3	Forced Outage	Emergency shutdown due to excessive build up of bottom ash in boiler lower furnace
COAL	SBPL	455	25/11/2024 20:31			Forced Outage	Tripped due to control valve sudden closure.
GEO	TIWI C BINARY	16.7	14/10/2024 18:08			Maintenance Outage	Unit shutdown to the facilitate cleaning of vaporizer and preheater. The unit is under test and commissioning.
GEO	MB 2	57	28/10/2024 11:15	29/10/2024 00:21	1	Forced Outage	Tripped due to low condenser vacuum.
GEO	TW 6	56.8	09/11/2024 00:02			Maintenance Outage	Declared unavailable to facilitate essential repairs on the hot well on Transformer.
GEO	PALAYAN BINARY	31	16/11/2024 05:04	17/11/2024 15:35	1	Forced Outage	Contingency measure to Typhoon Pepito.
GEO	BACMAN3	20	16/11/2024 06:07	18/11/2024 13:51	2	Forced Outage	Contingency measure to Typhoon Pepito.
GEO	BACMAN1	60	16/11/2024 06:46	17/11/2024 15:23	1	Forced Outage	Contingency measure to Typhoon Pepito.
GEO	BACMAN2	60	16/11/2024 09:35	17/11/2024 12:15	1	Forced Outage	Contingency measure to Typhoon Pepito.
GEO	TW 5	57	16/11/2024 18:22	18/11/2024 22:52	2	Forced Outage	On house load as contingency measure to the passage of typhoon PEPITO.
GEO	MB O1	3	25/11/2024 18:19			Forced Outage	Brine optimization for the capacity testing of Unit 12.
HYD	ANG M U4	50	14/02/2022 00:00			Planned Outage	Planned outage.
HYD	ANG A U2	6	06/11/2023 08:01			Planned Outage	Total Plant shutdown (Planned Outage)
HYD	ANG M U1	50	28/06/2024 08:01			Maintenance Outage	Replacement of Main Unit No.1 in relation to the ongoing AHEPP Modernization and Rehabilitation Project (December 31 2024 2400H).
HYD	INARIHAN	1.6	22/10/2024 04:29			Forced Outage	Affected by the outage of CASURECO.
HYD	NIA	6	22/10/2024 15:50	04/11/2024 10:08	13	Forced Outage	Suspension of IDR due to typhoon KRISTINE.
HYD	TIBAG	5.8	24/10/2024 02:00	01/11/2024 19:15	8	Forced Outage	Affected by Transmission line tripping due to passage of TC Kristine.
HYD	L LABAYAT	1.4	24/10/2024 02:00	01/11/2024 16:53	8	Forced Outage	Affected by line tripping due to TC Kristine
HYD	MAS	12	30/10/2024 17:26	31/10/2024 00:02	1	Forced Outage	Affected by the tripping of Cabanatuan-Fatima 69kV Line.
HYD	KAL 1	181.1	04/11/2024 00:01	08/11/2024 23:59	4	Planned Outage	Semi Annual Maintenance until November 9 2024.
HYD	CAL U2	14	04/11/2024 08:00	08/11/2024 23:00	4	Planned Outage	Planned outage until Nov 8 2024.
HYD	CAL U1	14	04/11/2024 08:00	08/11/2024 23:00	4	Planned Outage	Planned Outage until Nov. 8 2024.

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Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Luzon							
HYD	PAN 2	60	04/11/2024 22:59	05/11/2024 13:17	1	Forced Outage	Earth fault activation
HYD	PAN 1	60	06/11/2024 21:00	07/11/2024 16:21	1	Forced Outage	Tripped due to actuation of differential protection
HYD	PAN 1	60	07/11/2024 23:37	08/11/2024 19:01	1	Forced Outage	Stator earth fault tripped.
HYD	KAL 1	181.1	09/11/2024 00:00	13/11/2024 22:24	4	Planned Outage	Planned outage until November 13 2024.
HYD	BOTCN	0.8	11/11/2024 00:00	15/11/2024 18:25	4	Planned Outage	On Planned Outage until November 15 2024.
HYD	BAKN SINIPSIP	12.4	17/11/2024 14:53	18/11/2024 15:38	1	Forced Outage	Due to cut conductor at plant AOR. Affected by the passage of Typhoon PEPITO.
HYD	MATUNO	8.7	17/11/2024 15:45	19/11/2024 11:18	2	Forced Outage	Affected by Bayombong-Matuno 69kV Line tripping.
HYD	MARIS 2	4.3	17/11/2024 16:04	18/11/2024 07:16	1	Forced Outage	Affected by the tripping of Bayombong ? SanTiago 230kV line 1 due to passage of Typhoon PEPITO
HYD	MARIS 1	4.3	17/11/2024 16:04	18/11/2024 07:58	1	Forced Outage	Affected by the tripping of Bayombong ? SanTiago 230kV line 1 due to passage of Typhoon PEPITO
HYD	SAL-ANGAN	2.4	17/11/2024 22:46	18/11/2024 09:40	1	Forced Outage	Affected by the tripping of Itogon - Ampucao line due to passage of Typhoon PEPITO
HYD	CASEC 2	82.5	18/11/2024 15:50	19/11/2024 21:05	1	Forced Outage	Tripped due to lower guide bearing trouble.
HYD	KAL 3	181.4	19/11/2024 00:00	23/11/2024 23:59	4	Planned Outage	Planned outage until November 23 2024.
NATG	EERI2	440	10/08/2024 12:02	30/10/2024 10:37	81	Maintenance Outage	Maintenance outage after steam blowing. The unit is under test and commissioning.
NATG	ST. RITA 30	263	18/09/2024 00:15	29/10/2024 19:44	41	Planned Outage	Planned Outage until November 1 2024.
NATG	EERI3	440	02/10/2024 16:56			Maintenance Outage	Under test and commissioning.
NATG	EERI1	440	20/10/2024 20:43	05/11/2024 11:57	16	Forced Outage	Demi water supply shortage. On Commissioning Test
NATG	ST. RITA 20	263	22/10/2024 06:12	11/11/2024 01:49	20	Forced Outage	Tripped due to activation of unit protection
NATG	ILIJAN A1	190	22/10/2024 22:41	28/10/2024 13:47	6	Forced Outage	Emergency shutdown due to Gas Supply restriction.
NATG	ILIJAN B1	190	24/10/2024 10:04	29/10/2024 18:23	5	Forced Outage	Emergency tripped due to gas supply trouble.
NATG	ILIJAN B3	220	25/10/2024 09:09	29/10/2024 20:15	4	Forced Outage	Emergency shutdown ue to gas supply problem.
NATG	ILIJAN B2	190	25/10/2024 09:27	29/10/2024 14:45	4	Forced Outage	Emergency shutdown ue to gas supply problem.
NATG	AVION 1	47.2	26/10/2024 21:00	27/10/2024 01:19	1	Forced Outage	Unable to start due to trouble on fuel system
NATG	ILIJAN B2	190	29/10/2024 17:10	31/10/2024 07:25	2	Forced Outage	To swap with Ilijan B1
NATG	ST. RITA 30	263	29/10/2024 19:44	30/10/2024 15:06	1	Forced Outage	On commissioning test
NATG	EERI2	440	30/10/2024 15:55	01/11/2024 08:49	2	Maintenance Outage	Under test and commissioning.
NATG	ST. RITA 30	263	30/10/2024 20:59	31/10/2024 17:30	1	Forced Outage	On commissioning test.
NATG	EERI2	440	01/11/2024 09:25	03/11/2024 08:24	2	Forced Outage	The unit tripped while on test and commissioning.
NATG	ST. RITA 30	263	01/11/2024 17:08	04/11/2024 11:55	3	Planned Outage	Under test and commissioning after major overhaul.
NATG	ILIJAN B1	190	01/11/2024 17:29	04/11/2024 10:18	3	Forced Outage	Unit tripped due to actuation of generator lockout protection.
NATG	EERI2	440	03/11/2024 08:49	06/11/2024 10:18	3	Forced Outage	On commissioning
NATG	ST. RITA 30	263	04/11/2024 23:56	05/11/2024 21:01	1	Forced Outage	On commissioning.
NATG	ILIJAN A1	190	06/11/2024 01:25			Forced Outage	Emergency shutdown due to fuel supply problem.
NATG	EERI2	440	06/11/2024 14:48	07/11/2024 09:42	1	Forced Outage	Tripped due to cold reheat high pressure outlet high high.

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Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Luzon							
NATG	EERI2	440	09/11/2024 09:55	10/11/2024 06:58	1	Forced Outage	On commisiiioning
NATG	EERI2	440	11/11/2024 11:51	13/11/2024 04:22	2	Forced Outage	High conductivity of hotwell.
NATG	EERI1	440	11/11/2024 12:48	14/11/2024 19:39	3	Forced Outage	On commissioning.
NATG	EERI2	440	13/11/2024 11:37	14/11/2024 06:02	1	Forced Outage	On commissioning.
NATG	EERI2	440	14/11/2024 18:16	15/11/2024 07:03	1	Forced Outage	On test and commissioning.
NATG	EERI2	440	16/11/2024 08:33	18/11/2024 15:25	2	Forced Outage	Tripped due to high condenser conductivity.
NATG	ILIJAN B1	190	18/11/2024 21:56	21/11/2024 01:11	3	Forced Outage	Gas supply restriction.
NATG	ILIJAN A3	220	19/11/2024 14:28			Forced Outage	Emergency shutdown due to gas supply problem.
NATG	ILIJAN A2	190	19/11/2024 14:40			Forced Outage	Emergency shutdown due to gas supply problem.
NATG	EERI2	440	19/11/2024 21:22			Forced Outage	Tripped due to HP bypass valve signal error.
OIL	MAL 1	300	03/05/2019 18:21			Forced Outage	Declared unavailable due to motorization of unit generator caused by the non-opening of phase B of PCB 8-05CB08MAL
OIL	MAL 2	130	24/07/2024 21:24			Forced Outage	Tripped due to loss prime of CWP
OIL	BPPC S3	70	01/11/2024 06:01	04/11/2024 16:07	3	Maintenance Outage	Maintenance outage
OIL	BPPC S2	70	01/11/2024 06:01	04/11/2024 16:07	3	Maintenance Outage	Maintenance outage
OIL	BPPC S1	70	01/11/2024 06:01	04/11/2024 16:07	3	Maintenance Outage	Maintenance outage
SOLR	CAGAYAN NORTH	115	07/11/2024 18:51	08/11/2024 17:11	1	Forced Outage	Isolated after the tripping of Tuguegarao-Magapit 69kV line due to typhoon MARCE .
WIND	NWIND 2	18.8	07/11/2024 15:44	10/11/2024 15:55	3	Forced Outage	Affected by Laoag-Bangi Wind Farm 69kV Line tripping.
WIND	NWIND 1	32.4	07/11/2024 15:44	10/11/2024 11:19	3	Forced Outage	Affected by Laoag-Bangi Wind Farm 69kV Line tripping
WIND	CAPRIS	81	07/11/2024 21:11	08/11/2024 18:54	1	Forced Outage	Affected by Laoag-Pagudpod Windfarm 115kV Line tripping.
WIND	CAPA II	50	07/11/2024 22:09			Forced Outage	Overspeed tripping due to TS Marce
WIND	BALAOI WIND	80	07/11/2024 23:18			Forced Outage	Affected by Laoag-Balaoi Windfarm 115kV Line tripping.?
Visayas							
BAT	KAB BESS U0	20	28/10/2024 22:22	29/10/2024 03:02	1	Maintenance Outage	To conduct relay testing of line and transformer differential relays.
BIOF	SCBI U0	7.4	31/03/2023 10:35			Forced Outage	Plant shutdown
BIOF	HPC U1 U0	2	12/11/2023 20:00			Forced Outage	Defective auxiliary of vibration meter.
BIOF	CASA 2 U1	7	15/04/2024 12:44			Forced Outage	Due to internal trouble
BIOF	VMC U0	2.5	21/04/2024 16:20			Forced Outage	Weekly maintenance.
BIOF	NNBP U1	25	22/05/2024 15:59			Forced Outage	Insufficient fuel supply (bagasse).
BIOF	CASA U1	8	30/09/2024 15:32	18/11/2024 16:09	49	Forced Outage	Factory test run of Cogen plant
BIOF	VMCI U0	35	23/10/2024 17:14	05/11/2024 13:05	13	Forced Outage	VMCI isolate from the grid due to tripping of their 13.8kV Breaker. Generator shutdown at 1726H to conduct plant maintenance.
BIOF	CABI U0	12	28/10/2024 14:59			Forced Outage	End of plant test run.
BIOF	HPC U2 U0	9.5	02/11/2024 08:56	04/11/2024 17:13	2	Forced Outage	Shutdown due to weekly maintenance.
BIOF	FFHC U0	9	04/11/2024 05:38	05/11/2024 02:59	1	Forced Outage	Weekly maintenance

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Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Visayas							
BIOF	HPC U2 U0	9.5	18/11/2024 10:13	19/11/2024 00:42	1	Forced Outage	Shutdown to conduct weekly maintenance.
BIOF	CASA U1	8	18/11/2024 16:22	19/11/2024 23:28	1	Forced Outage	Emergency cut-out due to boiler trouble.
BIOF	NNBP U1	25	18/11/2024 23:08	19/11/2024 19:00	1	Forced Outage	Shutdown due to generator alarms.
BIOF	NNBP U1	25	24/11/2024 03:50			Forced Outage	Shutdown due to conveyor problem.
COAL	PEDC U3	150	27/10/2024 00:30			Maintenance Outage	PMS-major overhauling
GEO	MALITBOG U2	77.5	08/07/2024 05:43			Forced Outage	Due to high vibration
GEO	PGPP1 U3	35.5	12/09/2024 00:10	17/11/2024 20:46	66	Forced Outage	emergency shutdown at 0010H to conduct inspection of the turbine rotor due to high bearing no.1 vibration.
GEO	BAGO BINARY U1	4.7	24/09/2024 19:57			Forced Outage	Turbine tripped under test and commissioning.
GEO	BILIRAN U1	1	05/10/2024 04:39			Forced Outage	Turbine high vibration trip
GEO	NASULO U0	47.5	22/10/2024 16:06	28/10/2024 14:14	6	Forced Outage	Affected by tripping of Amlan-Nasuji 138kV Line 1 and Line 2.
GEO	UMPP U2	30	23/10/2024 08:21			Maintenance Outage	Emergency repair of air cooled condenser
GEO	UMPP U4	27.5	23/10/2024 08:25			Maintenance Outage	Emergency repair of air cooled condenser
GEO	PGPP2 SOG1 U0	20	24/10/2024 19:47	27/10/2024 12:14	3	Forced Outage	Auto-tripped due to opening of breaker 52SG1.
GEO	PGPP2 SOG2 U0	20	25/10/2024 20:45	27/10/2024 09:35	2	Forced Outage	Isolate from the grid due to tripping of 52SGN AND 52OK.
GEO	TGPP U1	41	29/10/2024 06:30	30/10/2024 03:11	1	Forced Outage	Emergency shutdown for repair of steam leaks (scrubber body and gland ceiling pipeline)
GEO	PGPP1 U3	35.5	20/11/2024 16:37	21/11/2024 17:33	1	Forced Outage	Emergency shutdown due to oil leak at generator exciter side.
GEO	PGPP1 U3	35.5	25/11/2024 22:06			Forced Outage	Emergency shutdown due to excessive leak of its generator air cooler D drain line.
HYD	THC U1	5	23/10/2024 22:45			Forced Outage	Due to Low water level.
HYD	Villasiga U3	0.9	24/10/2024 14:44	26/10/2024 14:31	2	Forced Outage	affected by line fault
HYD	Villasiga U2	3.6	24/10/2024 14:44	26/10/2024 14:28	2	Forced Outage	affected by line fault
HYD	Villasiga U3	0.9	26/10/2024 23:39			Forced Outage	cut-out due to flash flood
HYD	UPPER TAFT U1	4.7	27/10/2024 09:15	28/10/2024 09:09	1	Forced Outage	Changeover from unit 3
HYD	Villasiga U2	3.6	27/10/2024 19:38	28/10/2024 04:26	1	Forced Outage	Low water pressure at intake gate
HYD	LHEP U3	0.4	27/10/2024 23:54	28/10/2024 00:14	1	Forced Outage	Carbon brush cleaning.
HYD	UPPER TAFT U3	4.7	28/10/2024 09:06	29/10/2024 04:19	1	Forced Outage	Changed over to unit 1
HYD	UPPER TAFT U2	4.7	28/10/2024 18:14	29/10/2024 23:48	1	Forced Outage	Insufficient water intake.
HYD	UPPER TAFT U3	4.7	29/10/2024 13:03	03/11/2024 08:27	5	Forced Outage	Insufficient water intake
HYD	UPPER TAFT U2	4.7	30/10/2024 09:03	01/11/2024 07:58	2	Forced Outage	Changeover of unit from 2 to 1. (Insufficient water supply)
HYD	THC U3	5.1	01/11/2024 07:44	02/11/2024 20:10	1	Forced Outage	Affected by tripping of Taft Feeder
HYD	UPPER TAFT U1	4.7	01/11/2024 07:51	05/11/2024 09:04	4	Forced Outage	Affected by Paranas-Quinapondan tripping.
HYD	UPPER TAFT U3	4.7	03/11/2024 20:44	06/11/2024 06:16	3	Forced Outage	Emergency outage due to grease leakage caused by a mechanical fault (Under test and commissioning).
HYD	UPPER TAFT U2	4.7	05/11/2024 08:58	10/11/2024 09:14	5	Forced Outage	Insufficient water intake. (Under test and commissioning)
HYD	UPPER TAFT U1	4.7	06/11/2024 06:12			Forced Outage	Insufficient water intake. (Under test and commissioning)

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Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Visayas							
HYD	UPPER TAFT U3	4.7	07/11/2024 21:15	12/11/2024 06:10	5	Forced Outage	Insufficient water intake. (Under test and commissioning)
HYD	UPPER TAFT U1	4.7	10/11/2024 09:14	17/11/2024 09:04	7	Forced Outage	Change unit. Under test and commissioning.
HYD	UPPER TAFT U2	4.7	12/11/2024 06:10	15/11/2024 13:09	3	Forced Outage	Change unit. Under test and commissioning.
HYD	UPPER TAFT U3	4.7	15/11/2024 13:02	21/11/2024 06:31	6	Forced Outage	Change unit (under test and commissioning).
HYD	THC U2	5.1	15/11/2024 19:27	25/11/2024 07:04	10	Forced Outage	Due to unbalanced current.
HYD	UPPER TAFT U2	4.7	17/11/2024 09:00	19/11/2024 00:40	2	Forced Outage	Change unit. Under test and commissioning.
HYD	UPPER TAFT U1	4.7	19/11/2024 00:31	25/11/2024 18:52	6	Forced Outage	Affected by tripping of Taft Feeder
HYD	UPPER TAFT U2	4.7	21/11/2024 06:32			Forced Outage	Under test & commissioning
HYD	THC U2	5.1	25/11/2024 18:28			Forced Outage	Affected by normalization of Taft Feeder
HYD	UPPER TAFT U3	4.7	25/11/2024 18:31			Forced Outage	Affected by normalization of Taft Feeder. Under test and commissioning
OIL	EAUC U1	11.5	13/05/2024 22:55			Forced Outage	CYLINDER NO. 7 CRANKCASE EXPLOSION
OIL	TPC (Carmen) U4	10	24/08/2024 00:00			Forced Outage	Detached connecting rods and crank shaft for machining
OIL	EAUC U2	11	13/10/2024 07:01	03/11/2024 07:00	21	Planned Outage	Conduct 5 000 types preventive maintenance
OIL	TPVI U3	5.5	28/10/2024 21:53	08/11/2024 13:06	11	Forced Outage	Unable to cut-in unit due to main bearing #9 temperature high
OIL	TPVI U1	5.5	28/10/2024 21:53			Forced Outage	Unable to cut-in unit due to main bearing #6 temperature high
OIL	CENPRI U5	6.7	29/10/2024 00:01	06/11/2024 17:30	8	Forced Outage	To conduct servicing of lube oil jacket water shell and tube type cooler.
OIL	CPPC U8	6.5	01/11/2024 00:01			Planned Outage	To conduct 90 000H Piston replacement + 81 000 ERH - 3 000H Type PMS
OIL	PDPP3 U5	12	07/11/2024 10:31	08/11/2024 22:50	1	Forced Outage	HT water leak at cylinder A4
OIL	PDPP3 U3	12	07/11/2024 10:31	08/11/2024 21:45	1	Forced Outage	Abnormal sound at T C A bank
OIL	PDPP1 U5	5	07/11/2024 11:00	08/11/2024 07:35	1	Forced Outage	Excessive water leak at T C A-Bank
OIL	TPC (Carmen) U1	10	18/11/2024 00:00	22/11/2024 15:17	4	Planned Outage	Shutdown request of Toledo Power Company Carmen Diesel Power Plant DG1 (TPC-CDPP DG1) to conduct Preventive Maintenance Schedule from November 18-22 2024 (Per DOE approved GOMP CY2024).
OIL	EAUC U2	11	23/11/2024 07:00	25/11/2024 07:55	2	Planned Outage	To conduct the piston and liner replacement preventive maintenance
SOLR	MONTESOL U0	14.5	26/10/2024 11:51	27/10/2024 01:23	1	Forced Outage	Isolated due to tripping of 69kV Amlan-Bindoy-San Carlos 69kV Line.
SOLR	Silay Solar U0	20	29/10/2024 17:52	30/10/2024 00:12	1	Forced Outage	Shutdown to conduct PMS at Switching and Substation equipment.
SOLR	SACASOL 1AB U0	19.5	29/10/2024 19:06	30/10/2024 03:30	1	Forced Outage	Isolated due to PMS of San Carlos-SACASOL 69kV Line 1
SOLR	SACASOL 1CD U0	19.8	30/10/2024 19:08	31/10/2024 02:25	1	Forced Outage	Isolated due to PMS of San Carlos-SACASOL 69kV Line 2
SOLR	Silay Solar U0	20	13/11/2024 18:01	14/11/2024 00:28	1	Forced Outage	Citicore Solar Negros Occidental to conduct maintenance activity of their lateral line and substation equipment.
SOLR	ISLASOL III U0	40.5	17/11/2024 20:36	18/11/2024 05:00	1	Forced Outage	To conduct annual PMS of MV equipment.
SOLR	ISLASOL III U0	40.5	18/11/2024 18:18	19/11/2024 01:20	1	Forced Outage	Isolated due to PMS of 69KV Cadiz-Islasol III(CO).
SOLR	ISLASOL III U0	40.5	19/11/2024 18:40	20/11/2024 02:13	1	Forced Outage	Isolated due to PMS of 69KV Cadiz-Islasol III(CO).
SOLR	ISLASOL II U0	27.1	22/11/2024 18:50	23/11/2024 01:34	1	Forced Outage	Isolated from the grid due to Annual Preventive Maintenance of their San Enrique Switching Station HV Equipment.
SOLR	ISLASOL II U0	27.2	22/11/2024 18:50			Forced Outage	Isolated from the grid due to Annual Preventive Maintenance of their San Enrique Switching Station HV Equipment.
SOLR	ISLASOL II U0	27.1	23/11/2024 18:32	24/11/2024 03:23	1	Forced Outage	Isolated from the grid due to Annual Preventive Maintenance of their La Carlota Switching Station HV Equipment.

MARKET OUTCOME
ANNEX

Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Visayas							
SOLR	SOLEQ U0	24.5	24/11/2024 18:32	25/11/2024 03:39	1	Maintenance Outage	Annual PMS of FSEC HVE.
SOLR	SOLEQ U0	24.5	25/11/2024 18:29			Planned Outage	Annual PMS of FSEC HVE.
SOLR	Silay Solar U0	20	25/11/2024 18:48	26/11/2024 00:03	1	Forced Outage	Citicore Solar Negros Occidental to conduct maintenance activity of their lateral line and substation equipment.
Mindanao							
BAT	MSS U0	20	19/11/2024 23:01	20/11/2024 03:58	1	Forced Outage	Isolated due to emergency shutdown of 5BS01MAC.
BAT	MSS U0	20	25/11/2024 09:18			Forced Outage	Maintenance Outage (ETC Nov. 27. 2024 1500H)
BIOF	CSC U1	3.4	11/03/2024 23:59	20/11/2024 08:50	254	Forced Outage	Shutdown from Testing and Commissioning Phase. (Forced Outage)
BIOF	BBM U0	5.7	08/10/2024 15:56			Forced Outage	Tripped due to SOCOTECO 1 69KV(SRB)line power outage.
BIOF	BBI U0	12.4	25/10/2024 23:10			Forced Outage	Forced Outage. Fault to be determined by BBI. (OMC Outage)
BIOF	LSK U1	15	28/10/2024 09:18	17/11/2024 23:59	20	Forced Outage	Plant shutdown due to scarcity of fuel supply. ETC Nov. 11 2024. (OMC Outage)
BIOF	BBI U0	12.4	20/11/2024 23:01	21/11/2024 00:00	1	Forced Outage	Engine trouble. (Forced Outage)
BIOF	CSC U1	3.4	21/11/2024 22:02	22/11/2024 11:00	1	Forced Outage	Plant shutdown due to shortage of fuel supply. (OMC Outage)
COAL	MCO U2	150	11/10/2024 01:12			Forced Outage	Tripped. Indication Induced draft fan. NO ETC yet
COAL	PPE U1	20	11/10/2024 06:34			Forced Outage	Forced Outage. Cause For verification.
COAL	MCC U3	55	12/10/2024 00:10	27/10/2024 13:44	15	Maintenance Outage	PMS(Non-GOMP) ETC Oct. 27 2024 at 0600H
COAL	FMP U2	135	20/10/2024 13:57	27/10/2024 15:25	7	Forced Outage	Forced outage Suspected furnace bed agglomeration. ETC Oct. 24 2024.
COAL	FMP U3	135	28/10/2024 04:04			Planned Outage	(Planned Outage GOMP). ETC Dec. 10 2024 2359H
COAL	DCP U2	150	02/11/2024 00:00	24/11/2024 14:08	22	Forced Outage	(Planned Outage PMS-Non-GOMP). ETC November 15 2024
COAL	STE U1	116	05/11/2024 00:00	11/11/2024 12:05	6	Planned Outage	PMS(GOMP). ETC November 12 2024.
COAL	STE U2	116	16/11/2024 00:00	22/11/2024 11:04	6	Planned Outage	Planned Outage (PMS-GOMP)
COAL	GKP U3	151.3	23/11/2024 00:09			Forced Outage	PMS (Non-GOMP). ETC December 2 2024.
GEO	MA3 U1	3.6	29/10/2024 04:01	31/10/2024 08:18	2	Forced Outage	Mt. Apo U3 was on Emergency S D due to Acid Leak at Static Mixer. (Forced Outage)
GEO	MA3 U1	3.6	16/11/2024 00:12	17/11/2024 23:59	1	Planned Outage	Planned Outage (PMS-GOMP)
GEO	MA3 U1	3.6	18/11/2024 00:00	22/11/2024 13:17	4	Forced Outage	Extended GOMP. Original ETC Nov. 19 2024.
HYD	ALP U0	2.6	28/07/2024 08:05			Forced Outage	Plant on shutdown. Generating Units 1 & 2 were totally damaged by landslide. (Forced Outage)
HYD	AG6 U4	40	02/09/2024 09:02	28/10/2024 17:02	56	Planned Outage	(PMS-GOMP). ETC October 31 2024
HYD	NBT U0	3	02/09/2024 10:01			Forced Outage	Plant shutdown due to weir repair. ETC December 02 2024. (Forced outage)
HYD	MHP U0	0.5	13/09/2024 13:20			Forced Outage	Emergency shutdown due to bearing temperature rising. (Forced Outage)
HYD	AG5 U1	27.5	16/10/2024 08:04	29/10/2024 15:36	13	Planned Outage	PMS(GOMP). ETC November 1 2024
HYD	AG6 U1	34.5	17/10/2024 09:18	31/10/2024 23:59	14	Planned Outage	Planned Outage PMS (ETC Oct. 31 2024 2359H)
HYD	LPP U1	11.9	25/10/2024 13:13	26/10/2024 05:25	1	Forced Outage	Plant shutdown due to tripping of Agus6-Kauswagan 69kV line.
HYD	TL1 U2	0.5	27/10/2024 23:58	28/10/2024 00:33	1	Forced Outage	Plant isolated due to load normalization of Davao-DLPC 69kV Line 2. (OMC Outage)

MARKET OUTCOME
ANNEX

Outage Summary

Plant Type	Plant/ Unit Name	Capacity (MW)	Date Out	Date In	Duration (Day/s)	Outage Type	Remarks
Mindanao							
HYD	PG4 U3	75	28/10/2024 07:08	12/11/2024 08:08	15	Forced Outage	Installation testing & commissioning of intake gate hydraulic actuator. (Maintenance Outage)
HYD	TL1 U2	0.5	29/10/2024 00:01			Forced Outage	Plant isolated due to insufficient water supply. (OMC Outage)
HYD	AG4 U1	52.7	31/10/2024 08:10	18/11/2024 11:10	18	Planned Outage	(PMS - GOMP). ETC November 25 2024
HYD	AG6 U1	34.5	01/11/2024 00:00	06/11/2024 19:18	5	Forced Outage	Extended GOMP Outage. ETC November 10 2024
HYD	AG7 U1	26.1	04/11/2024 18:13	10/11/2024 10:14	6	Planned Outage	PMS(GOMP). ETC November 11 2024
HYD	TL1 U1	0.5	09/11/2024 23:44	10/11/2024 00:47	1	Forced Outage	Plant shutdown affected by DLPC line switching activity. (OMC Outage)
HYD	MN2 U3	6.8	11/11/2024 08:01	14/11/2024 10:35	3	Planned Outage	Semi-Annual PMS Turbine Inspection
HYD	TL2 U3	0.2	12/11/2024 23:16	13/11/2024 23:17	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	TL2 U2	0.2	12/11/2024 23:16	13/11/2024 23:17	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	TL2 U1	0.2	12/11/2024 23:16	13/11/2024 23:24	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	TL2 B U1	0.3	12/11/2024 23:16	13/11/2024 23:25	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	TL2 A U2	0.2	12/11/2024 23:16	13/11/2024 23:20	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	TL2 A U1	0.44	12/11/2024 23:16	13/11/2024 22:36	1	Planned Outage	Plant shutdown due to 4th quarter turbine inspection. (PMS-GOMP)
HYD	PG4 U2	75	18/11/2024 08:03	22/11/2024 08:39	4	Planned Outage	Planned outage - GOMP. ETC November 24 2024.
HYD	AG5 U2	27.5	20/11/2024 08:06			Planned Outage	PMS - GOMP. ETC December 15. 2024.
HYD	MN1 U2	6.6	21/11/2024 07:01	22/11/2024 02:00	1	Planned Outage	Shutdown PMS-GOMP
HYD	MN1 U1	6.6	21/11/2024 07:01	22/11/2024 01:59	1	Planned Outage	Shutdown PMS-GOMP
HYD	MN1 U4	16.2	21/11/2024 07:02	22/11/2024 03:02	1	Planned Outage	Shutdown PMS-GOMP
HYD	MN1 U3	16.2	21/11/2024 07:02	22/11/2024 02:20	1	Planned Outage	Shutdown PMS-GOMP
HYD	AG2 U1	60	22/11/2024 08:43			Planned Outage	PMS-GOMP. ETC December 8 2024.
HYD	PG4 U2	75	22/11/2024 09:39	24/11/2024 08:04	2	Planned Outage	Shutdown due to excessive vibration. Under GOMP schedule from Nov. 18 to 24 2024.
HYD	AG7 U2	25.3	23/11/2024 09:02			Planned Outage	PMS(GOMP). ETC December 31 2024
HYD	PG4 U2	75	24/11/2024 15:35			Forced Outage	Emergency shutdown Minor adjustment of Governor control.
HYD	TU2 U1	5.5	25/11/2024 08:54			Forced Outage	Plant shutdown due to runout check of runner and bearing check up check the RTD placements and clearance verification.
OIL	KEG U0	10.6	15/04/2024 15:05			Forced Outage	Failed to synchronize due to low SF6 Pressure on PCB. (Forced Outage)
OIL	WMP U9	10.2	21/10/2024 00:01			Planned Outage	PMS-Non-GOMP. ETC December 05 2024.
OIL	WMP U1	10.2	31/10/2024 20:25	08/11/2024 16:10	8	Forced Outage	WMPC Unit 1 declared forced outage due to HT low pressure stop.
OIL	MEG U1	6.4	04/11/2024 00:00	18/11/2024 23:59	14	Planned Outage	PMS(GOMP). ETC November 18 2024
OIL	MMH U0	7.5	16/11/2024 06:58	17/11/2024 00:10	1	Forced Outage	Cut out from the grid due to FIBECO 13.2kV line total power outage. (OMC outage)
OIL	MEG U2	6.4	19/11/2024 00:01			Planned Outage	PMS. ETC December 3 2024
OIL	WMP U10	10.2	23/11/2024 18:12	25/11/2024 10:37	2	Forced Outage	Isolated while running as RPS. Cause Forced outage of Zamboanga - WMPC 138kV Line 2

MARKET OUTCOME
ANNEX

Congestion

Equipment Name	Trading Intervals	Percent of Time
3STRO_3CLA1	120	1.3%
6KABAN_TR1	116	1.3%
1HERM_1DUH1	101	1.1%
5MNDUE_TR2	63	0.7%
1HERM_1MAL1	61	0.7%
1MEXI_1HER1	56	0.6%
CEBU_TO_NEGROS	36	0.4%
3TAYA_3MBA2	34	0.4%
1BAUA_1LAT2	32	0.4%
1BAUA_1LAT1	28	0.3%
1SNRAFA_TR2	24	0.3%
1SNRAFA_TR1	20	0.2%
1MEXI_1HER2	18	0.2%
2ZAPOTE_TR4	14	0.2%
7CORELL_TR1	9	0.1%
5DAAN_4TAB2	7	0.1%
6BCOLOD_TR2	6	0.1%
1MPGC_TR4	4	0.04%
3MKBNB_TR4	2	0.02%
1MPGC_TR2	1	0.01%
1MPGC_TR3	1	0.01%
4MAAS_7UBA1	1	0.01%
6PGPP1_TR1	1	0.01%
LEYTE_TO_CEBU	1	0.01%

MARKET OUTCOME
GLOSSARY OF TERMS

CAPACITY ON OUTAGE

Calculated for each 5-min interval as the sum of the capacity of all generating units on outage, which are further distinguished by plant type and category. The generating unit/s on outage and categories of outage are based on the SO's daily operations report. Cited below are the outage categories as defined in ERC Resolution No. 21, Series of 2016.

Deactivated Shutdown	- Refers to a condition where a generating unit is unavailable for service for an extended period of time for reasons not related to equipment and inactive for more than 60 days.
Forced	- An outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state.
Maintenance	- An outage that does not require immediate removal from the In-Service state but requires a Unit to be removed from the available state before the next planned outage. This is scheduled at least seven (7) days in advance.
Planned	- The state in which a Unit is unavailable due to inspection, testing, preventive maintenance or overhaul. A Planned Outage is scheduled with a pre-determined duration and is coordinated with the System Operator. The Planned Outage of a Unit shall be reflected in the Grid Operating and Management Program (GOMP).

DEMAND

Calculated for each 5-minute trading interval as the sum of the real time dispatch (RTD) schedule of all load resources plus regional losses.

EFFECTIVE SUPPLY

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.

HERFINDAHL-HIRSCHMAN INDEX (HHI)

It is a commonly accepted measure of market concentration that takes into account the relative size and distribution of participants in the market. The HHI is a number between 0 and 10,000, which is calculated as the sum of squares of the participant's market share. The HHI approaches zero when the market has very large number of participants with each having a relatively small market share. In contrary, the HHI increases as the number of participants in the market decreases, and the disparity in the market shares among the participants increases. The following are the widely used HHI screening numbers: (1) less than 1,500 - not concentrated; (2) 1,500 to 2,500 - moderately concentrated; and (3) greater than 2,500 - highly concentrated.

MARKET RESIDUAL SUPPLY INDEX (Market RSI)

The RSI is a dynamic continuous index measured as ratio of the available generation without a generator to the total generation required to supply the demand. The RSI is measured for each generator. The greater the RSI of a generator, the less will be its potential ability to exercise market power and manipulate prices, as there will be sufficient capacity from the other generators. In contrary, the lower the RSI, the greater the market power of a generator (and its potential benefit of exercising market power), as the market is strongly dependent on its availability to be able to fully supply the demand. In particular, a RSI greater than 100% for a generator means that the remaining generators can cover the demand, and in principle that generator cannot manipulate market price. On the other hand, a RSI less than 100% means that the generator is pivotal in supplying the demand.

The RSI for the whole market (Market RSI) is measured as the lowest RSI among all the generators in the market. A Market RSI less than 100% indicates the presence of pivotal generator/s

MARKET SHARE

The fraction of the total capacity or energy that a company or related group owns or controls in the market.

MAJOR PARTICIPANT GROUP

The grouping of generators by ownership or control.

NOMINATED CAPACITY

The available capacity declared by self-scheduled generators.

MARKET OUTCOME
GLOSSARY OF TERMS

OFFERED CAPACITY

The available capacity declared by scheduled generators.

PRICING CONDITIONS

A price imposed by the Market Operator to the Market/Trading Participant in cases:

Administered Price (AP)	- Interval affected by the declaration of market suspension and intervention.
Pricing Error Notice PEN]	- Calculated prices are believed to be inerror due to erroneous, inconsistent, or inappropriate input data.
Price Substitution Methology (PSM)	- Undesirable market pricing situations arising from the effects of network congestion in the power system, particularly during the occurrence of extreme nodal price separation.
Secondary Price Cap (SPC)	- Applied upon breaching the PHP9,000/MWh rolling average price over a seventy-two (72) hours period .

PIVOTAL SUPPLIER INDEX (PSI)

The pivotal supplier index is a binary variable (1 for pivotal and 0 for not pivotal) for each generator. The index identifies whether a generator is pivotal in supplying the demand. The PSI is calculated as the percentage of time that a generator is pivotal in a period (i.e. monthly).

POST MARKET RUN CALCULATION

Price adjustment after consideration of different pricing conditions such as AP, SPC, PSM, and PEN.

REGISTERED CAPACITY

The capacity registered by a generator with WESM.

REGISTERED CAPACITY (NET OF OUTAGE)

The capacity registered by a generator with WESM less capacity on outage.

RESERVE CATEGORIES

Regulating (RU and RD)	- Readily available and dispatchable generating capacity that is allocated exclusively to correct deviations from the acceptable nominal frequency caused by unpredicted variations in demand or generation output.
Contingency (FR)	- Synchronized generation capacity from Qualified Generating Units and Qualified Interruptible Loads allocated to cover the loss or failure of a synchronized generating unit or a transmission element of the power import from a circuit interconnection.
Dispatchable (DR)	- Generating Capacity that are readily available for dispatch in order to replenish the Contingency Reserves whenever a generating unit trips or a loss of a single transmission interconnection occurs.

DISCLAIMER

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