

MARKET ASSESSMENT HIGHLIGHTS

Demand, Supply, and Price

- The average weekly regional GWP decreased in Luzon region by 15.90%, while it increased in Visayas and Mindanao regions by 28.29%, and 32.69%, respectively. Extremely high prices in the Visayas and Mindanao regions from 09 to 11 December, which were subject to pricing correction, were excluded from the weekly average energy price calculations.
- The average weekly demand slightly decreased in Luzon region by 1.89%, while it slightly increased in Visayas and Mindanao regions by 5.91 and 1.60%, respectively.
- The average weekly outage decreased in the Luzon and Visayas regions by 4.08% and 15.96%, respectively, while it slightly increased in the Mindanao region by 3.41%.
- Exports from Luzon to Visayas occurred 91.22% of the time, averaging at 214.3 MW, while the flow from Visayas to Luzon occurred 3.77% of the time, averaging at 256.1 MW. Flow from Mindanao to Visayas was observed 56.55% of the time, averaging at 100.7 MW, while flow from Visayas to Mindanao occurred 43.35% of the time, averaging at 100.1 MW.
- In the Luzon region all reserve types requirement were met 100% of the time. In the Visayas and Mindanao regions Upward and Downward Regulation, and Contingency reserves requirement were met 100% of the time, while the Dispatchable reserves requirement were only met 97.32% and 96.92% of the time, respectively.

Energy Offer Pattern Analysis

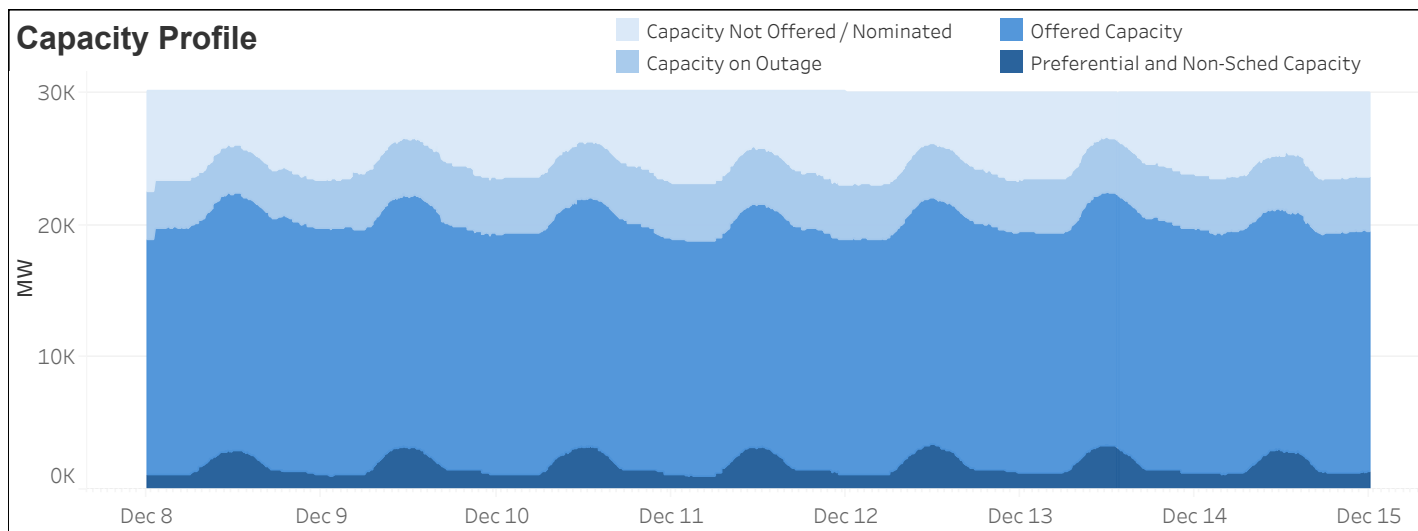
- Luzon**
- Biofuel plants recorded dips in nominated capacities on 09, 10, 11 and 13 Dec due to outages.
 - Coal plants recorded variations in offered capacities throughout the week due to reduced availability, with a dip on 09 Dec caused by an outage.
 - Oil plants recorded variations in offered capacities throughout the week due to outages.
 - Solar and Wind plants recorded their lowest daily peak nominations on 08 and 11 Dec, respectively.

- Visayas**
- Biofuel and Hydro plants recorded variations in nominated capacities due to outages and resource constraints.
 - Coal plants showed an increasing trend from 11 Dec as the plants returned to operation.
 - Geothermal plants recorded dips in nominated capacities on 10 and 14 Dec due to outages.
 - Oil plants recorded variations in offered capacities throughout the week due to outages.

- Mindanao**
- Biofuel plants recorded variations in nominated capacities due to outages.
 - Coal plants recorded a slight decrease in offered capacity on 09 Dec due to an outage, followed by a quick increase as a plant returned to operation, and then another outage on 13 Dec.
 - Geothermal plants recorded dips in offered capacities on 11 and 12 Dec due to outages and testing activities imposed with overriding constraints by the SO.
 - Hydro plants recorded a decrease in offered capacities starting 09 Dec due to reduced availability of some plants.
 - Oil plants recorded dips in offered capacities on 09 and 10 Dec due to outages, with further dips on 14 Dec due to outages and testing activities imposed with overriding constraints by the SO.
 - Solar plants recorded their lowest daily peak nominations on 14 Dec.

Market Systems Advisory

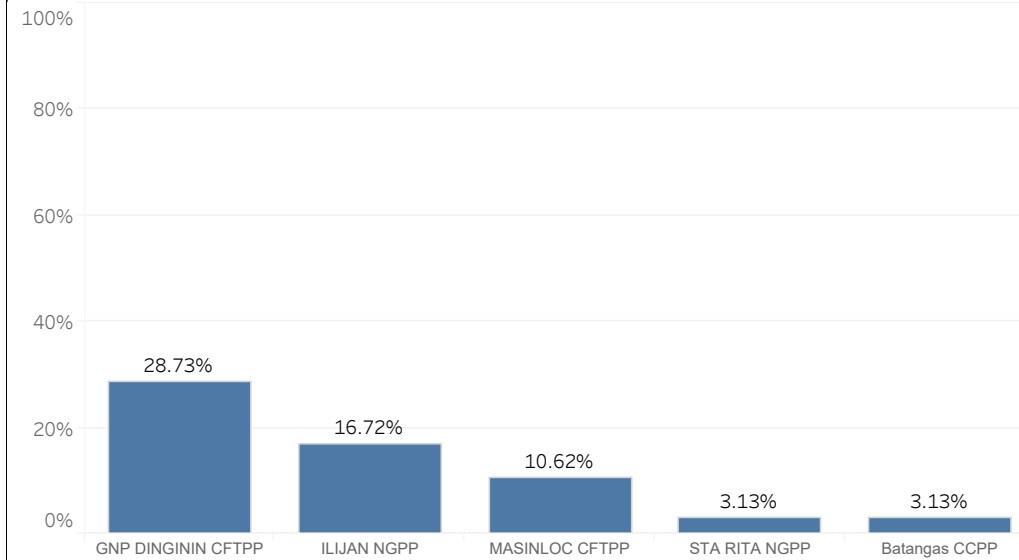
- MO-initiated Market Intervention was declared in the Luzon and Mindanao region on 13 December during the interval of 1325H due to failure to generate Real-Time Dispatch (RTD) schedules.



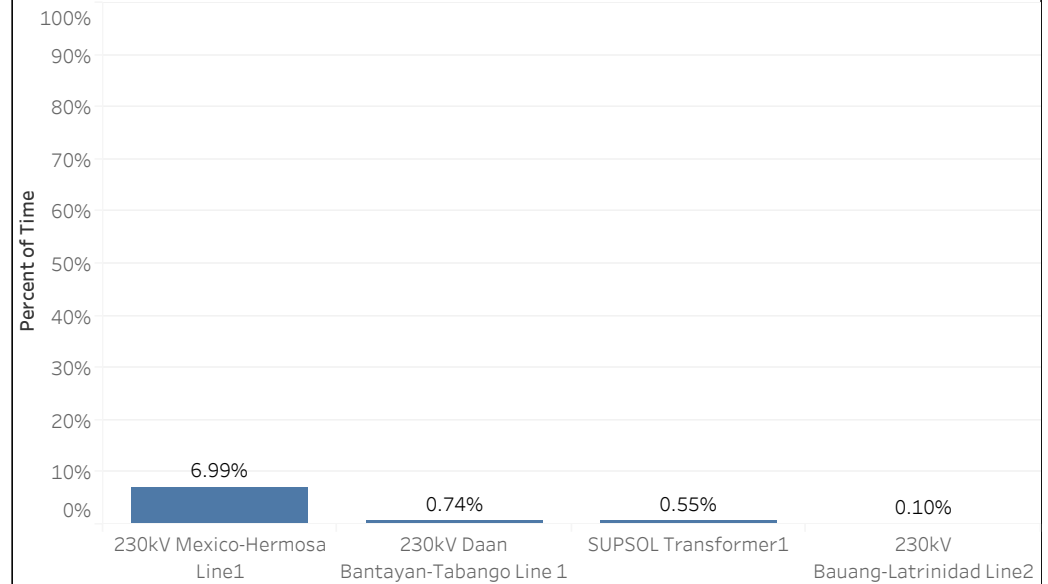
SUMMARY OF AVERAGE VALUES

Particulars	08 - 14 Dec 2025	01 - 07 Dec 2025	% Change
GENERATOR WEIGHTED AVERAGE PRICE (Php/MWh)			
System	4,574	4,099	11.61%
Luzon	2,543	3,024	-15.90%
Visayas	9,016	7,028	28.29%
Mindanao	9,884	7,449	32.69%
EFFECTIVE SUPPLY (MW)			
Luzon	12,533	12,592	-0.47%
Visayas	2,369	2,249	5.33%
Mindanao	2,844	2,938	-3.21%
DEMAND (MW)			
Luzon	9,504	9,686	-1.89%
Visayas	2,010	1,898	5.91%
Mindanao	2,184	2,149	1.60%
OUTAGE (MW)			
Luzon	2,889	3,012	-4.08%
Visayas	408	485	-15.96%
Mindanao	819	792	3.41%
REGULATING UP PRICE (Php/MWh)			
Luzon	7,242	7,359	-1.59%
Visayas	15,975	17,273	-7.51%
Mindanao	10,553	22,545	-53.19%
REGULATING DOWN PRICE (Php/MWh)			
Luzon	4,831	4,966	-2.73%
Visayas	10,490	15,371	-31.76%
Mindanao	9,077	22,355	-59.39%
CONTINGENCY RESERVE PRICE (Php/MWh)			
Luzon	929	1,583	-41.34%
Visayas	9,353	7,172	30.40%
Mindanao	5,537	3,522	57.22%
DISPATCHABLE RESERVE PRICE (Php/MWh)			
Luzon	604	908	-33.44%
Visayas	8,363	7,033	18.90%
Mindanao	1,762	154	1,041.97%

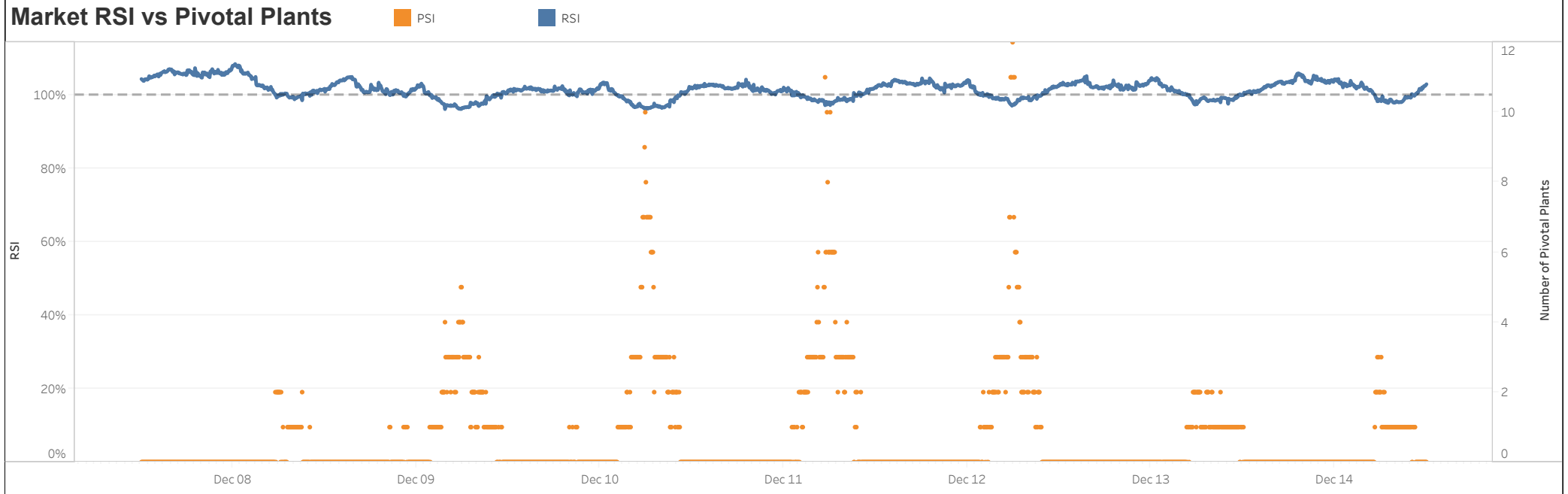
Top 5 Pivotal Plants



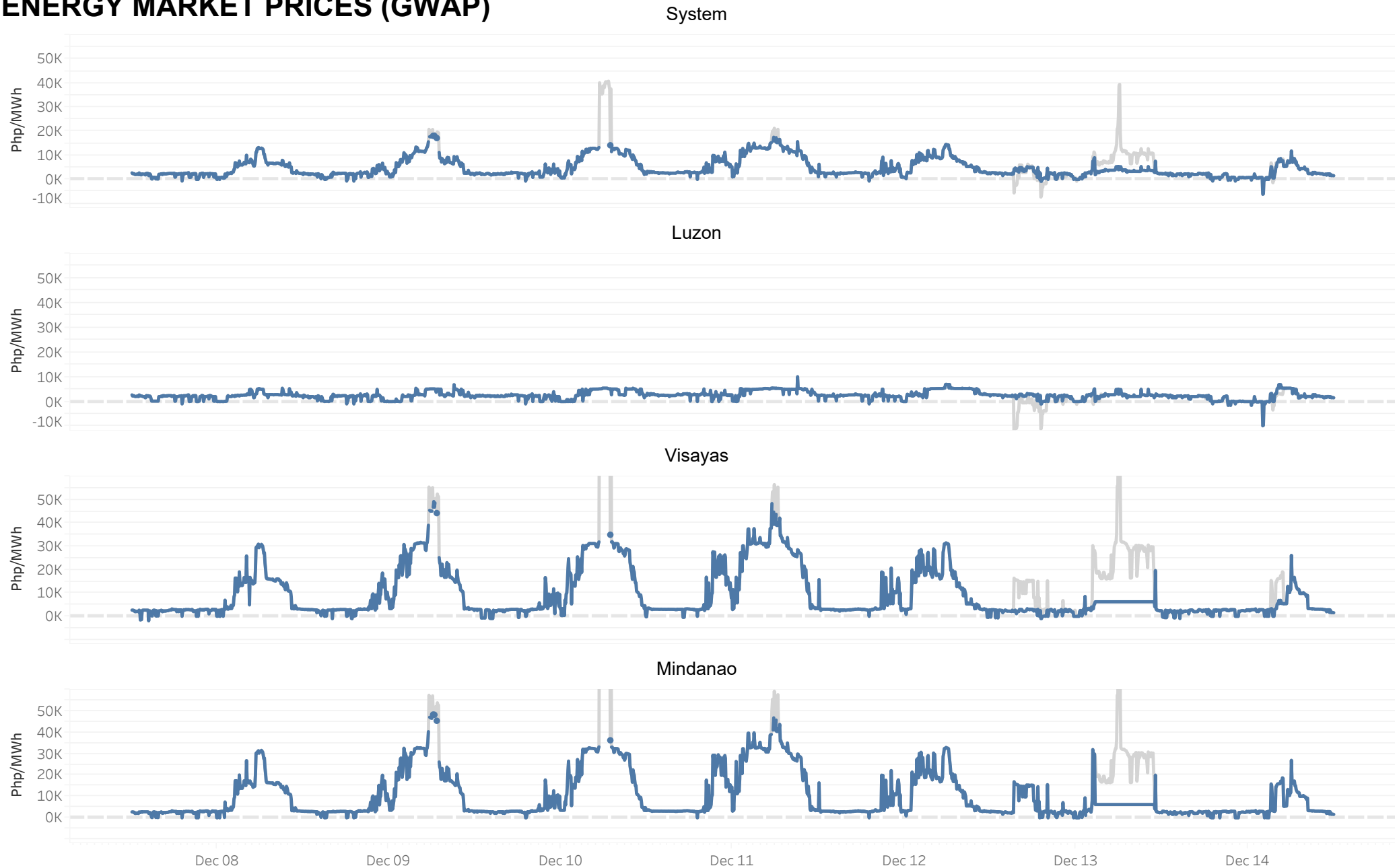
RTD Congestion



Market RSI vs Pivotal Plants



ENERGY MARKET PRICES (GWAP)

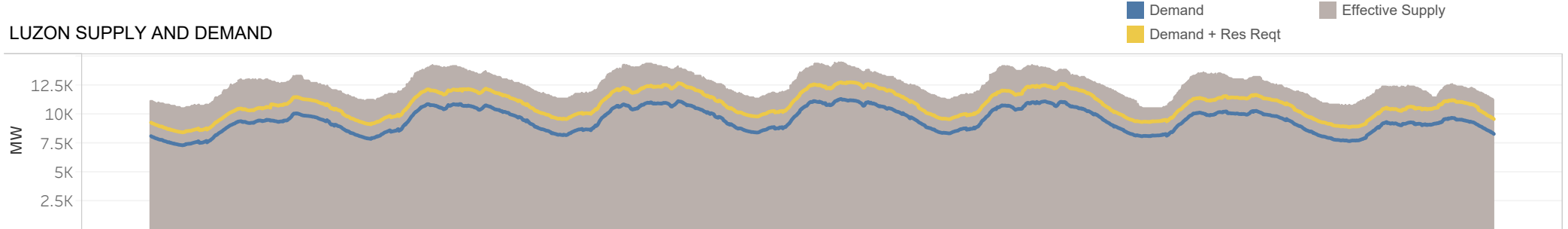


The charts show the market prices by region based on generator weighted average price (GWAP). Prices are subject to the finalization of settlement data.

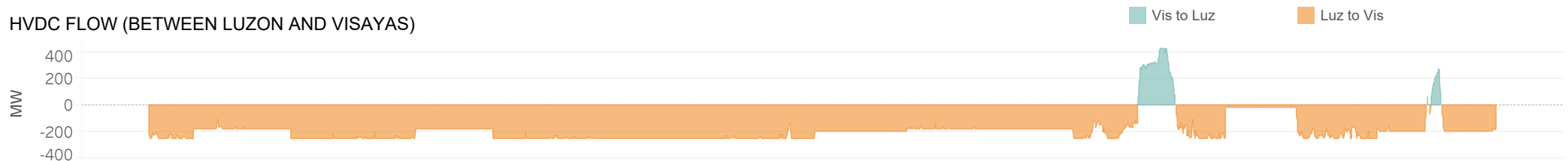
■ GWAP

■ GWAP (before post market run calculation)

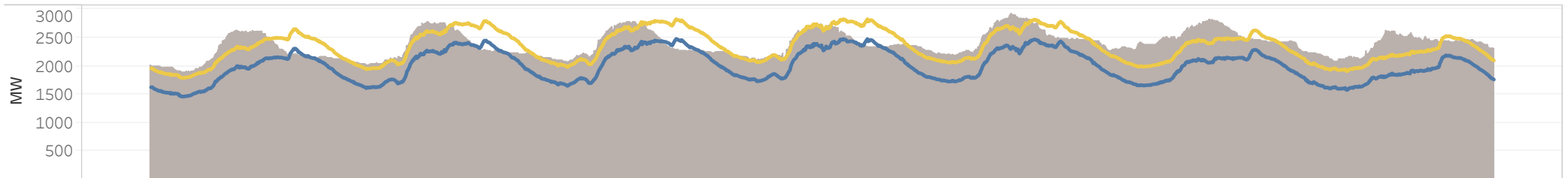
LUZON SUPPLY AND DEMAND



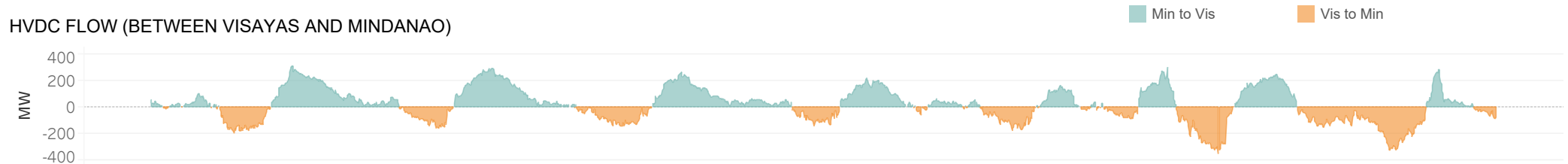
HVDC FLOW (BETWEEN LUZON AND VISAYAS)



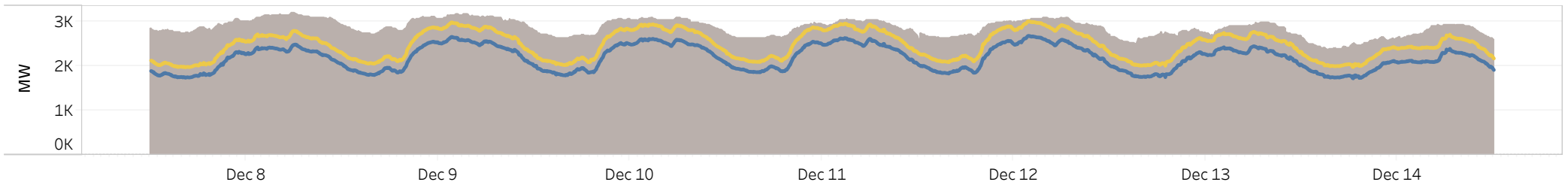
VISAYAS SUPPLY AND DEMAND



HVDC FLOW (BETWEEN VISAYAS AND MINDANAO)

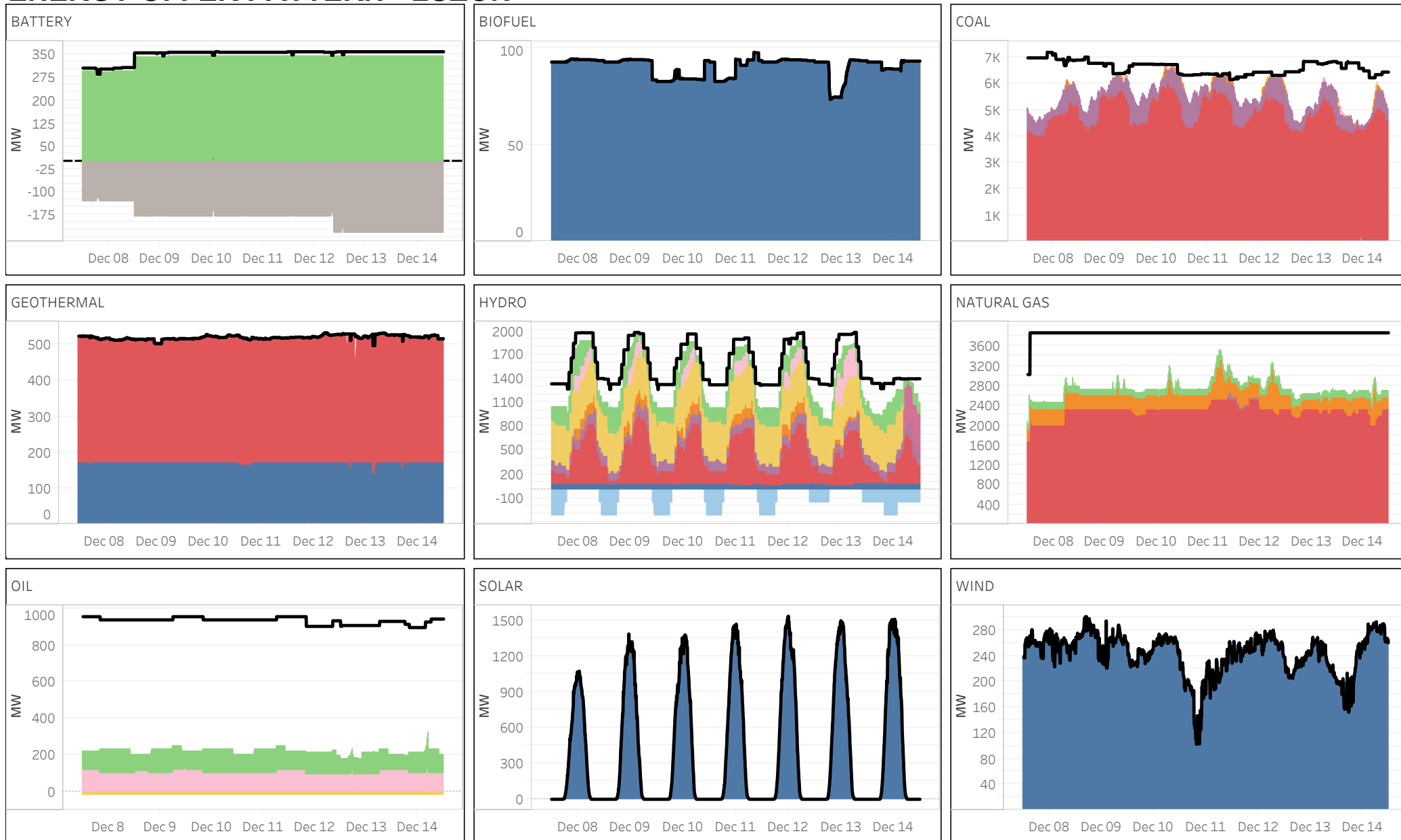


MINDANAO SUPPLY AND DEMAND



The charts show the aggregated supply and demand in each region and the scheduled power flow from/to a particular region via HVDC links.

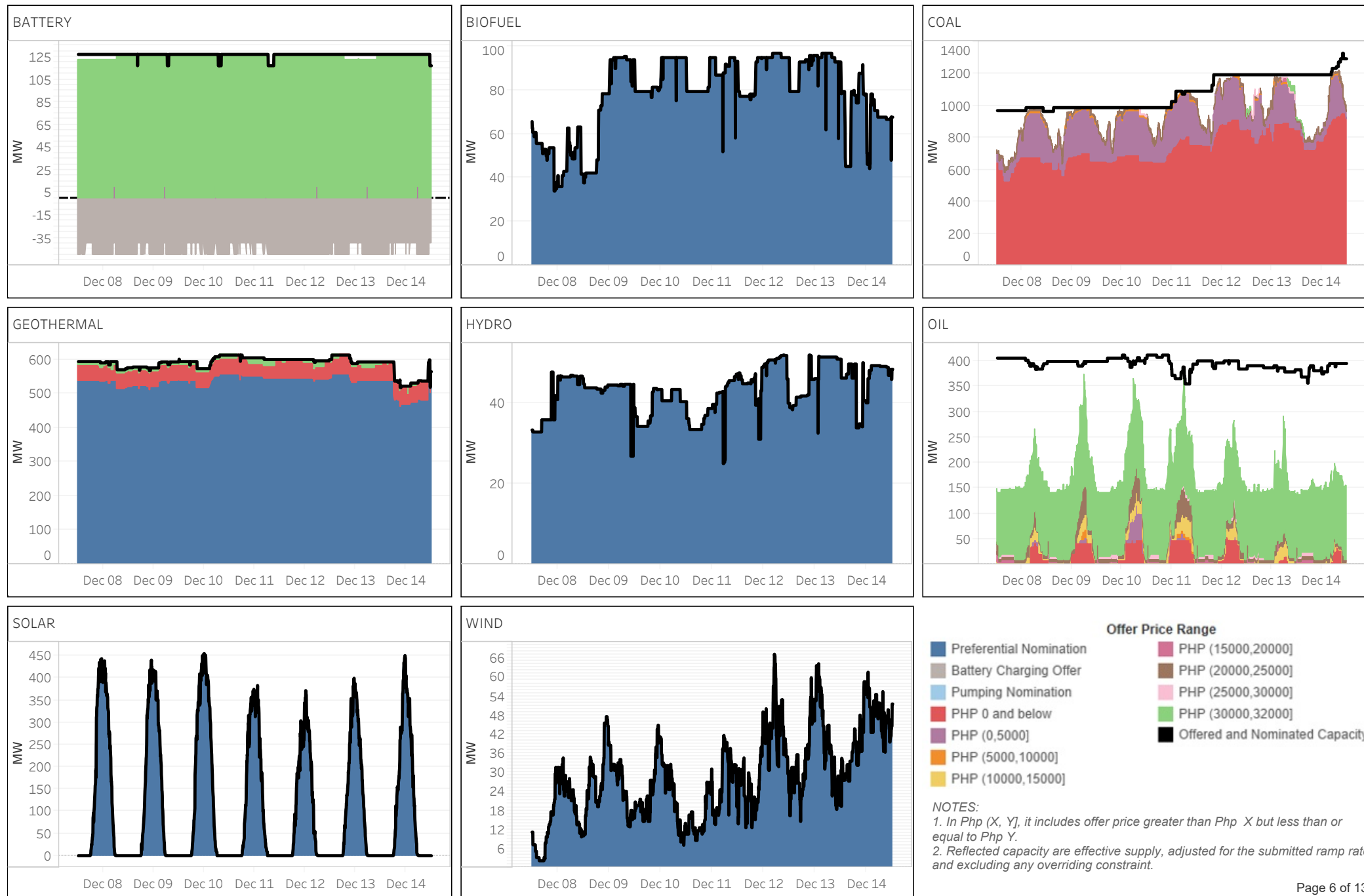
ENERGY OFFER PATTERN - LUZON



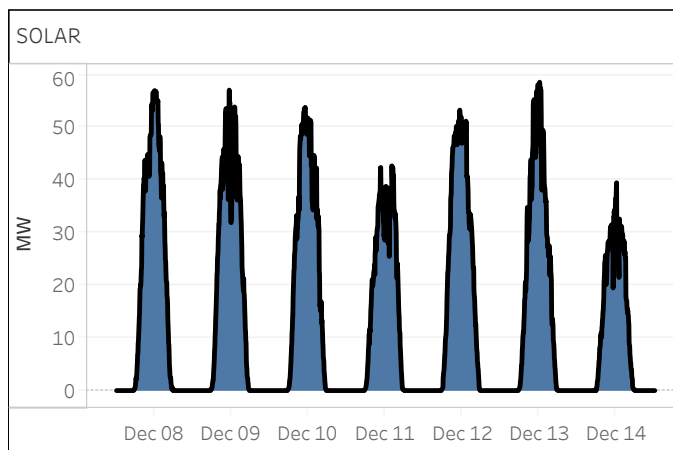
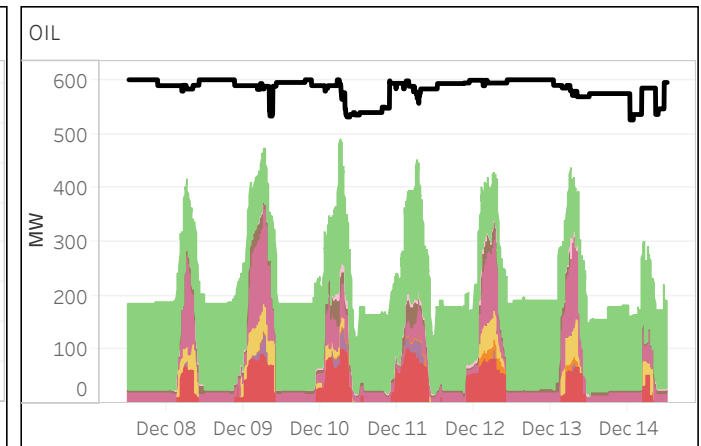
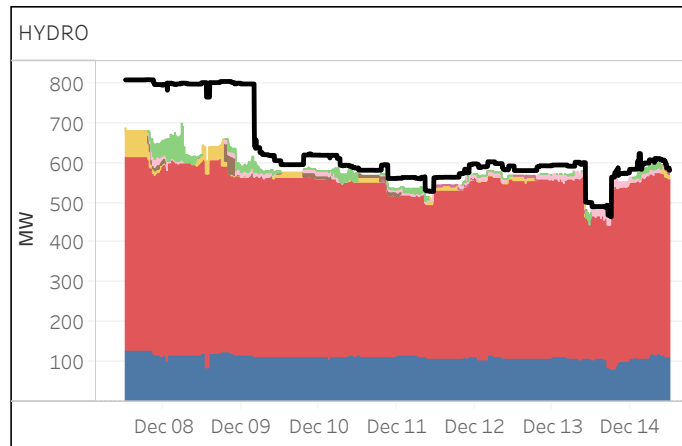
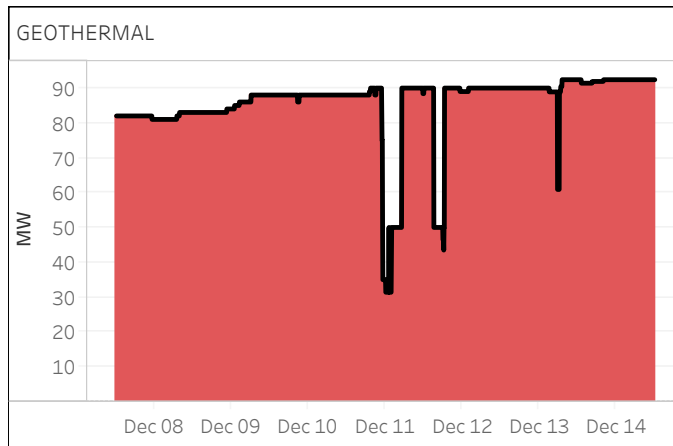
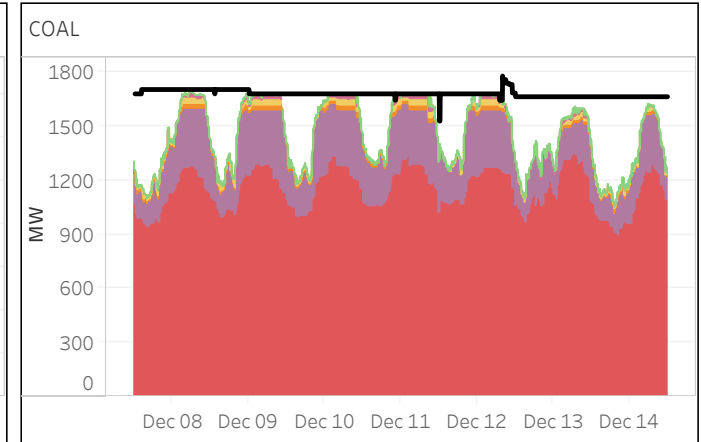
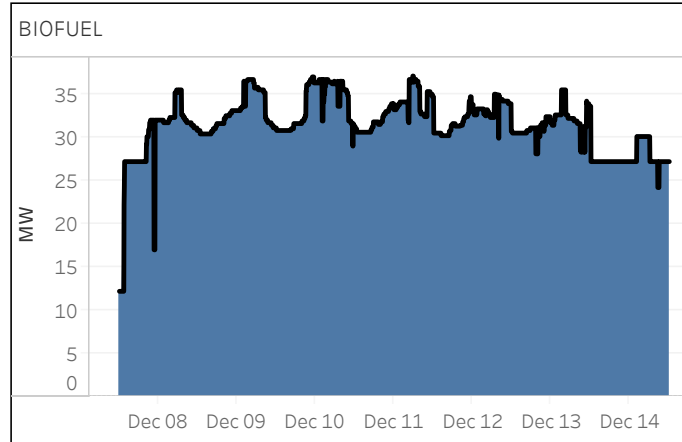
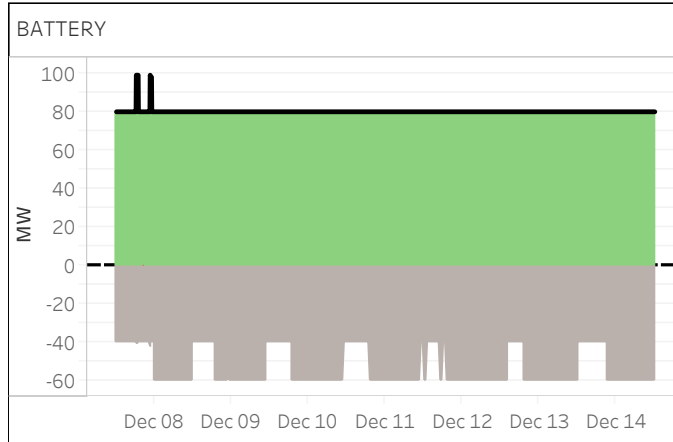
NOTES:

1. In $Php(X, Y)$, it includes offer price greater than $Php X$ but less than or equal to $Php Y$. 2. Reflected capacity are effective supply, adjusted for the submitted ramp rate and excluding any overriding constraint.

ENERGY OFFER PATTERN - VISAYAS



ENERGY OFFER PATTERN - MINDANAO

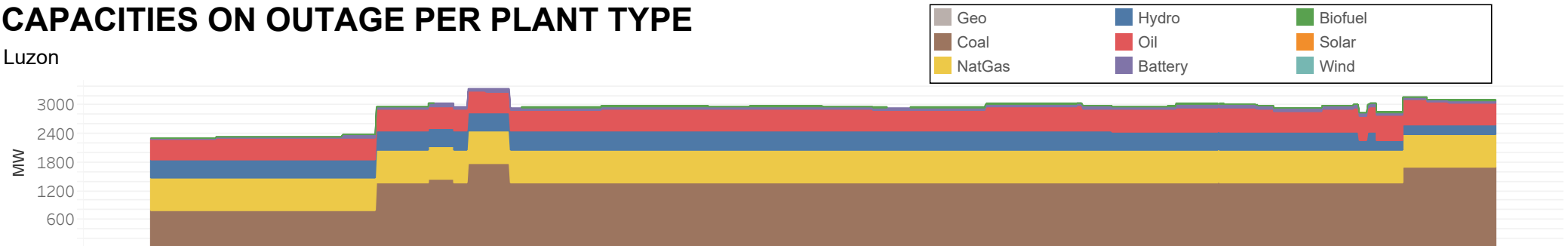


NOTES:

1. In Php (X, Y], it includes offer price greater than Php X but less than or equal to Php Y.
2. Reflected capacity are effective supply, adjusted for the submitted ramp rate and excluding any overriding constraint.

CAPACITIES ON OUTAGE PER PLANT TYPE

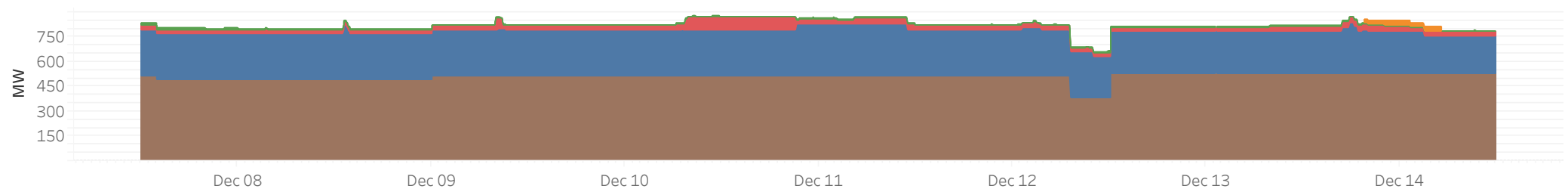
Luzon



Visayas



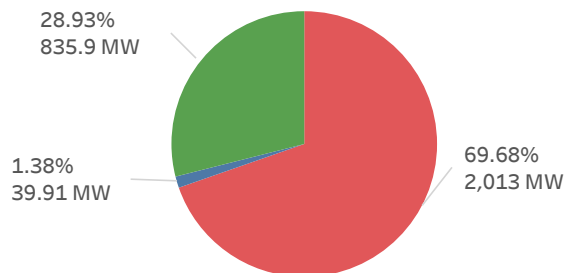
Mindanao



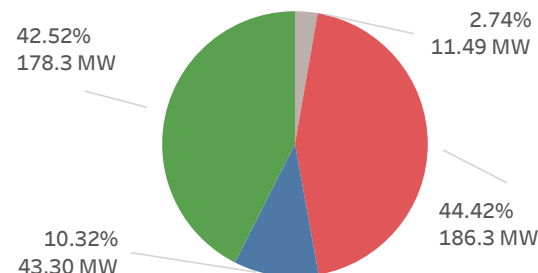
CAPACITIES ON OUTAGE PER CATEGORY

Deactivated Shutdown Forced Maintenance Planned

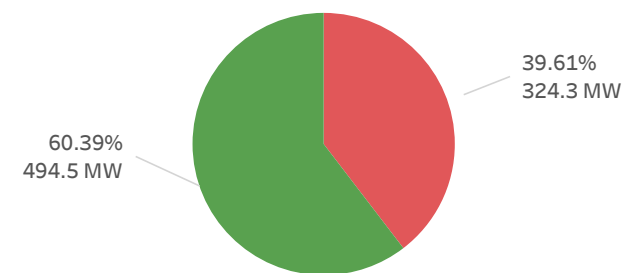
Luzon



Visayas

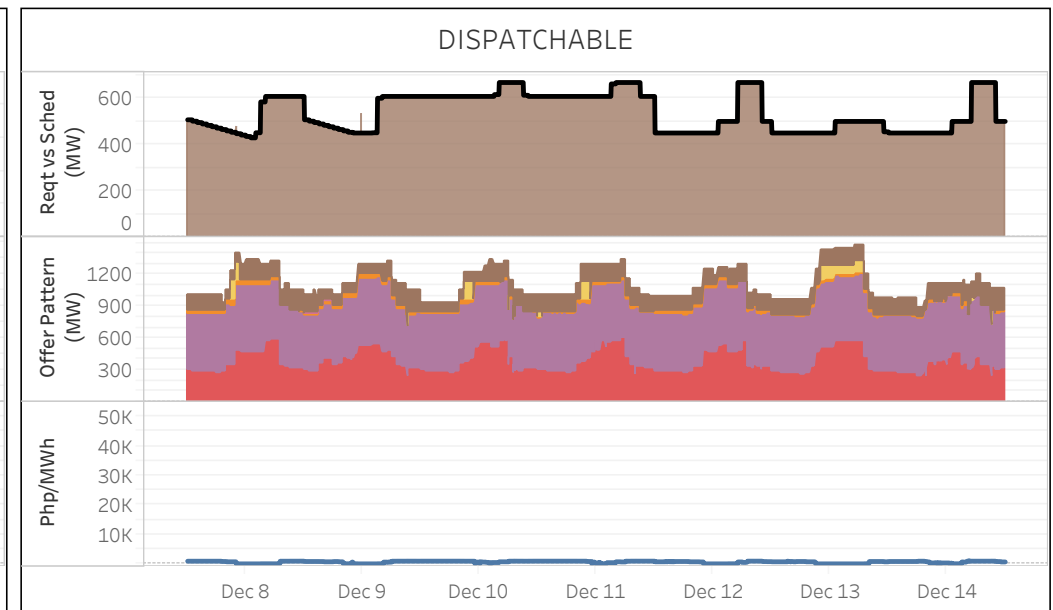
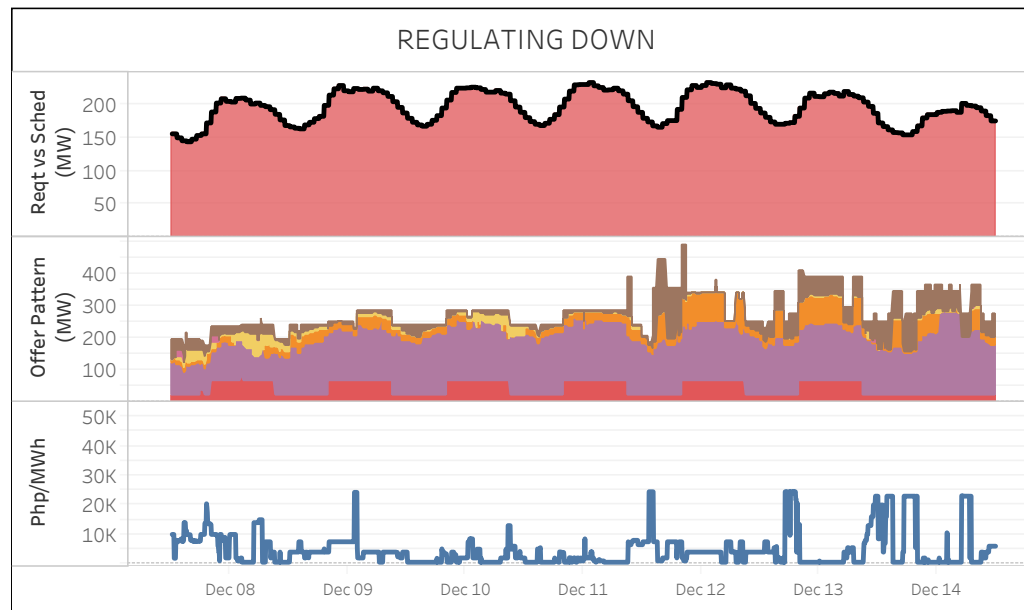
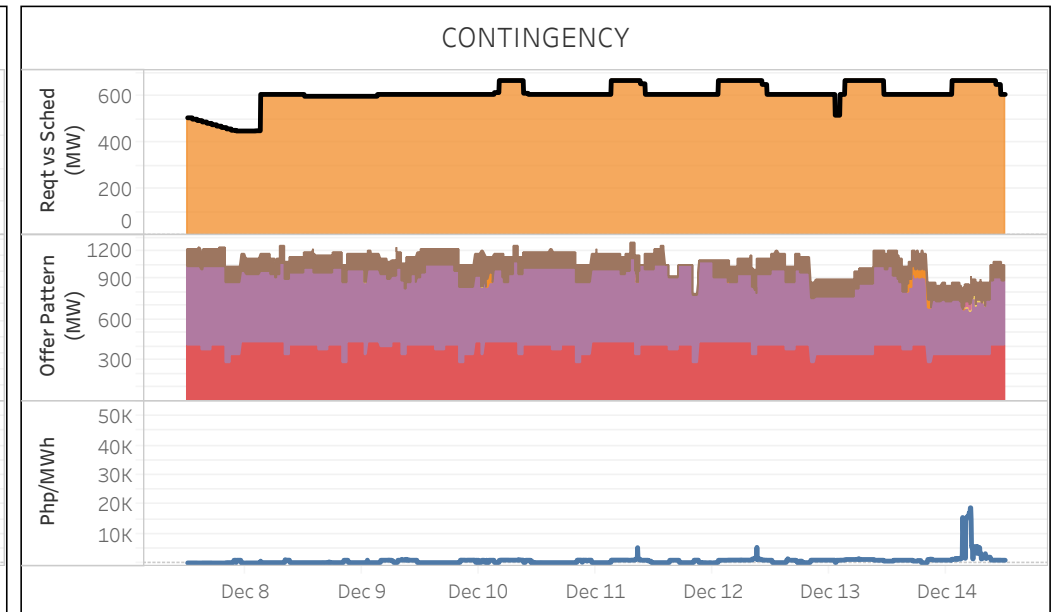
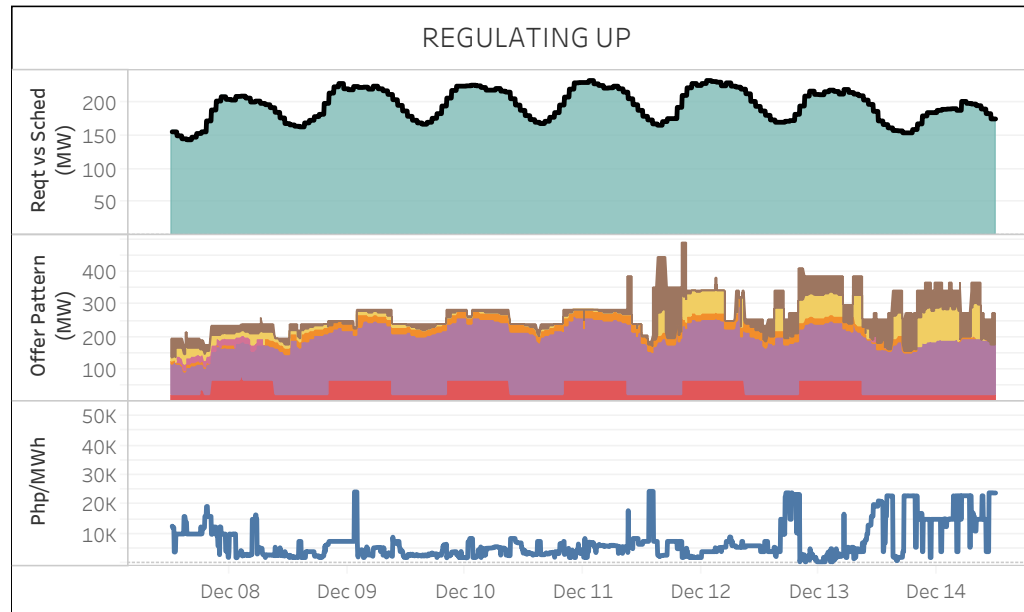


Mindanao



RESERVE MARKET DATA - LUZON

All reserve prices will be capped at price offer cap as per ERC NOR - Case No. 2023-002 RC - PDM Section 2.2.1.4



Req't vs Sched Legends

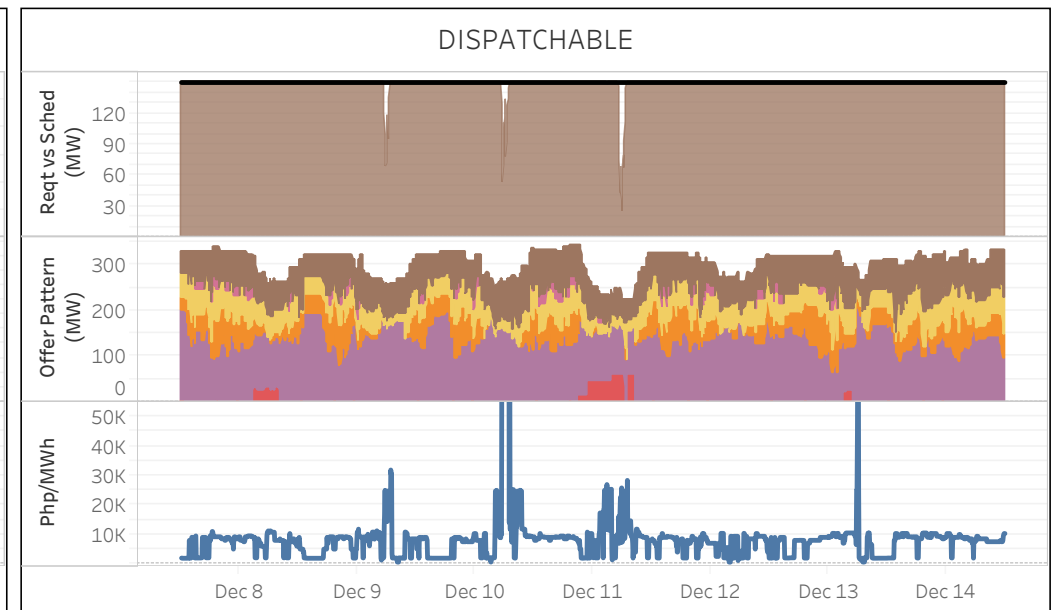
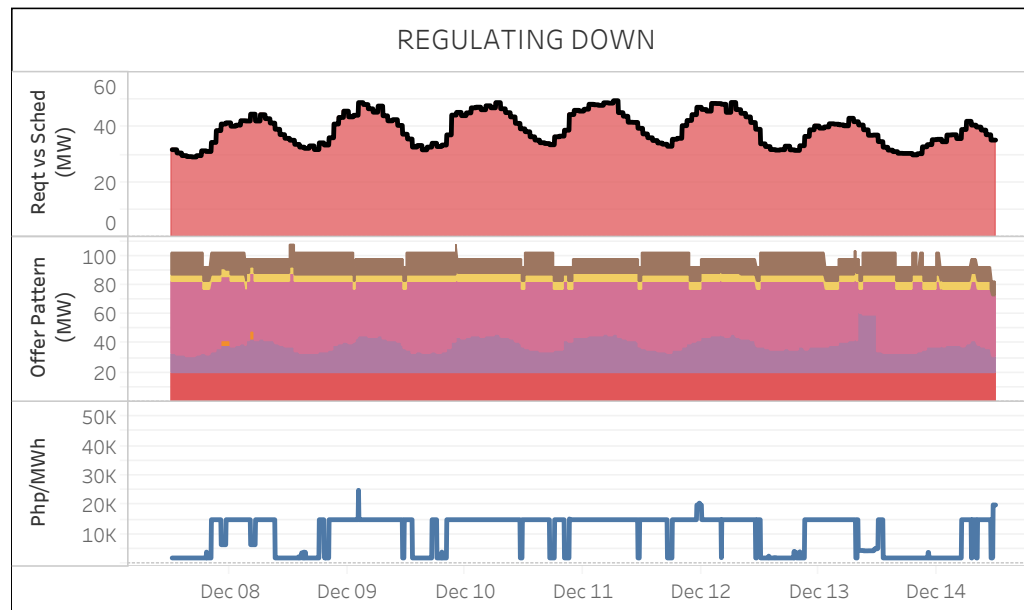
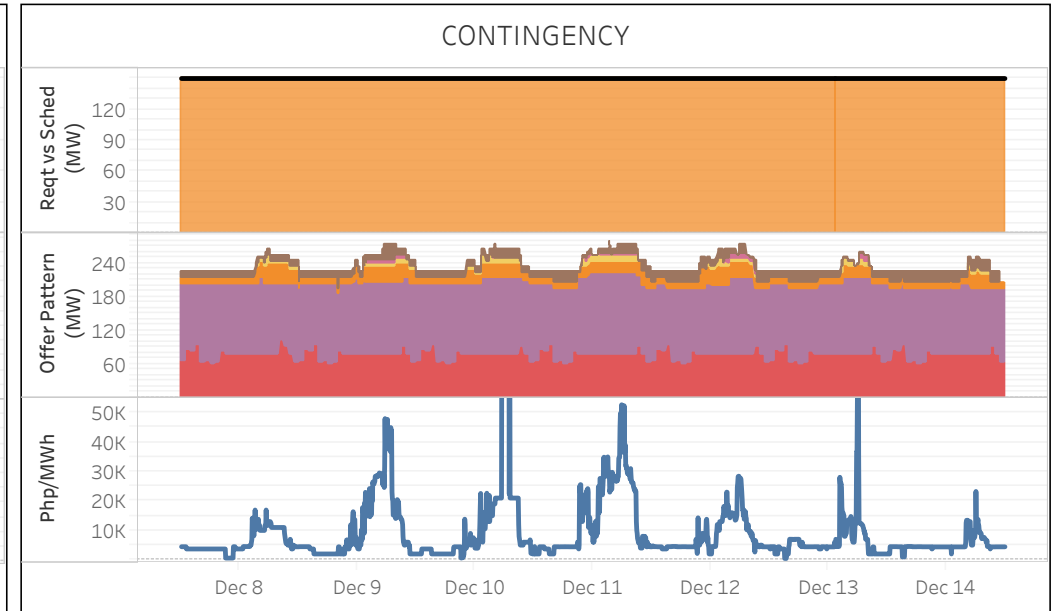
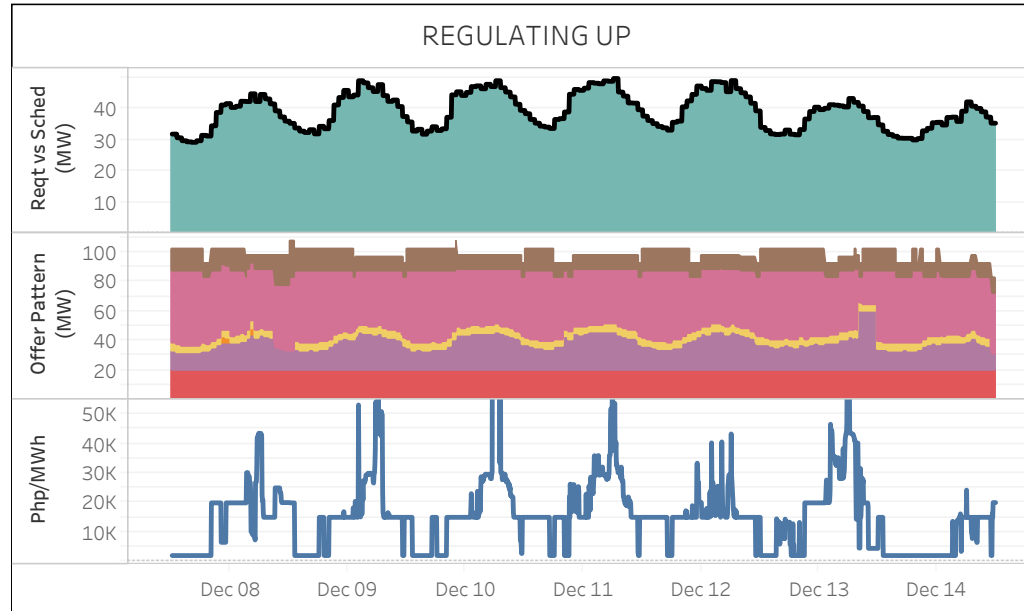
- Reserve Requirement
- RU Schedule
- RD Schedule
- FR Schedule
- DR Schedule

Offer Price Range

- Php 0
- Php (5000,10000)
- Php (15000,20000)
- Php (0,5000)
- Php (10000,15000)
- Php (20000,25000)

RESERVE MARKET DATA - VISAYAS

All reserve prices will be capped at price offer cap as per ERC NOR - Case No. 2023-002 RC - PDM Section 2.2.1.4



Reqt vs Sched Legends

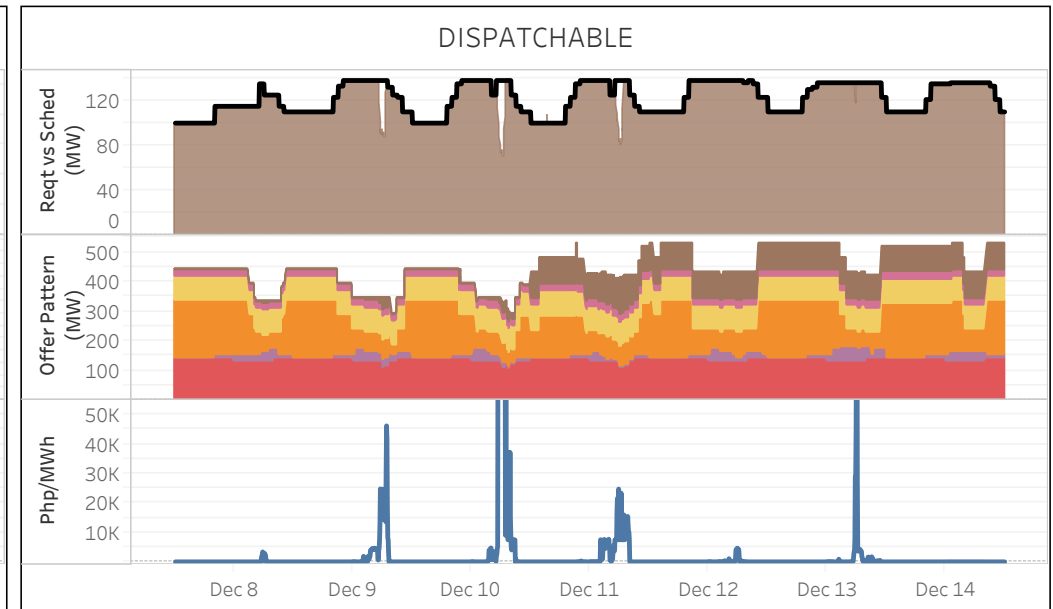
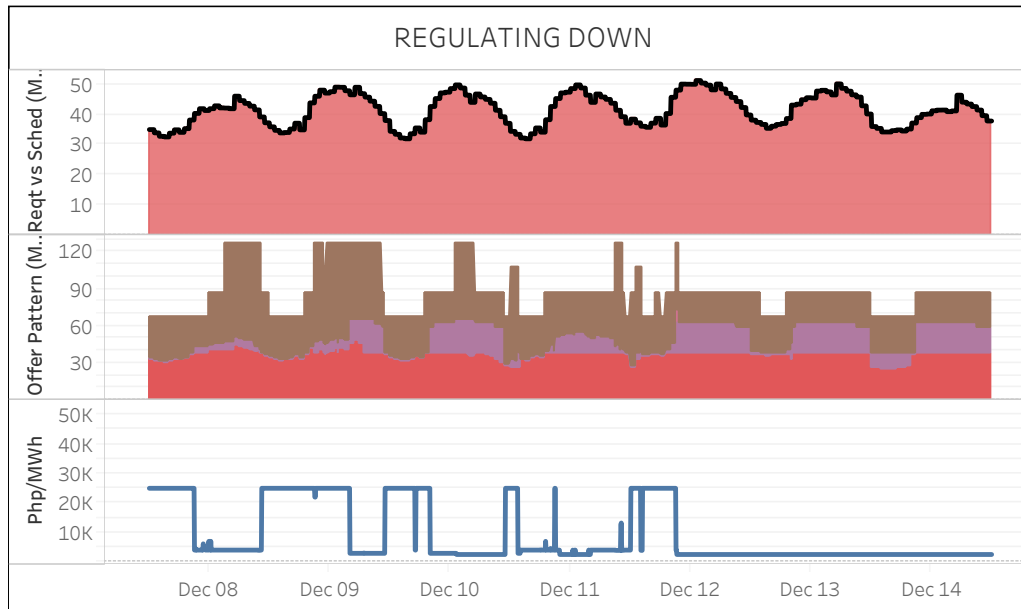
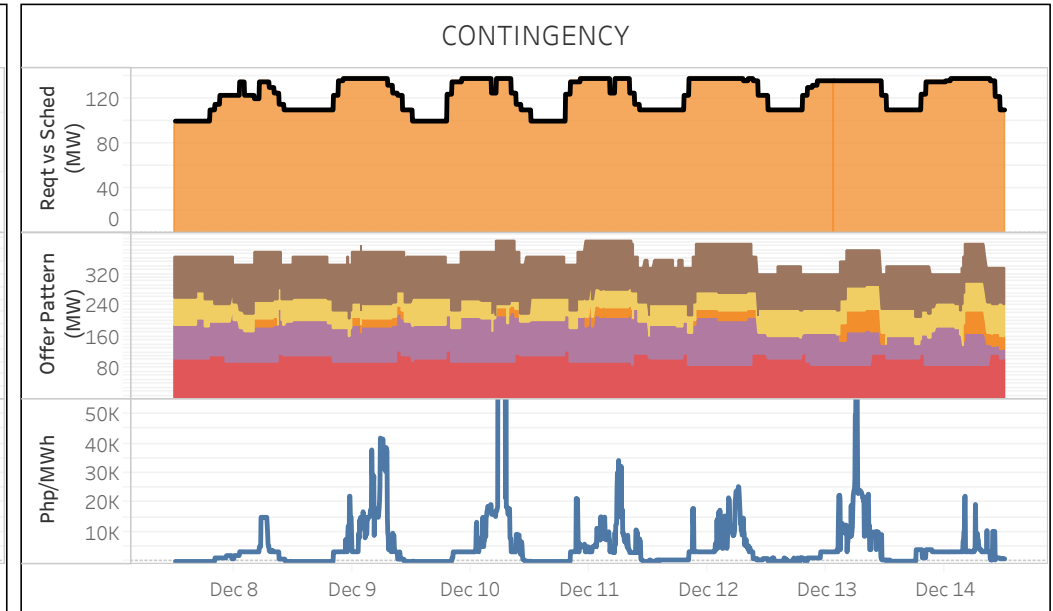
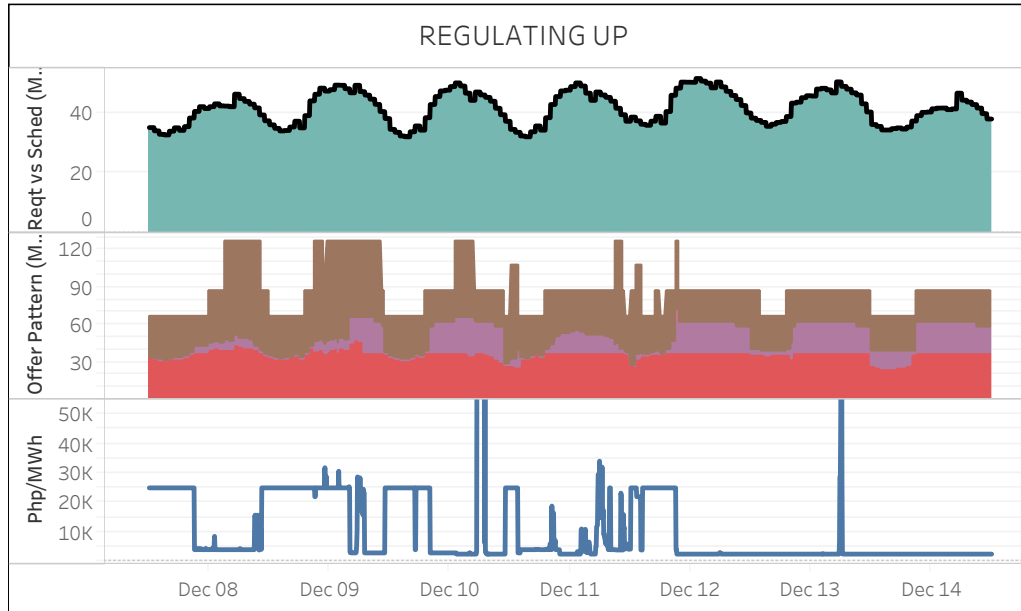
- Reserve Requirement
- RD Schedule
- DR Schedule
- RU Schedule
- FR Schedule

Offer Price Range

- Php 0
- Php (5000,10000)
- Php (15000,20000)
- Php (0,5000)
- Php (10000,15000)
- Php (20000,25000)

RESERVE MARKET DATA - MINDANAO

All reserve prices will be capped at price offer cap as per ERC NOR - Case No. 2023-002 RC - PDM Section 2.2.1.4



Req vs Sched Legends

- Reserve Requirement
- RD Schedule
- DR Schedule
- RU Schedule
- FR Schedule

Offer Price Range

- Php 0
- Php (5000,10000)
- Php (15000,20000)
- Php (0,5000)
- Php (10000,15000)
- Php (20000,25000)

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 Maintenance* - An outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state.
- Planned* - 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 1,000 - not concentrated; (2) 1,000 to 1,800 - moderately concentrated; and (3) greater than 1,800 - 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.

GLOSSARY OF TERMS

NOMINATED CAPACITY

The available capacity declared by self-scheduled generators.

OFFERED CAPACITY

The available capacity declared by scheduled generators.

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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