

MARKET ASSESSMENT HIGHLIGHTS

Demand, Supply, and Price

- The average weekly regional GWAP and demand increased across all regions. Extremely low prices in the Visayas region from 20 to 22 October and extremely high prices on 23 October, which will be subjected to pricing correction, were excluded from the weekly average energy price calculations.
- The average weekly outage decreased in the Luzon and Visayas regions by 3.10% and 11.55%, respectively, while it increased in the Mindanao region by 9.79%.
- Exports from Luzon to Visayas occurred 78.12% of the time, averaging at 193 MW, while the flow from Visayas to Luzon occurred 16.52% of the time, averaging at 104.1 MW. Flow from Mindanao to Visayas was observed 70.78% of the time, averaging at 166.9 MW, while flow from Visayas to Mindanao occurred 28.62% of the time, averaging at 105.7 MW.
- Pivotal suppliers were present 56.45% of the time.
- In Luzon, Upward Regulation, Downward Regulation and Contingency Reserves were met 100% of the time, while Dispatchable Reserve was met 99.75% of the time. In Visayas, all reserve types were met 100% of the time, except for Upward Regulation Reserve, which was met 99.95% of the time. In Mindanao, Upward and Downward Regulation Reserves were both met 93.4% of the time, while Dispatchable and Contingency Reserves were met 99.95% and 100% of the time, respectively.

Energy Offer Pattern Analysis

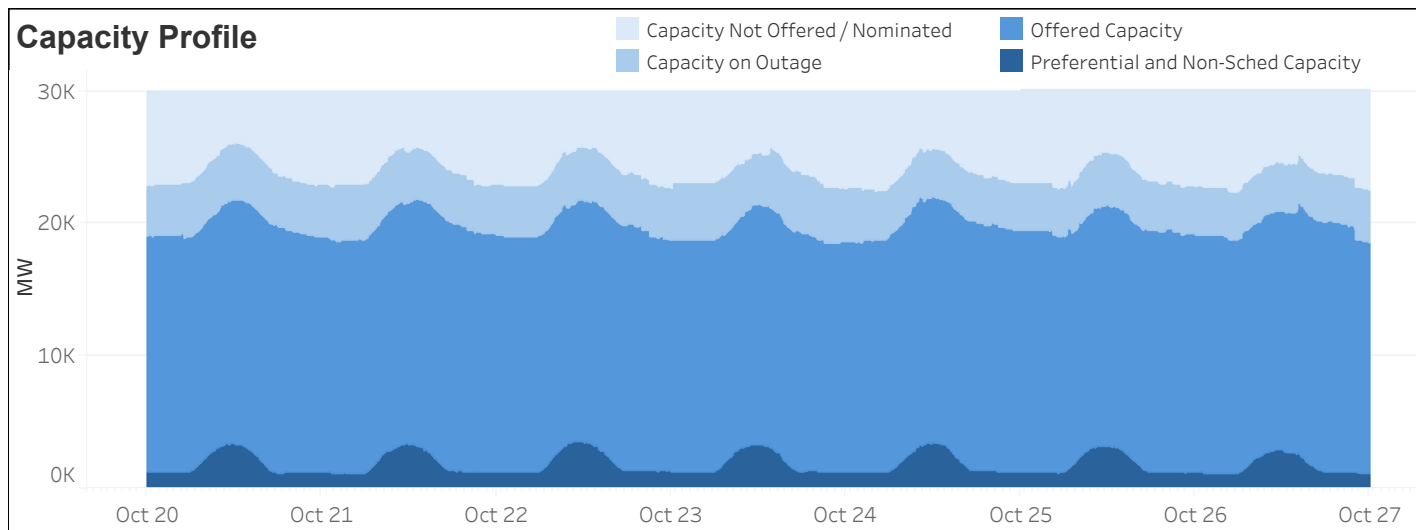
- Luzon**
- Biofuel plants recorded decreases in nominated capacities from 23 to 25 Oct due to outages.
 - Coal plants showed a decreasing trend in offered capacities due to outages and testing activities, which were imposed with overriding constraints by the SO.
 - Geothermal plants recorded dips in nominated capacities on 21 and 25 Oct due to outages.
 - Offered capacity of natural gas plants increased starting 23 Oct with the resumption of operations of several plants from outage.
 - Oil plants recorded dips in offered capacities on 21, 22 & 25 Oct due to outages and testing activities which were imposed with overriding constraints by the SO.

- Visayas**
- Biofuel plants recorded variations in nominated capacities throughout the week due to outages and subsequent plant restorations.
 - Coal plants recorded a dip in offered capacities from 23 to 24 Oct due to testing activities which were imposed with overriding constraints by the SO.
 - Geothermal plants recorded a dip in nominated capacities on 24 Oct due to an outage.
 - Hydro plants recorded dips in nominated capacities on 22, 25 and 26 Oct due to outages, while minor variations observed throughout the week were attributed to resource constraints.
 - Oil plants recorded variations in offered capacities throughout the week due to outages and testing activities, which were imposed with overriding constraints by the SO.
 - Solar plants recorded their lowest daily peak nominations on 26 Oct.

- Mindanao**
- Battery Energy Storage Systems recorded decrease in offered capacities due to derating output.
 - Biofuel plants recorded a decrease in nominated capacities starting 21 Oct due to an outage, with further dips observed on 26 Oct due to additional outages.
 - Coal plants recorded a decrease in offered capacities starting 21 Oct due to an outage, with additional dips observed on 21 and 25 Oct caused by outages and testing activities, which were imposed with overriding constraints by the SO.
 - Geothermal plants recorded a slight decrease in offered capacities on 26 Oct due to an outage.
 - Hydro plants recorded a decrease in offered capacities due to an outage from 20 to 24 Oct.
 - Oil plants recorded a decrease in offered capacities from 22 to 25 Oct due to an outage, with further dips on 20, 23, 25 and 26 Oct caused by additional outages.
 - Solar plants recorded their lowest daily peak nominations on 26 Oct.

Market Systems Advisory

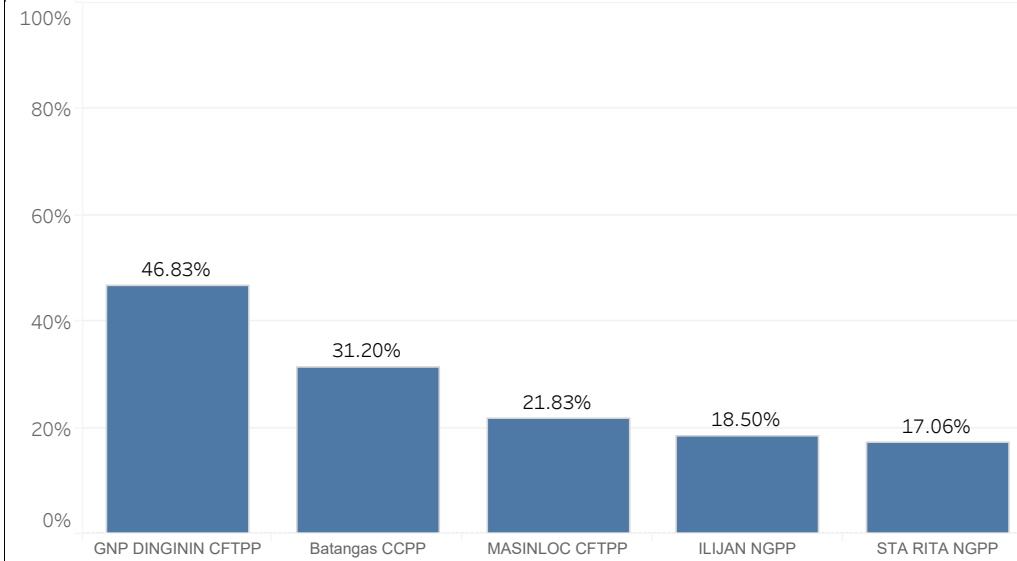
- SO-initiated Market Intervention were declared in the Visayas region on 24 October during the intervals from 0930H to 1150H due to MLD implementation to prevent overloading of Cebu_Mandaue 138kV Line 2



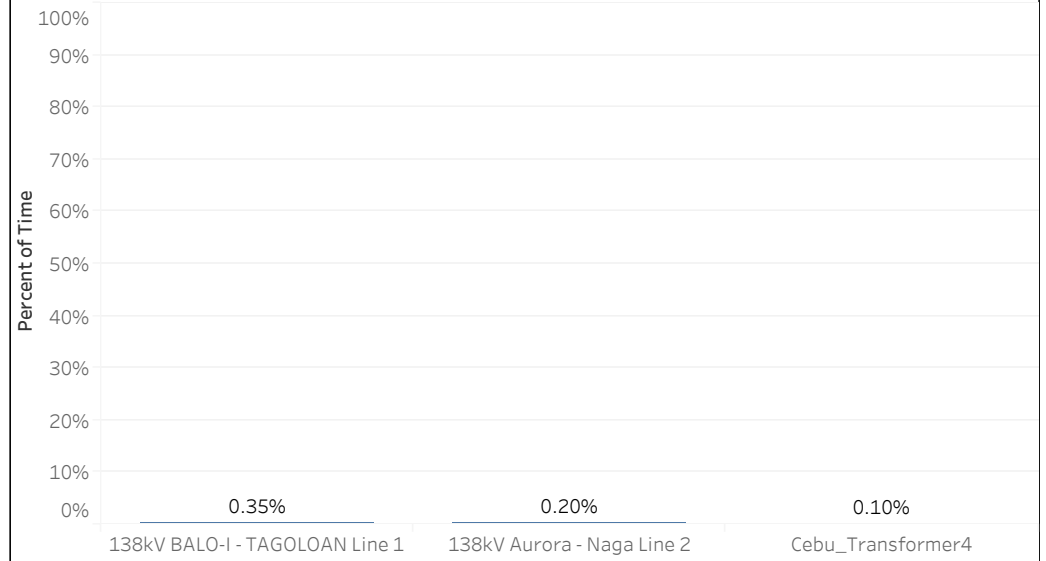
SUMMARY OF AVERAGE VALUES

Particulars	20 - 26 Oct 2025	13 - 19 Oct 2025	% Change
GENERATOR WEIGHTED AVERAGE PRICE (Php/MWh)			
System	3,986	3,497	13.98%
Luzon	4,133	2,435	69.73%
Visayas	6,499	5,763	12.77%
Mindanao	6,496	5,984	8.56%
EFFECTIVE SUPPLY (MW)			
Luzon	12,860	12,609	1.99%
Visayas	2,391	2,319	3.10%
Mindanao	3,107	3,136	-0.91%
DEMAND (MW)			
Luzon	10,297	9,828	4.77%
Visayas	2,037	1,988	2.44%
Mindanao	2,206	2,204	0.11%
OUTAGE (MW)			
Luzon	2,887	2,979	-3.10%
Visayas	380	430	-11.55%
Mindanao	663	604	9.79%
REGULATING UP PRICE (Php/MWh)			
Luzon	7,301	5,200	40.40%
Visayas	18,462	18,993	-2.80%
Mindanao	25,041	23,735	5.50%
REGULATING DOWN PRICE (Php/MWh)			
Luzon	5,955	6,398	-6.92%
Visayas	17,887	19,283	-7.24%
Mindanao	25,044	23,741	5.49%
CONTINGENCY RESERVE PRICE (Php/MWh)			
Luzon	3,106	1,277	143.19%
Visayas	6,933	6,300	10.05%
Mindanao	2,546	2,216	14.92%
DISPATCHABLE RESERVE PRICE (Php/MWh)			
Luzon	1,736	833	108.36%
Visayas	5,320	6,798	-21.73%
Mindanao	1,139	14	7,761.94%

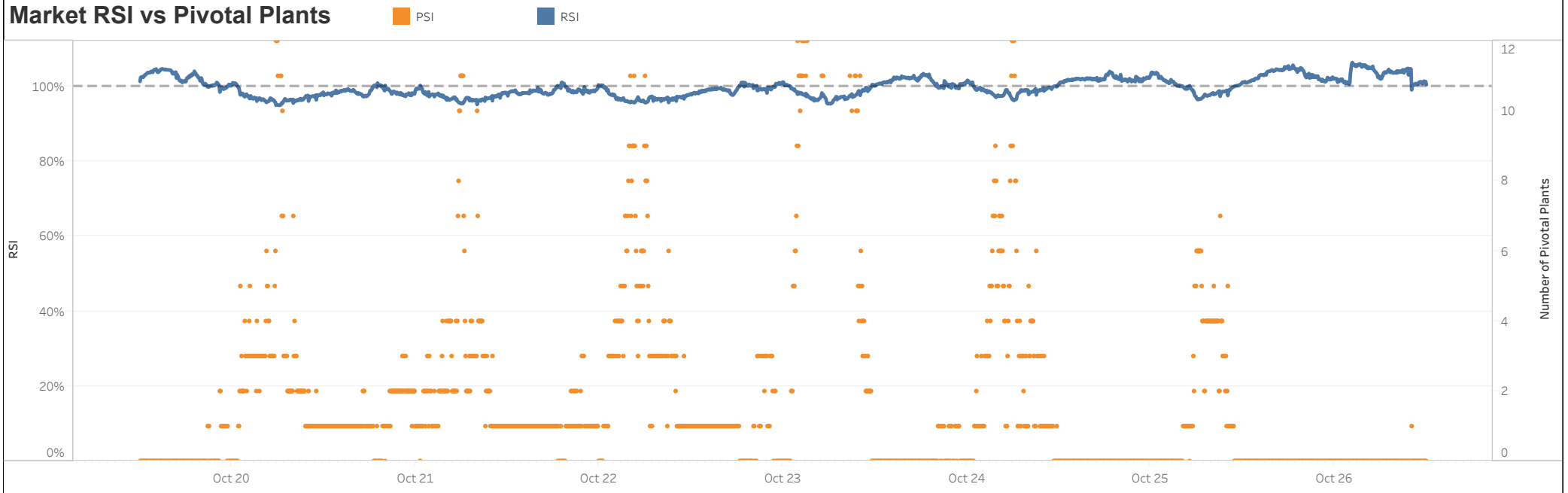
Top 5 Pivotal Plants



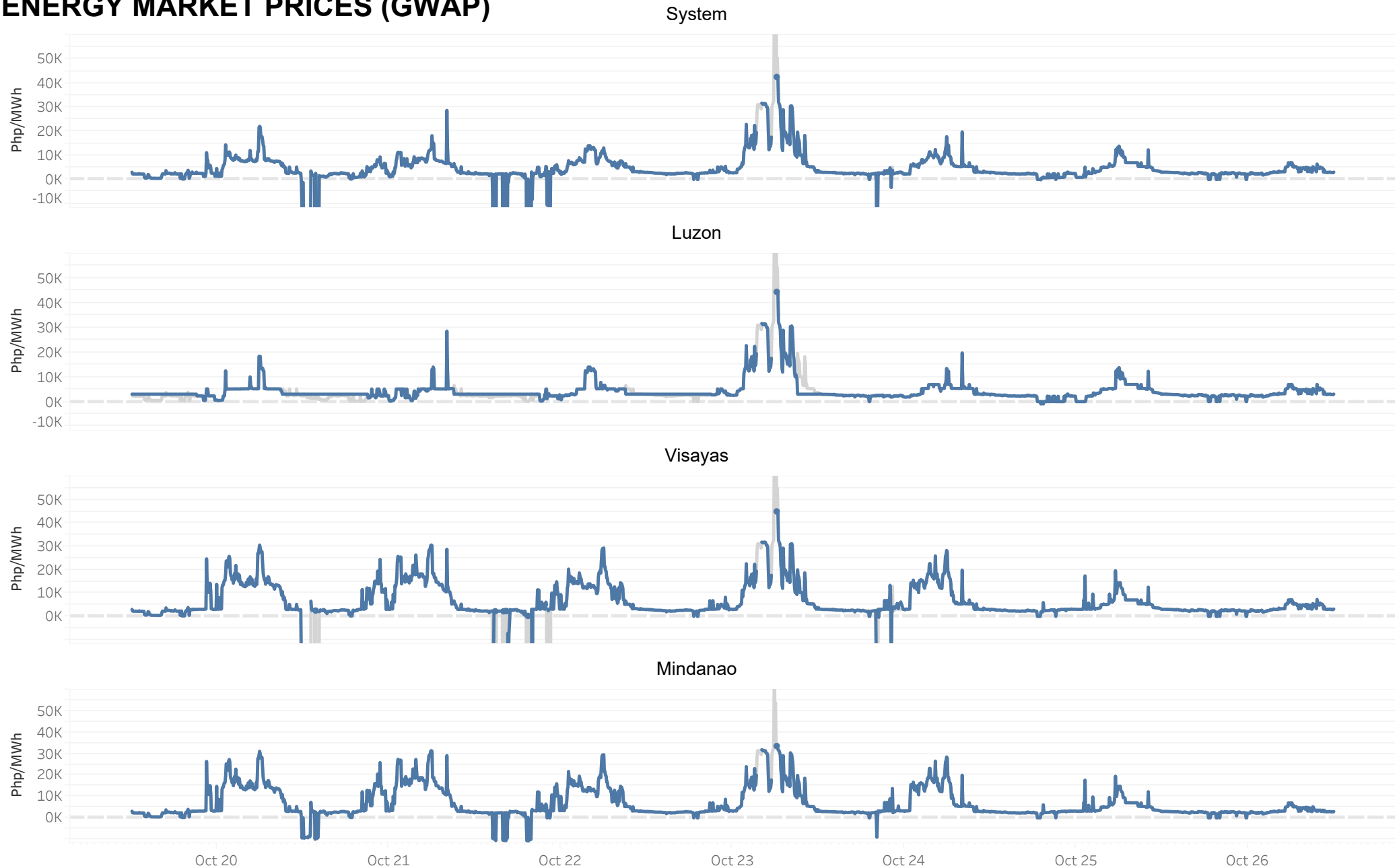
RTD Congestion



Market RSI vs Pivotal Plants



ENERGY MARKET PRICES (GWAP)

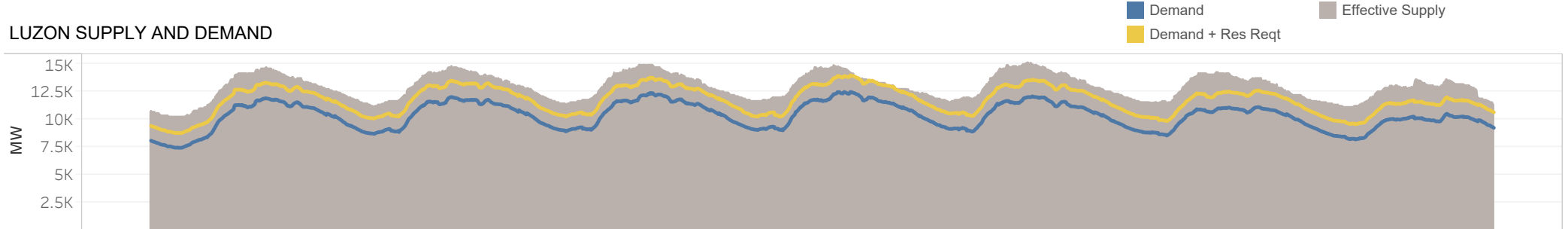


The charts show the market prices by region based on generator weighted average price (GWAP). Prices are subject to the finalization of settlement data.

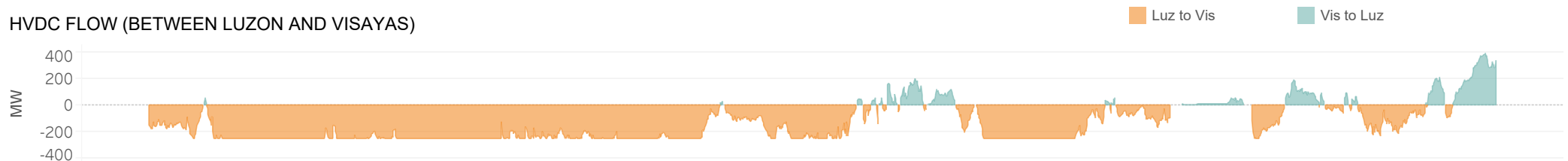
■ GWAP

■ GWAP (before post market run calculation)

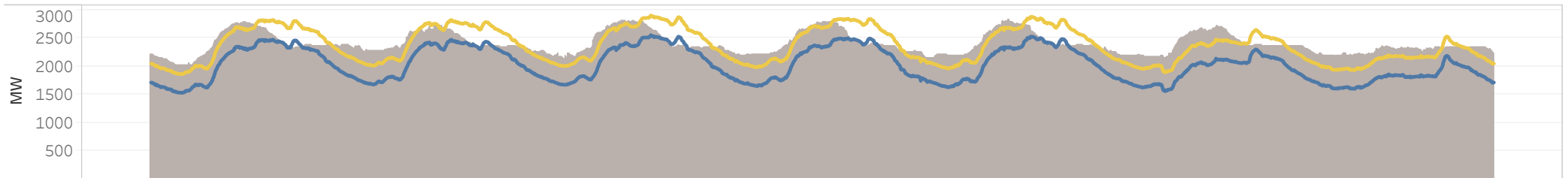
LUZON SUPPLY AND DEMAND



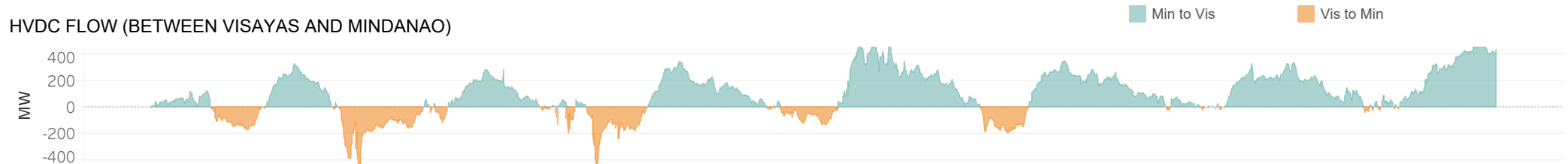
HVDC FLOW (BETWEEN LUZON AND VISAYAS)



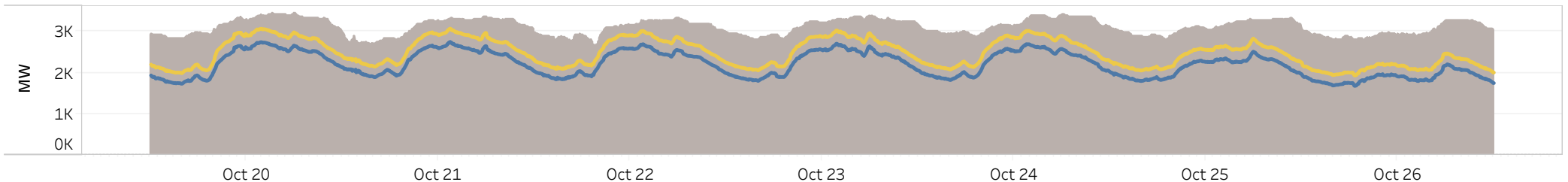
VISAYAS SUPPLY AND DEMAND



HVDC FLOW (BETWEEN VISAYAS AND MINDANAO)

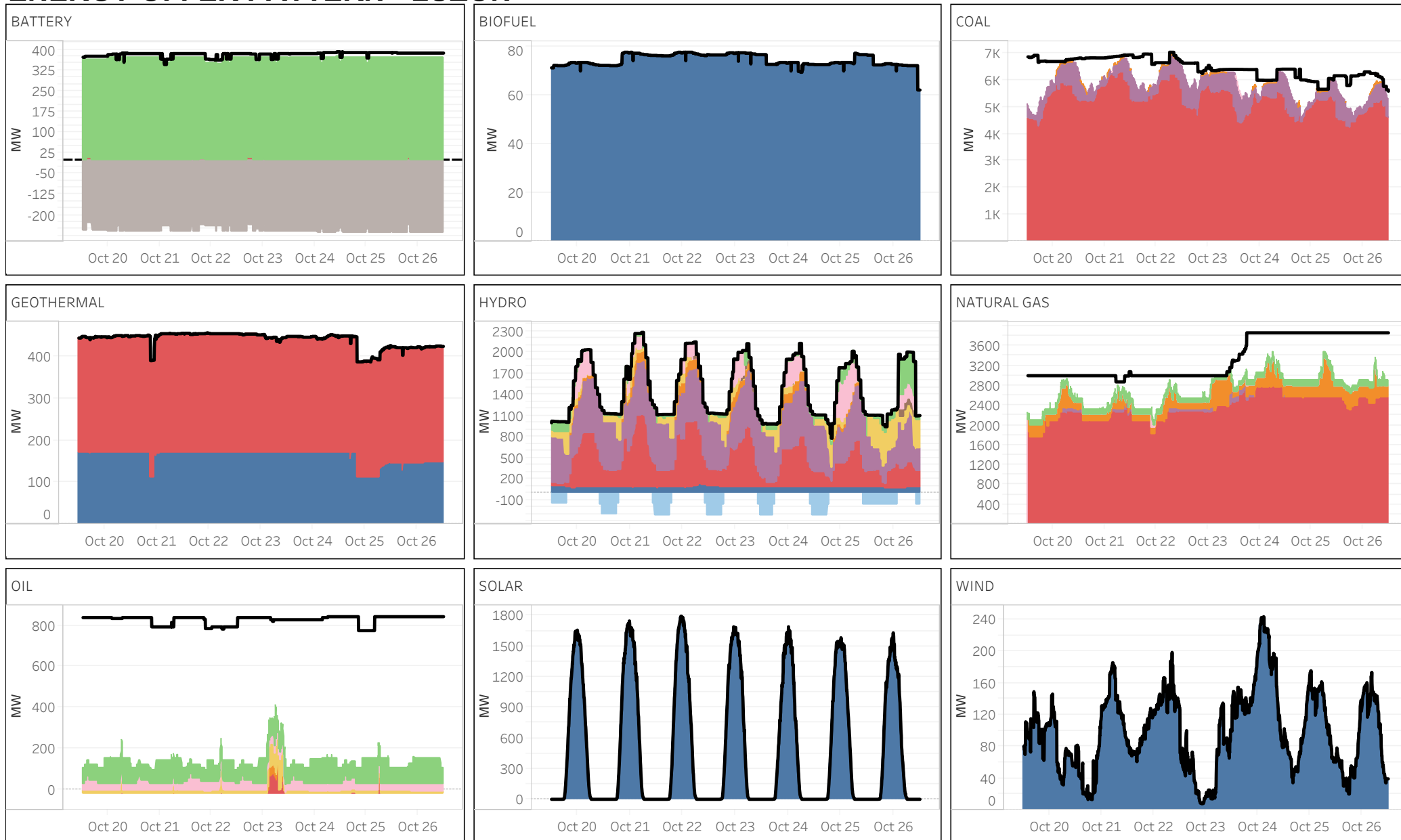


MINDANAO SUPPLY AND DEMAND



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



■ Preferential Nomination
■ Battery Charging Offer

■ Pumping Nomination
■ PHP 0 and below

■ PHP (0,5000]
■ PHP (5000,10000]

Offer Price Range

■ PHP (10000,15000]
■ PHP (15000,20000]

■ PHP (20000,25000]
■ PHP (25000,30000]

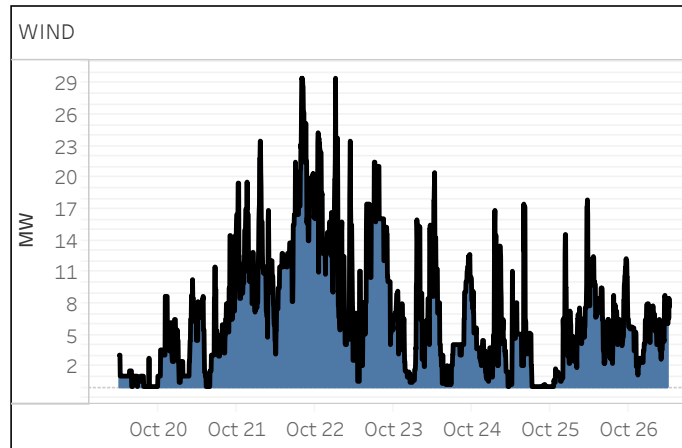
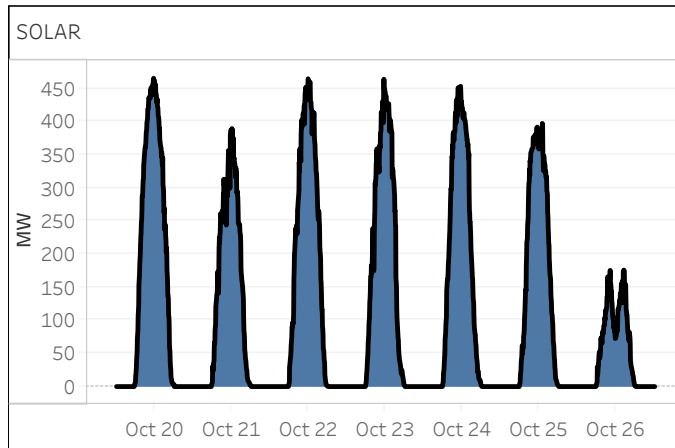
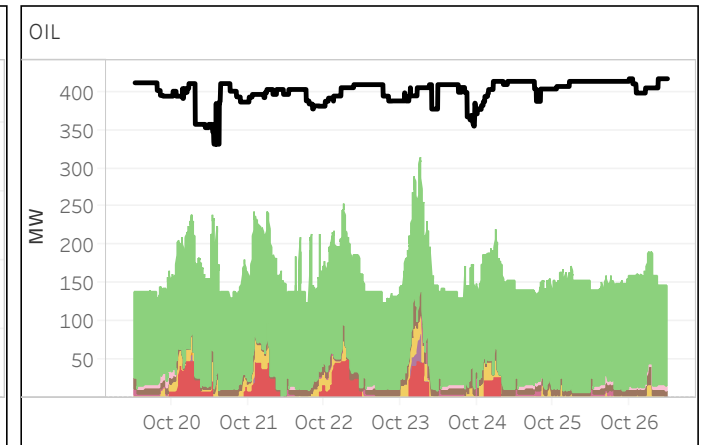
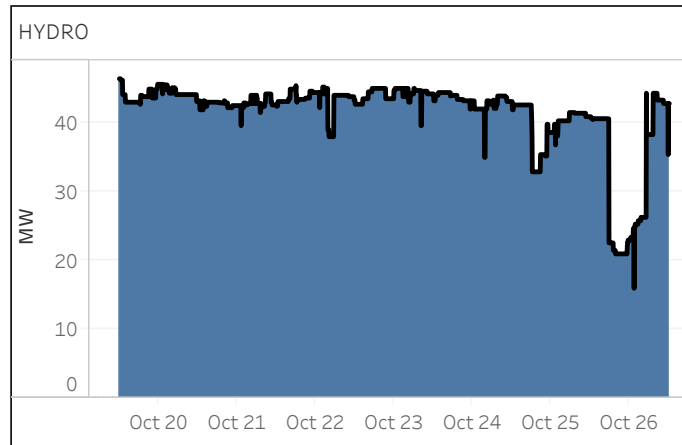
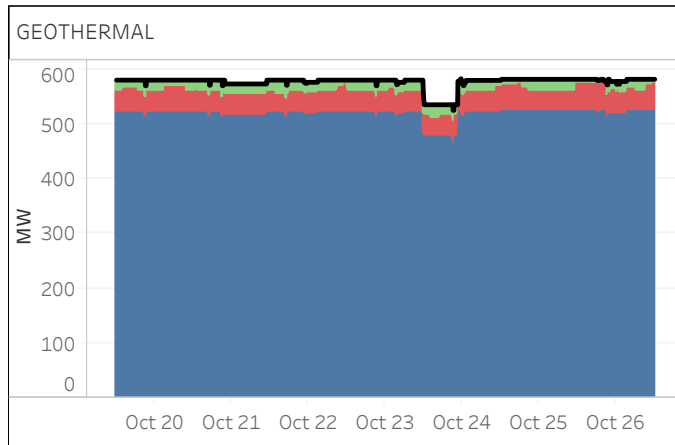
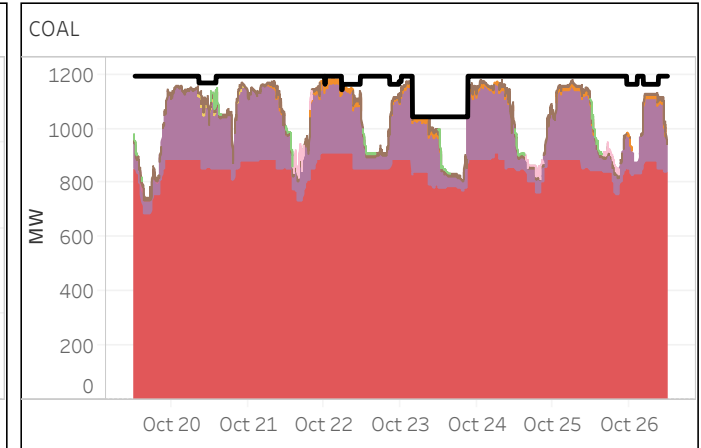
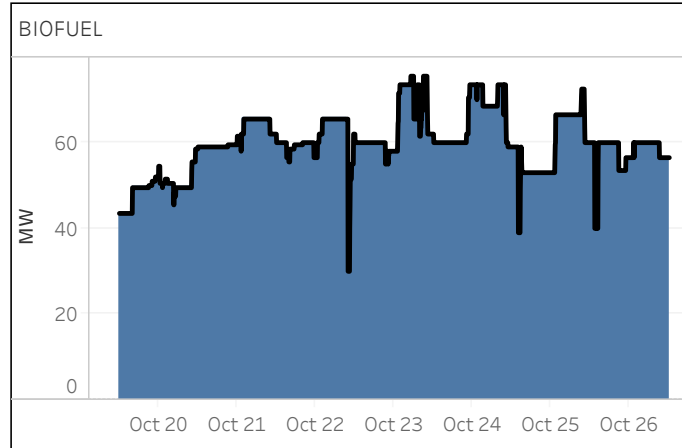
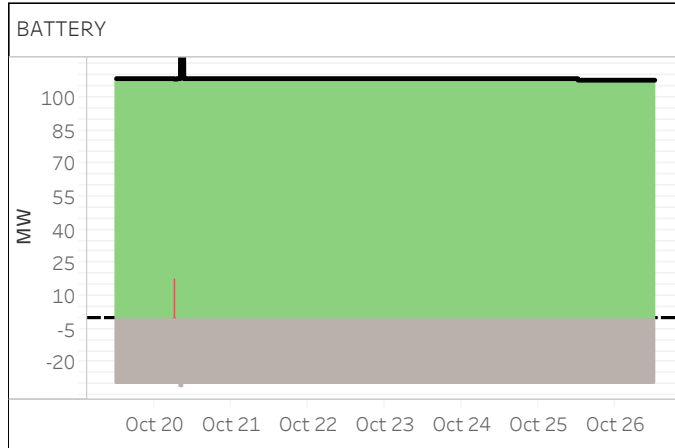
■ PHP (30000,32000]

■ Offered and Nominated Capacity

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.

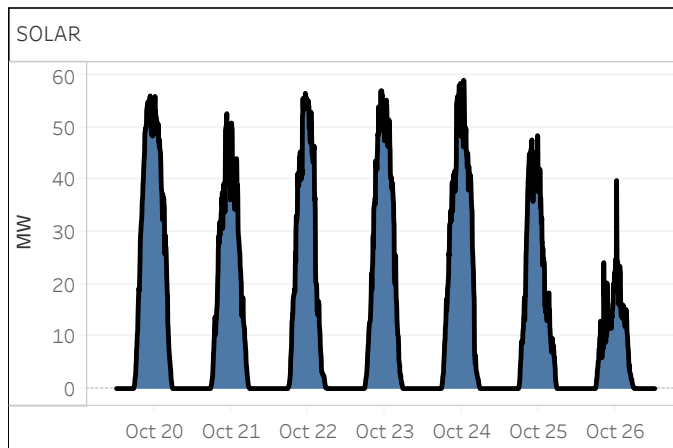
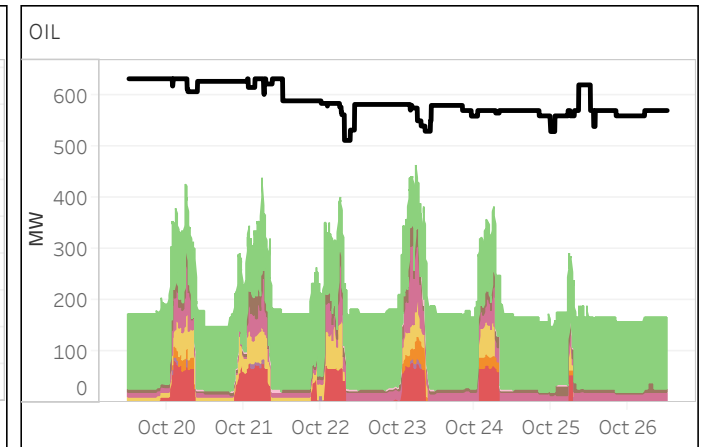
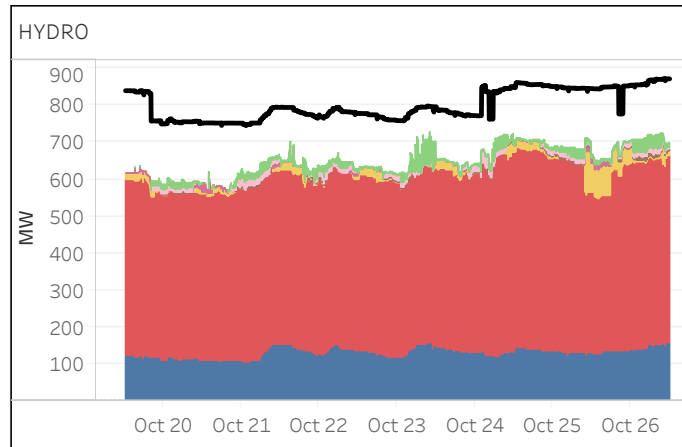
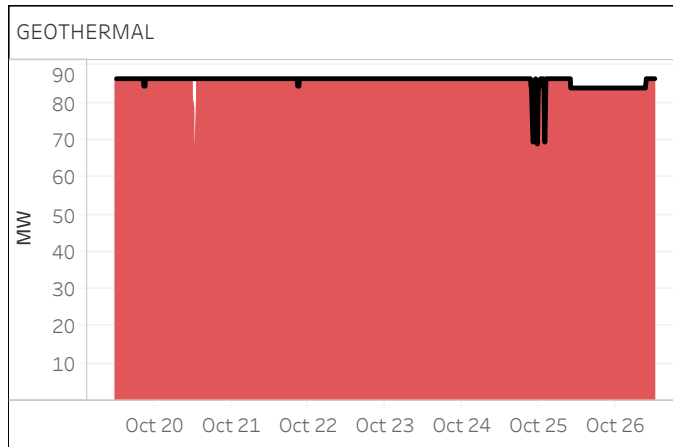
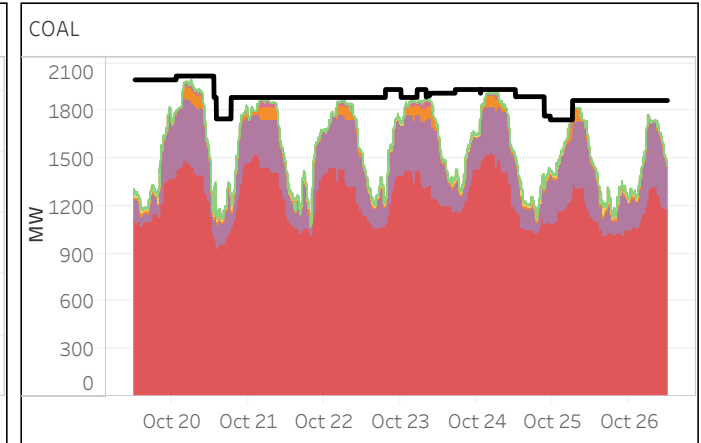
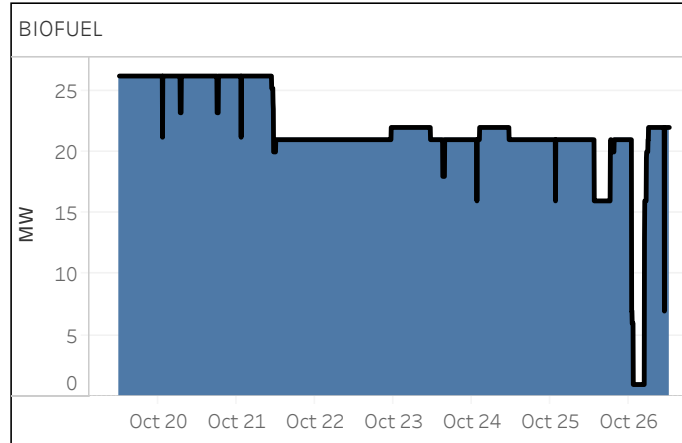
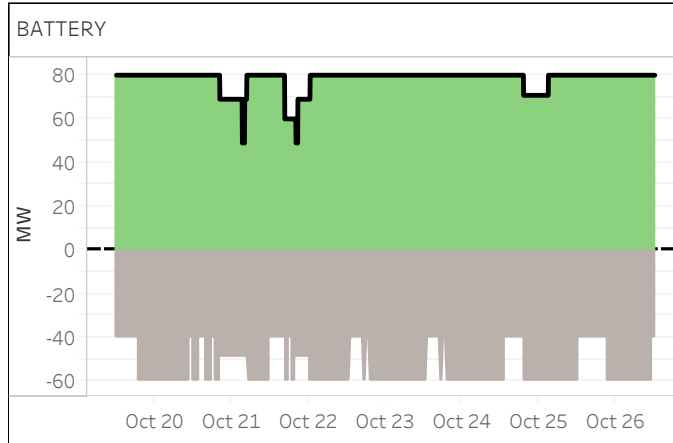
ENERGY OFFER PATTERN - VISAYAS



NOTES:

1. In Php (X, Y], it includes offer price greater than Php X but less than or equal to Php Y.
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ENERGY OFFER PATTERN - MINDANAO

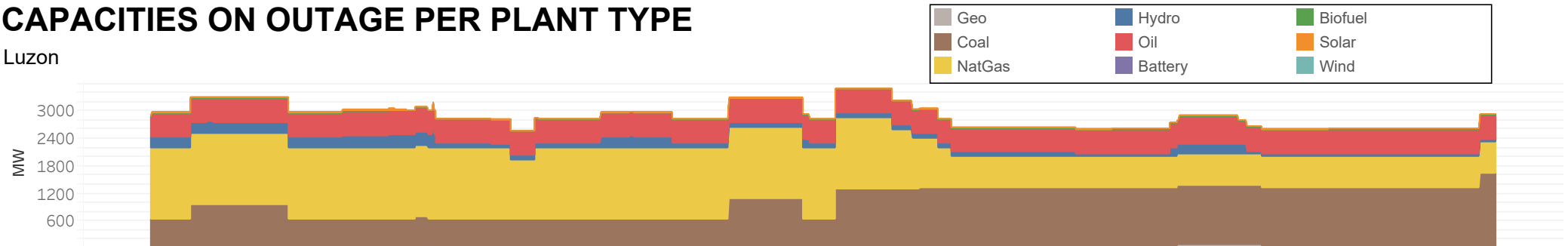


NOTES:

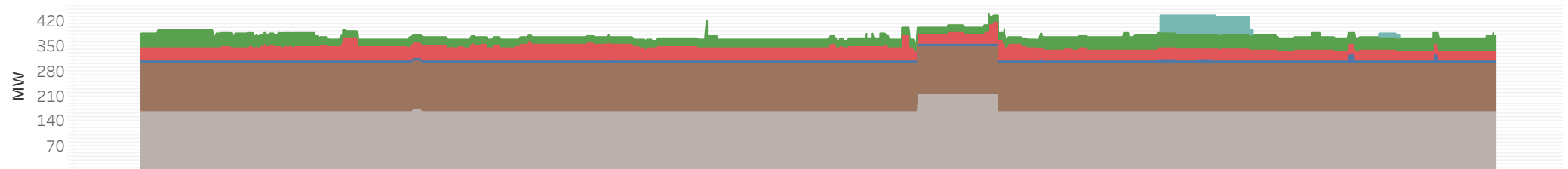
1. In Php (X, Y], it includes offer price greater than Php X but less than or equal to Php Y.
2. Reflected capacity are effective supply, adjusted for the submitted ramp rate and excluding any overriding constraint.

CAPACITIES ON OUTAGE PER PLANT TYPE

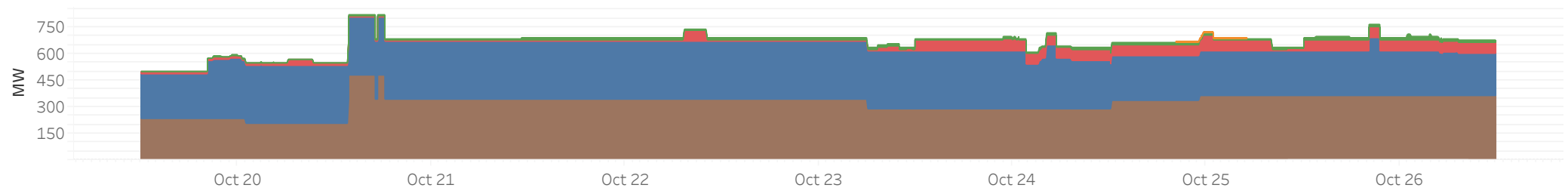
Luzon



Visayas



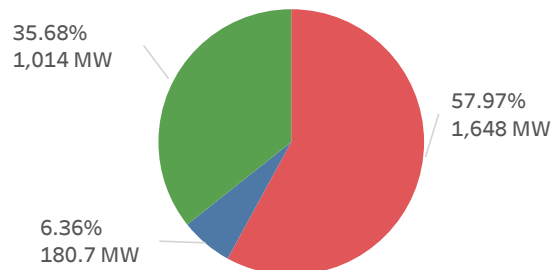
Mindanao



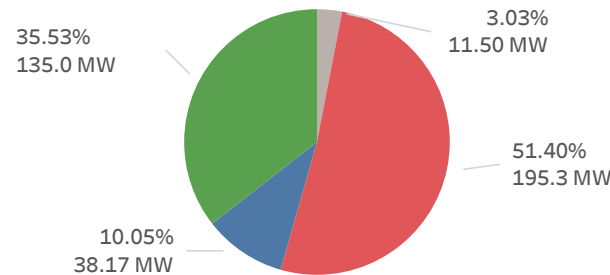
CAPACITIES ON OUTAGE PER CATEGORY

Deactivated Shutdown Forced Maintenance Planned

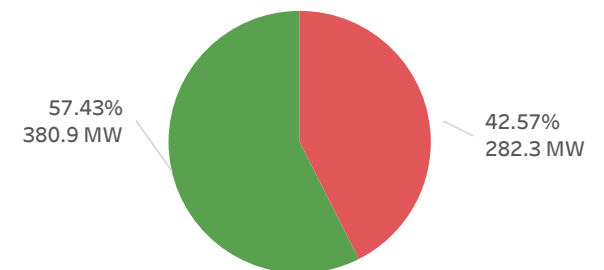
Luzon



Visayas

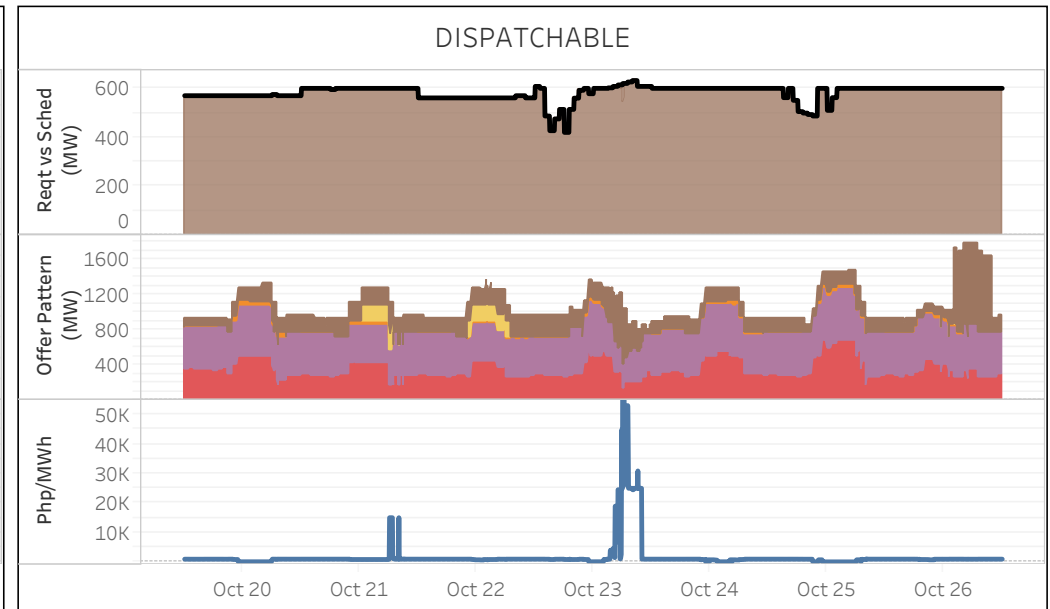
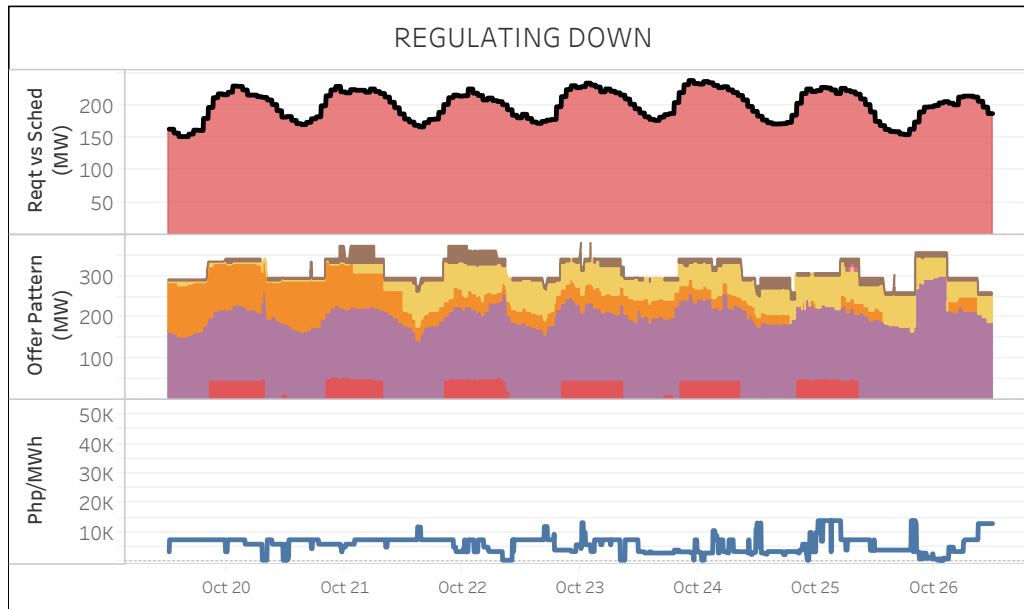
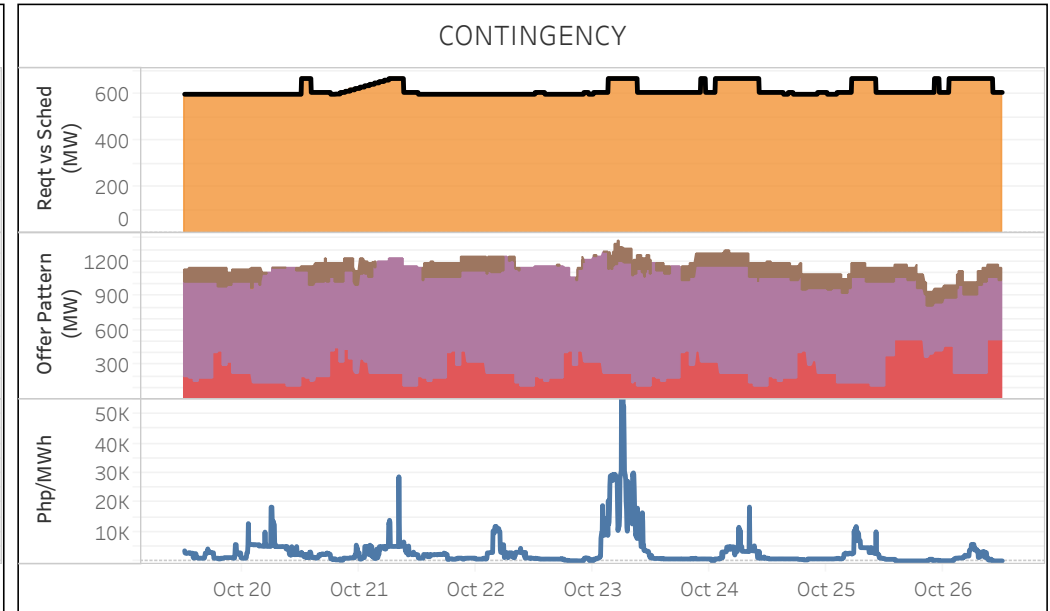
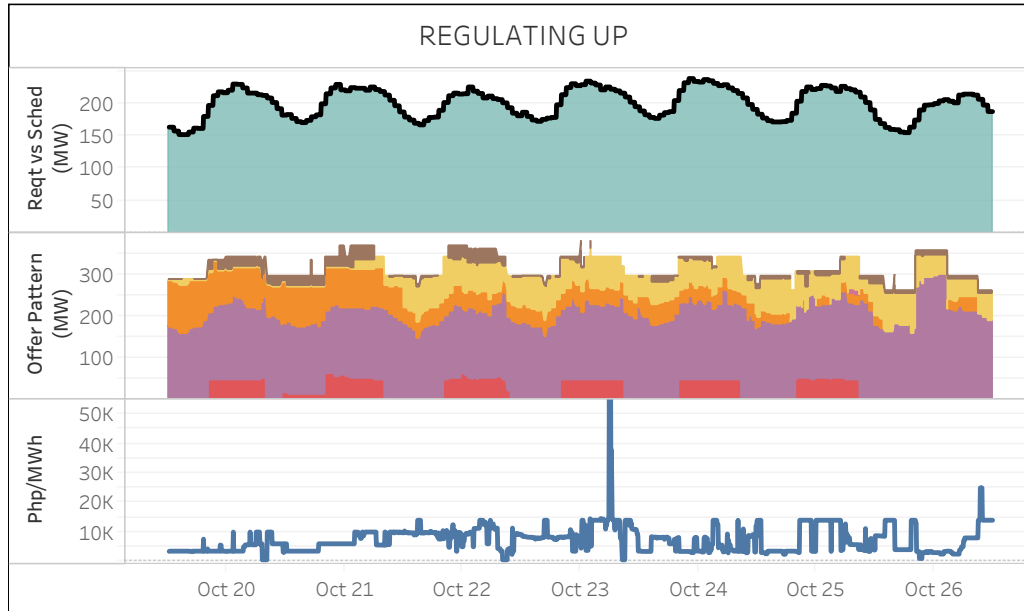


Mindanao



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

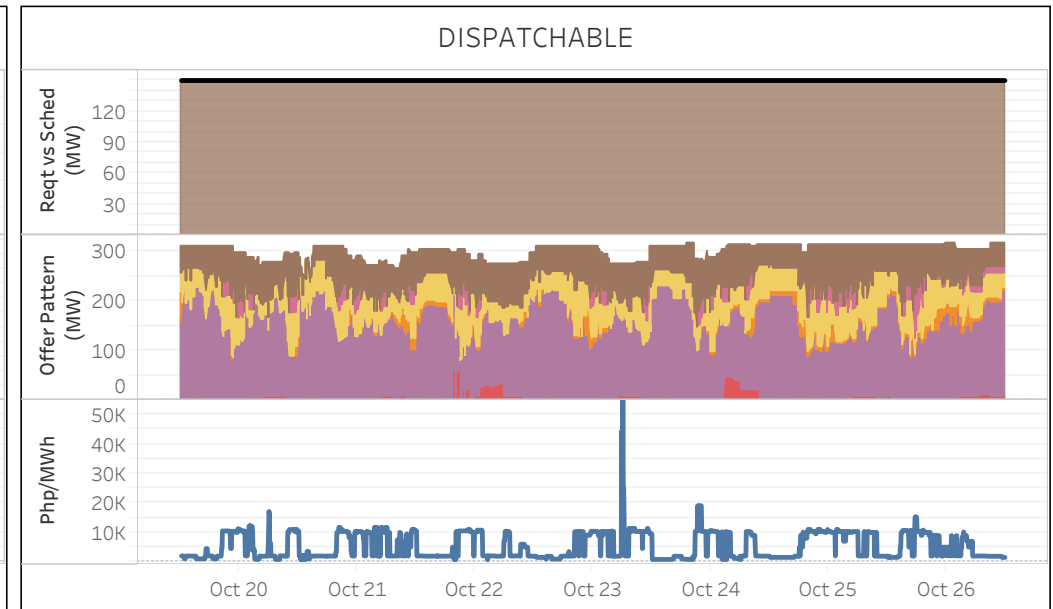
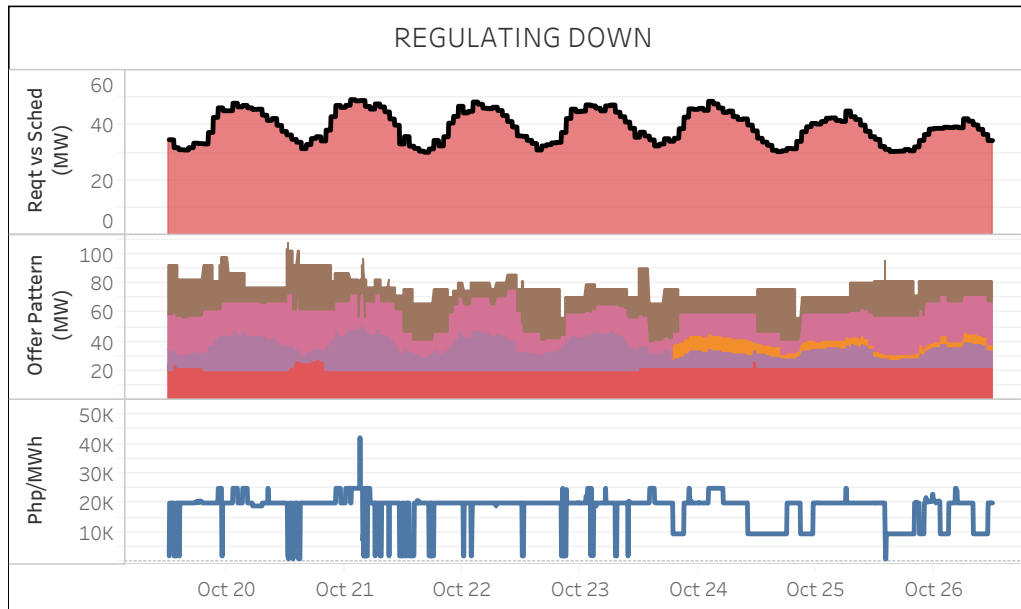
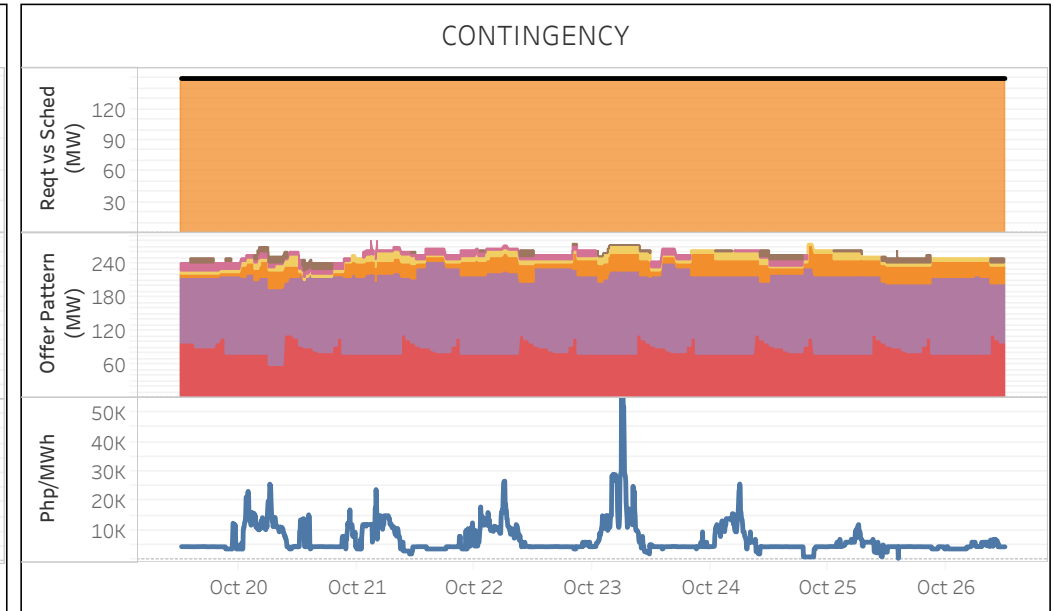
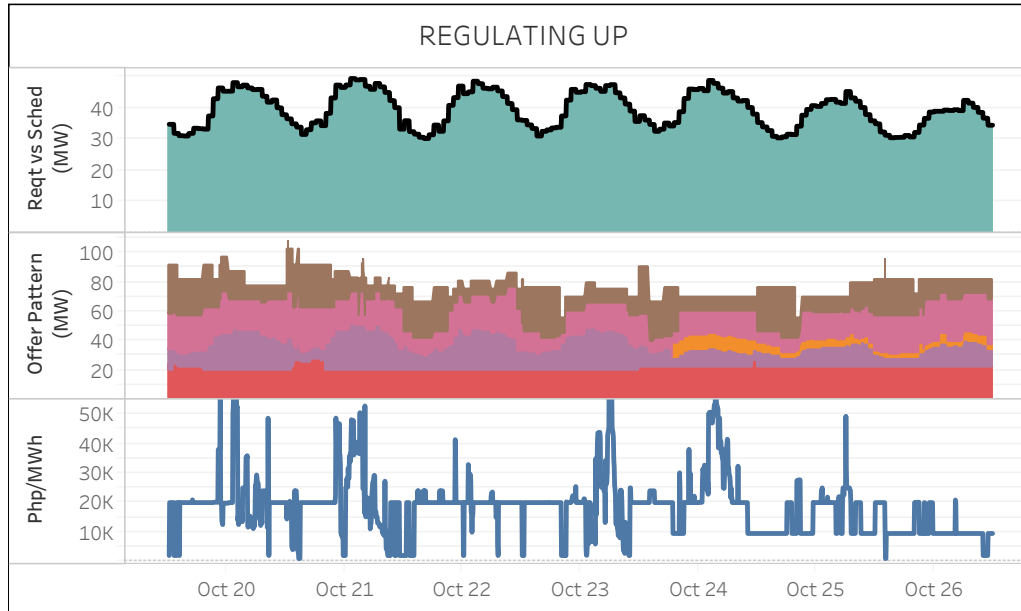
- Reserve Requirement
- RD Schedule
- DR Schedule
- RU Schedule
- FR Schedule

Offer Price Range

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

RESERVE MARKET DATA - 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



Req't vs Sched Legends

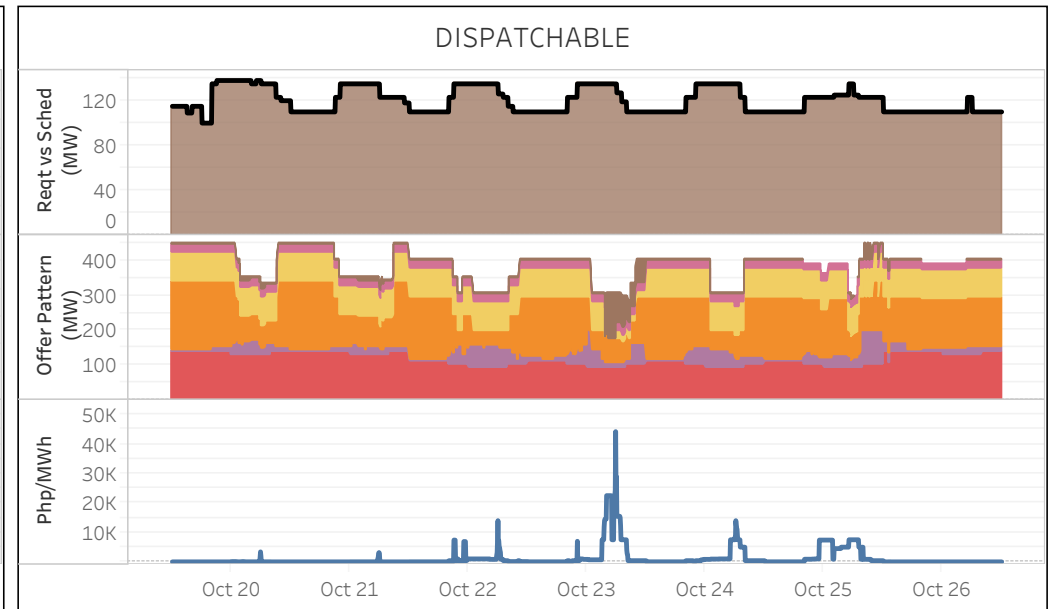
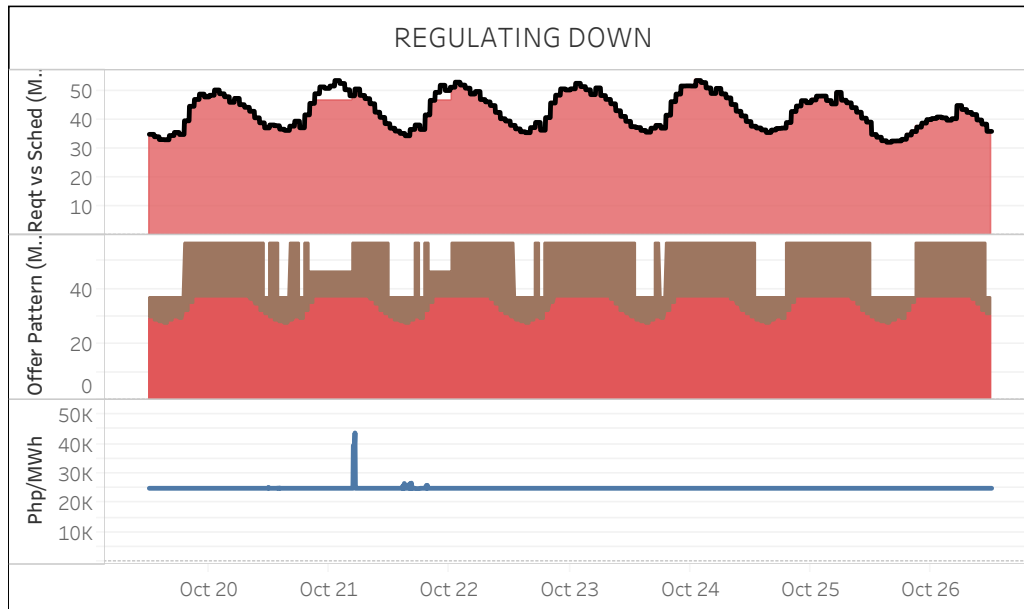
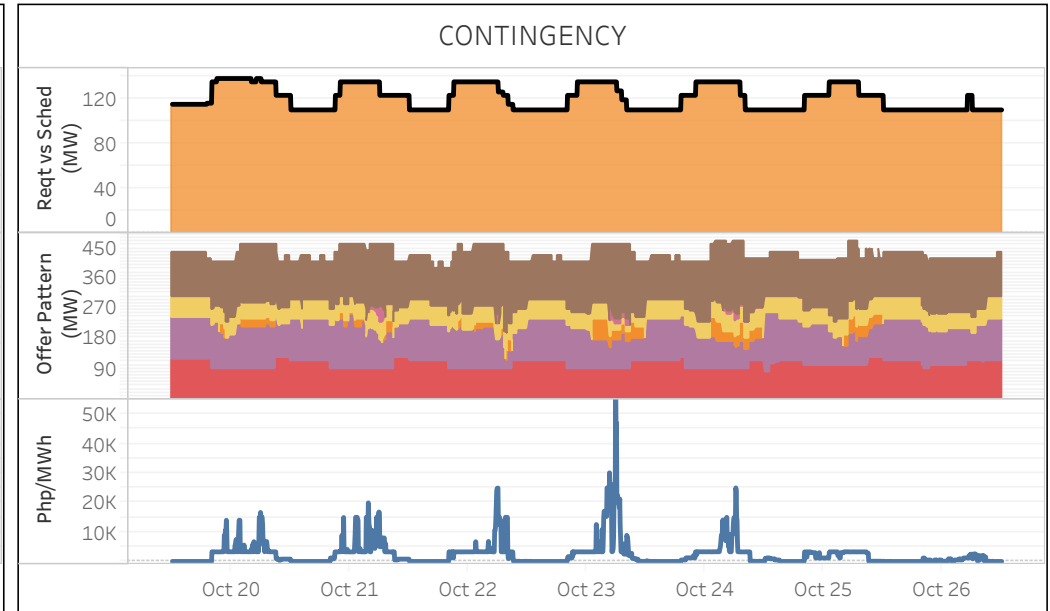
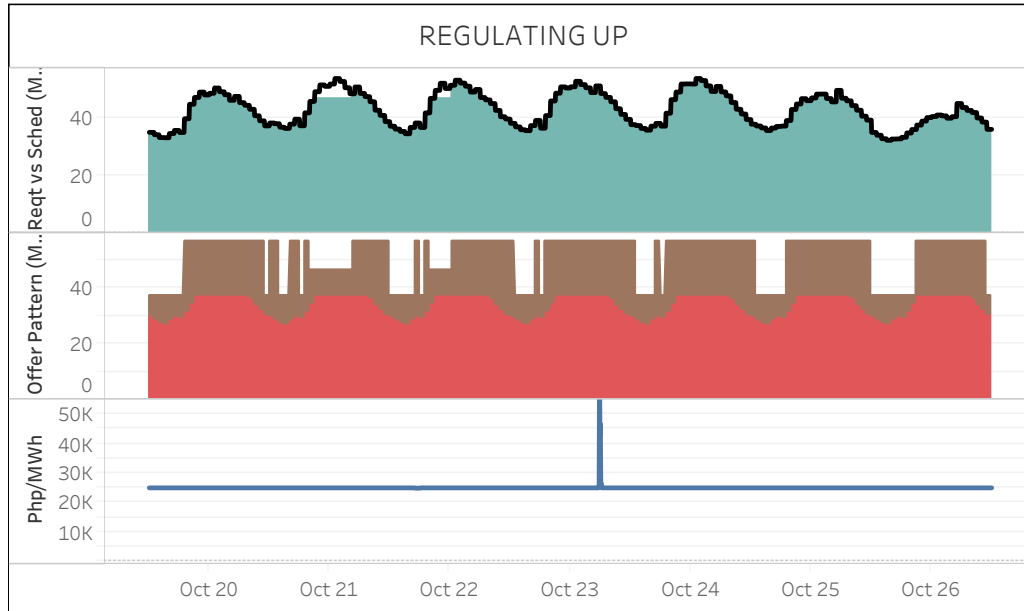
- Reserve Requirement
- RD Schedule
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- FR Schedule

Offer Price Range

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

RESERVE MARKET DATA - MINDANAO

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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

The information contained in this document is based on the available electricity spot market data. The same information is subject to change as updated figures come in. As such, the PEMC does not make any representation or warranty as to the completeness of this information. The PEMC likewise accepts no responsibility or liability whatsoever for any loss or cost incurred by a reader arising from, or in relation to, any conclusion or assumption derived from the information found herein.