

**MARKET ASSESSMENT HIGHLIGHTS**

Demand, Supply, and Price

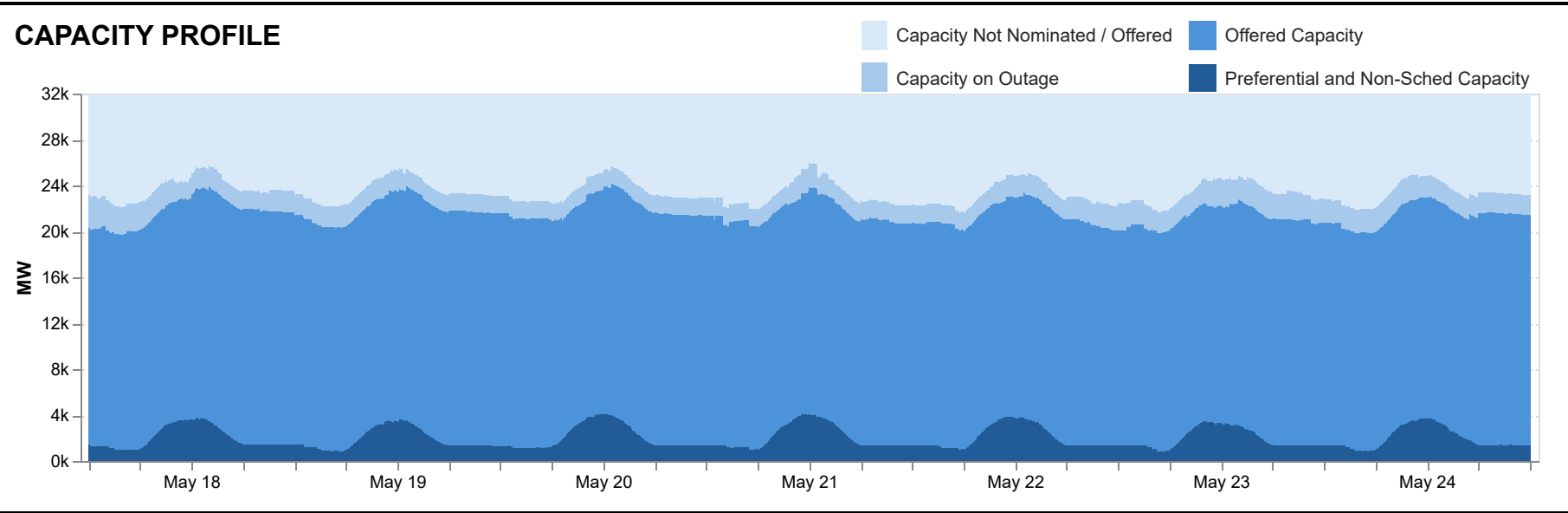
- Extremely high prices from 18 to 23 May that will be subjected to pricing correction, were excluded from the calculations for this week’s average GWAP. Meanwhile, previous week’s average GWAP was not included due to observed significant number of trading intervals that will be subjected to market re-run.
- The average weekly demand slightly decreased by 0.90%, 0.73% and 2.78% in the Luzon, Visayas, and Mindanao regions, respectively.
- The average weekly outage significantly decreased by 49.60% in the Luzon region as natural gas plants returned to operations and slightly decreased by 0.39% in the Visayas region as significant capacity of coal plants remained on outage, while it increased by 11.60% in the Mindanao region.
- Exports from Luzon to Visayas occurred 93.60% of the time, averaging at 92.5 MW, while flow from Visayas to Luzon occurred 6.30% of the time, averaging at 72.3 MW. Flow from Mindanao to Visayas was observed 99.85% of the time, averaging at 377.3 MW, while flow from Visayas to Mindanao occurred 0.15% of the time, averaging at 5.7 MW.
- The Upward Regulation, Downward Regulation, Contingency and Dispatchable reserve requirements were monitored across all regions. In Luzon region, these were met 100%, 100%, 100% and 99.80% of the time, respectively. In Visayas region, these were met 100%, 100%, 86.86% and 79.81% of the time, respectively. In Mindanao region, these were met 99.85%, 100%, 99.70% and 98.71% of the time, respectively.

Energy Offer Pattern Analysis

- Luzon
- Battery Energy Storage Systems recorded dips in offered capacities throughout the week due to reduced availability.
  - Coal plants recorded a decreases in offered capacities from 20 to 24 May due to reduced availability.
  - Geothermal plants recorded a decrease in nominated capacities starting on 19 May due to an outage, with dips observed on 24 May due to reduced availability.
  - Hydro plants experienced decrease in offered capacities from 22 to 24 May due to outages and resource constraints.
  - Natural Gas plants recorded decreases in offered capacities on 21 and 23 May due to testing activities imposed with overriding constraints by the SO.
  - Solar plants recorded higher effective supply compared to their nominated capacities throughout the week due to commissioning activities imposed with overriding constraints by the SO for new and newly rehabilitated plants. Wind plants likewise showed similar pattern on 18 May.
- Visayas
- Battery Energy Storage Systems recorded higher effective supply compared to their offered capacities throughout the week due to commissioning activities with overriding constraints imposed by the SO for new and newly rehabilitated plants.
  - Biofuel plants recorded higher effective supply compared to their nominated capacities from 19 to 24 May due to commissioning activities with overriding constraints imposed by the SO for new and newly rehabilitated plants.
  - Coal plants recorded decreases in offered capacities on 20, 21, and 22 May due to testing activities imposed with overriding constraints by the SO.
  - Geothermal plants recorded a decrease in offered capacities from 20 to 22 May, with a dip observe in nominated capacities on 22 May due to outages
  - Hydro plants experienced variations in nominated capacities throughout the week due to outages and resource constraints.
  - Oil plants experienced variations in offered capacities throughout the week due to outages.
  - Solar plants recorded higher effective supply compared to their nominated capacities from 18 to 22 May due to testing and commissioning activities with overriding constraints imposed by the SO for new and newly rehabilitated plants.
- Mindanao
- Biofuel plants showed variations in nominated capacities throughout the week due to outages and resource constraints.
  - Coal plants recorded a decrease in offered capacities on 24 May due to an outage.
  - Geothermal plants recorded a decrease in nominated capacities from 22 to 23 May due to an outage.
  - Hydro plants experienced variations in offered and nominated capacities throughout the week due to outages and resource constraints.
  - Oil plants experienced slight decreases in offered capacities throughout the week due to outages, with a significant drop on 23 May due to reduced availability.

ITEMOP Market Systems Advisory

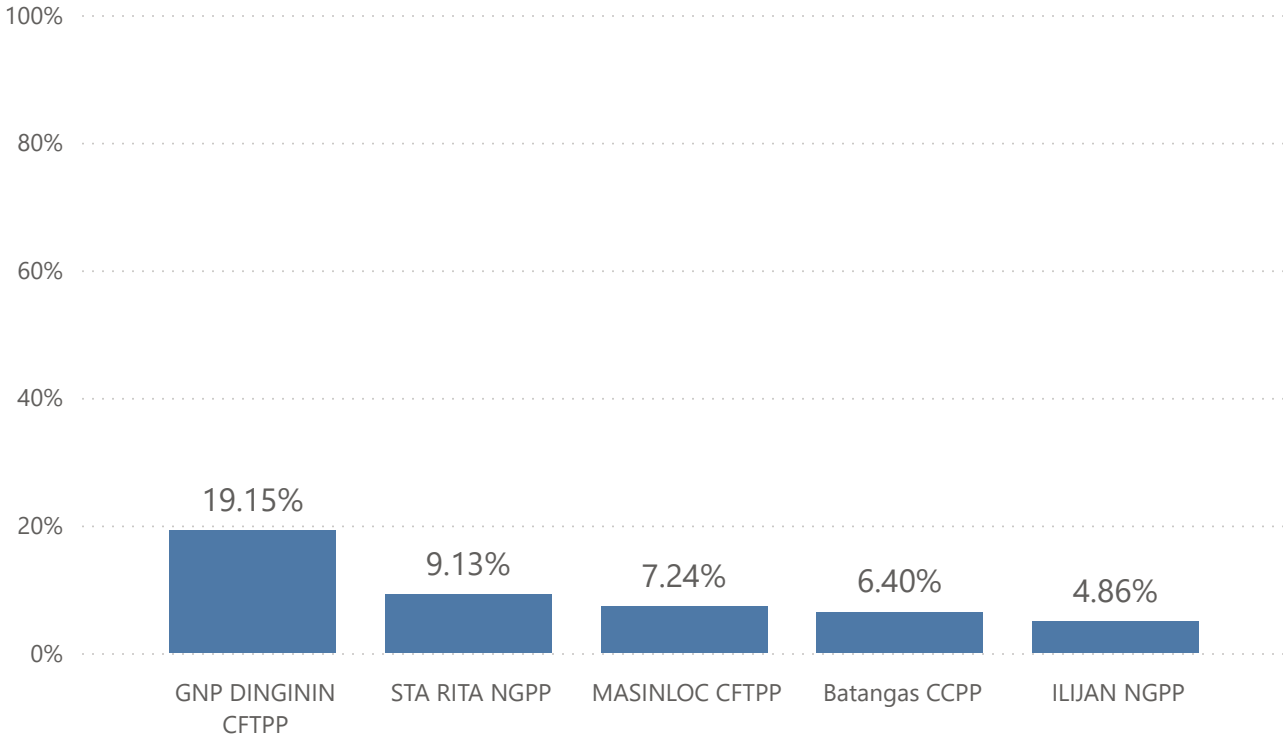
- SO-initiated Market Intervention (MI) was declared in the Visayas region on 19 May at 1345H to 1400H and on 21 May at 1655H to 2040H, due to MLD implementation resulting from the overloading of Daanbantayan-Tabango 230kV Line 2.



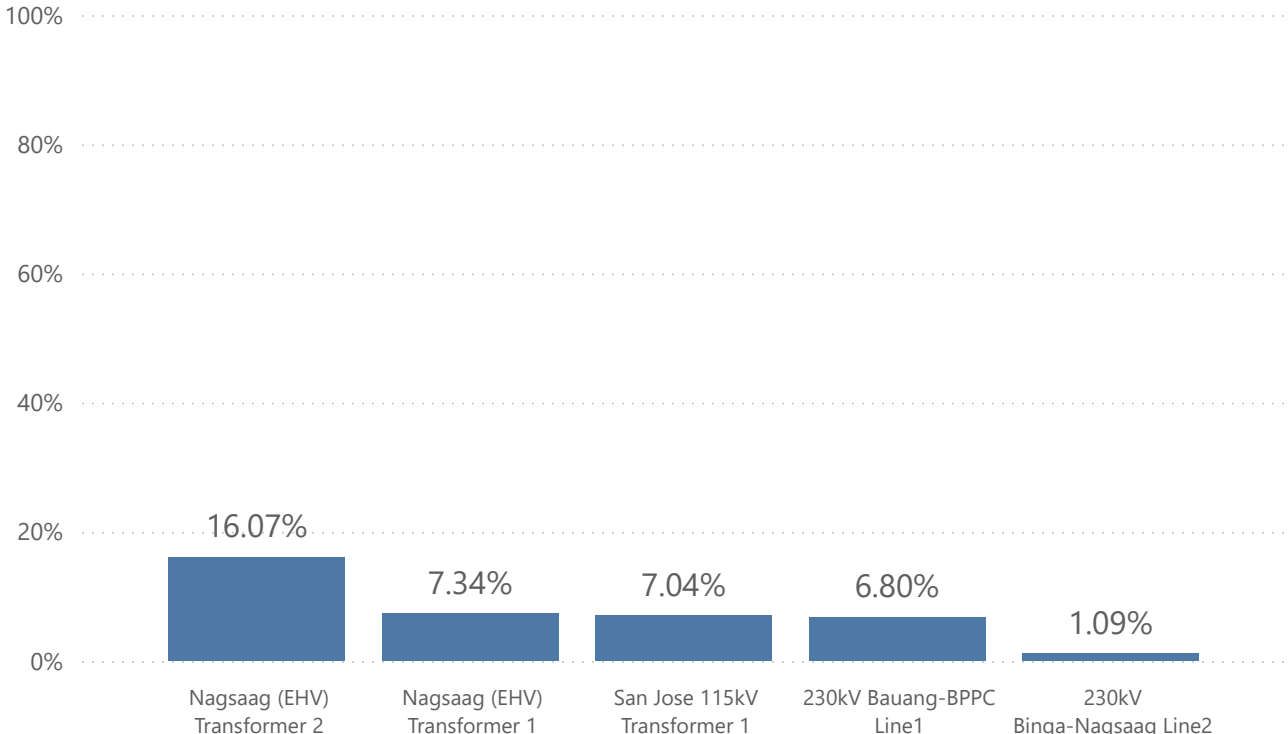
**SUMMARY OF AVERAGE VALUES**

| Particulars                                | 18 - 24 May 2026 | 11 - 17 May 2026 | % Change |
|--------------------------------------------|------------------|------------------|----------|
| GENERATOR WEIGHTED AVERAGE PRICE (Php/MWh) |                  |                  |          |
| System                                     | 7,230            |                  |          |
| Luzon                                      | 6,210            |                  |          |
| Visayas                                    | 10,841           |                  |          |
| Mindanao                                   | 11,017           |                  |          |
| EFFECTIVE SUPPLY (MW)                      |                  |                  |          |
| Luzon                                      | 14,653           | 14,022           | 4.50%    |
| Visayas                                    | 2,198            | 2,245            | -2.10%   |
| Mindanao                                   | 3,237            | 3,285            | -1.46%   |
| DEMAND (MW)                                |                  |                  |          |
| Luzon                                      | 11,687           | 11,793           | -0.90%   |
| Visayas                                    | 2,230            | 2,246            | -0.73%   |
| Mindanao                                   | 2,188            | 2,250            | -2.78%   |
| OUTAGE (MW)                                |                  |                  |          |
| Luzon                                      | 746              | 1,945            | -61.67%  |
| Visayas                                    | 613              | 616              | -0.39%   |
| Mindanao                                   | 423              | 379              | 11.60%   |
| REGULATING UP PRICE (Php/MWh)              |                  |                  |          |
| Luzon                                      | 9,683            |                  |          |
| Visayas                                    | 37,102           |                  |          |
| Mindanao                                   | 23,294           |                  |          |
| REGULATING DOWN PRICE (Php/MWh)            |                  |                  |          |
| Luzon                                      | 10,423           |                  |          |
| Visayas                                    | 16,635           |                  |          |
| Mindanao                                   | 22,426           |                  |          |
| CONTINGENCY RESERVE PRICE (Php/MWh)        |                  |                  |          |
| Luzon                                      | 2,121            |                  |          |
| Visayas                                    | 17,087           |                  |          |
| Mindanao                                   | 6,612            |                  |          |
| DISPATCHABLE RESERVE PRICE (Php/MWh)       |                  |                  |          |
| Luzon                                      | 2,006            |                  |          |
| Visayas                                    | 7,998            |                  |          |
| Mindanao                                   | 730              |                  |          |

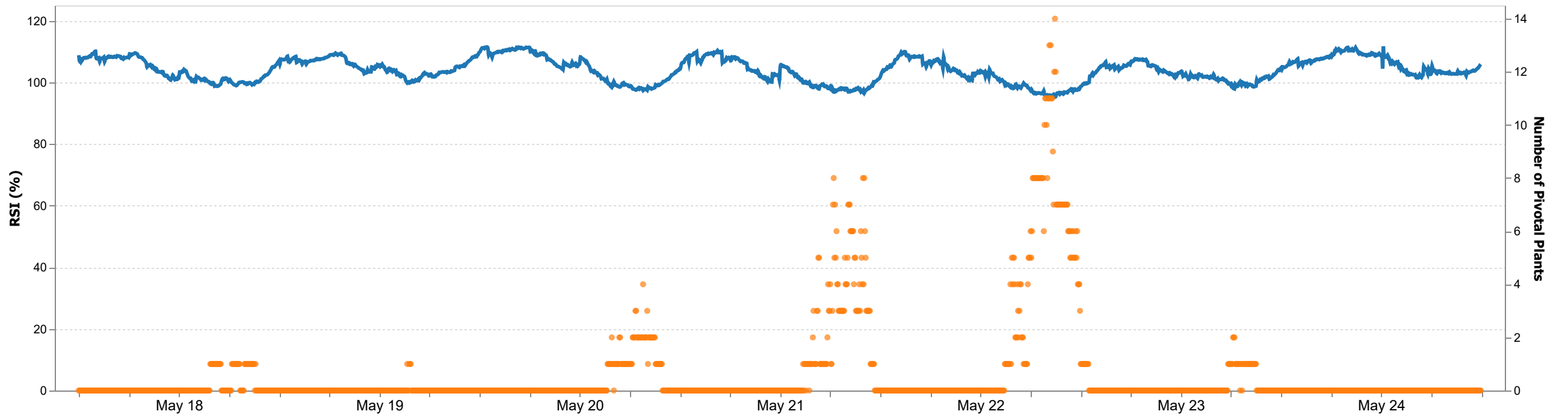
### Top Pivotal Plants



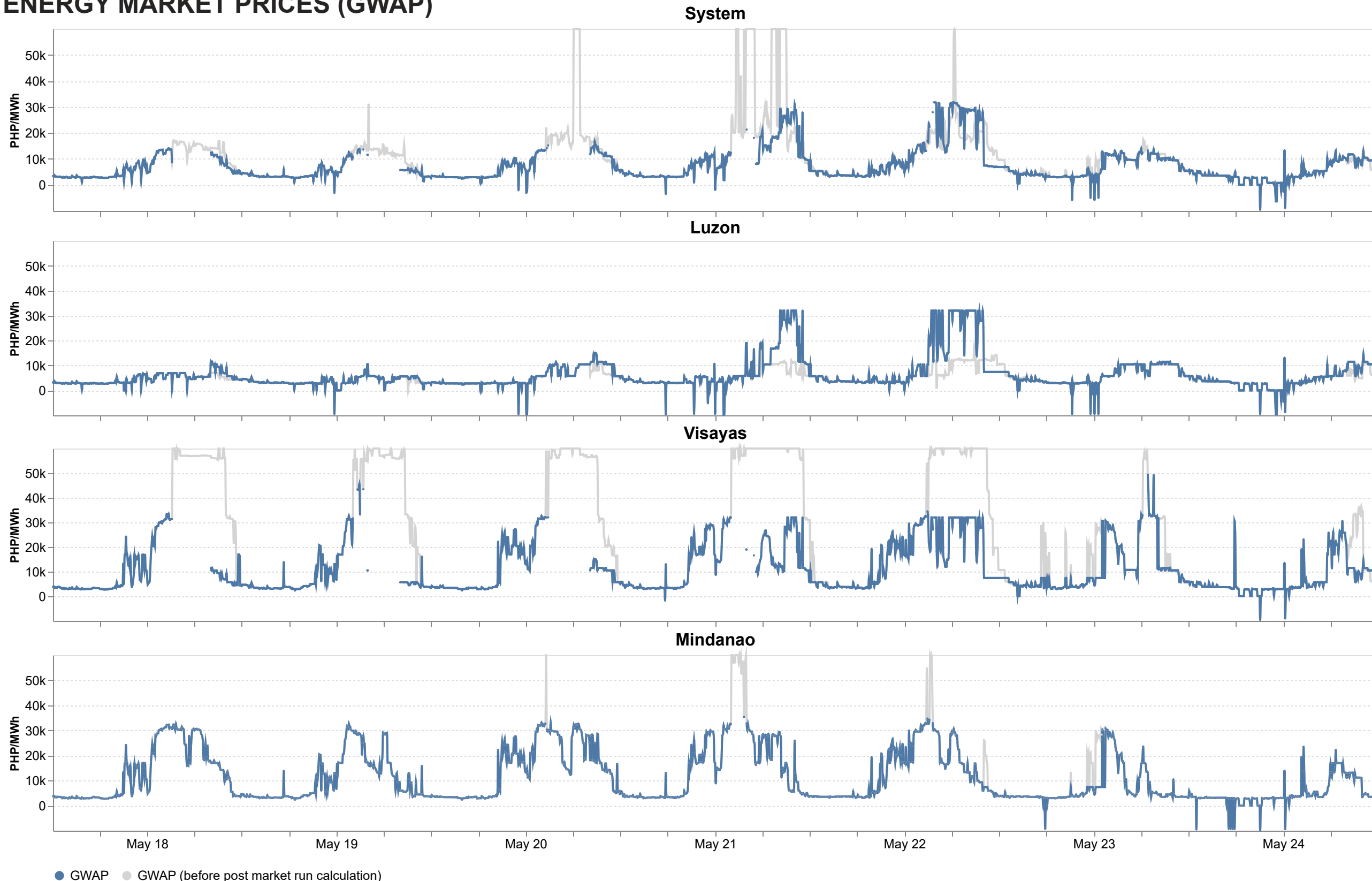
### RTD Congestion



### Market RSI vs Pivotal Plants

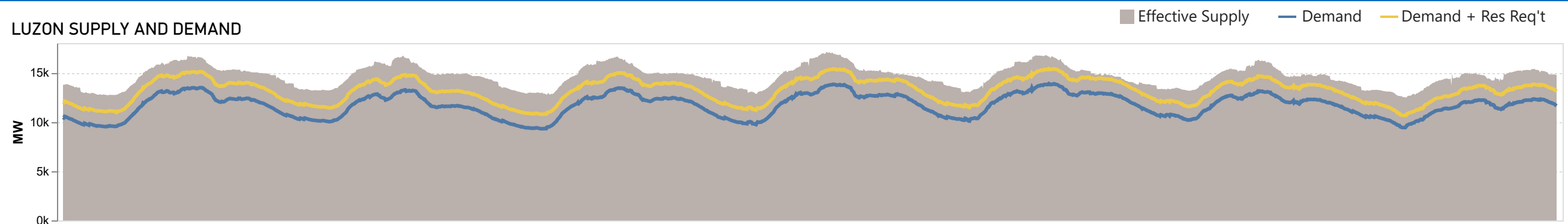


# ENERGY MARKET PRICES (GWAP)

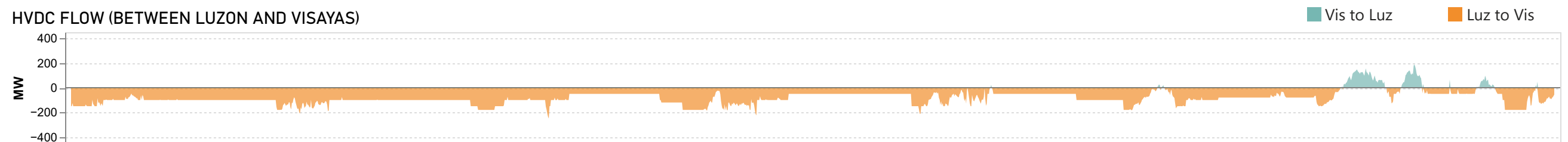


The charts show the market prices by region based on generator weighted average price (GWAP). Prices are subject to the finalization of settlement data.

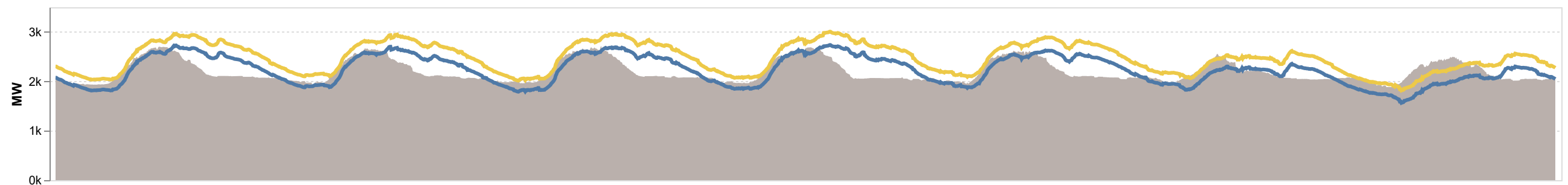
### LUZON SUPPLY AND DEMAND



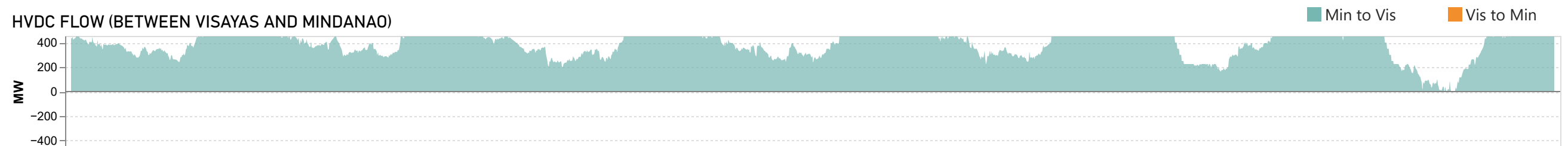
### HVDC FLOW (BETWEEN LUZON AND VISAYAS)



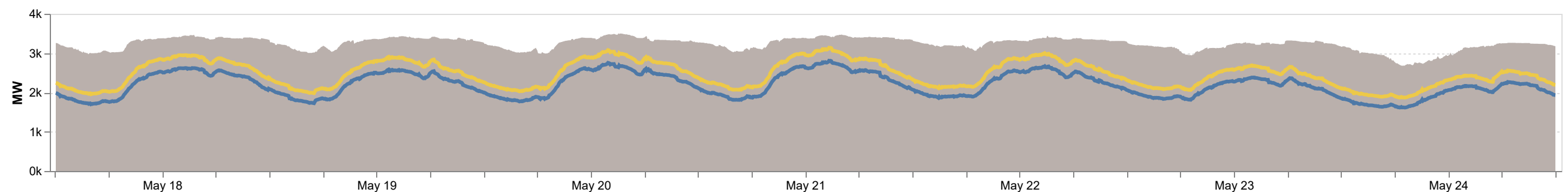
### VISAYAS SUPPLY AND DEMAND



### HVDC FLOW (BETWEEN VISAYAS AND MINDANAO)



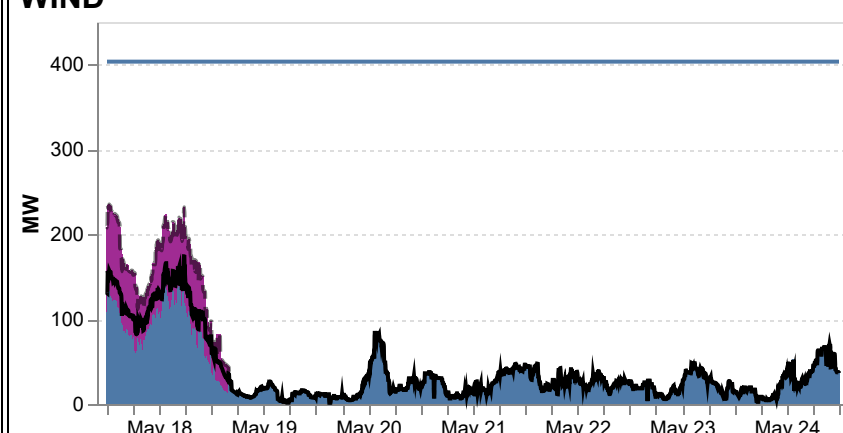
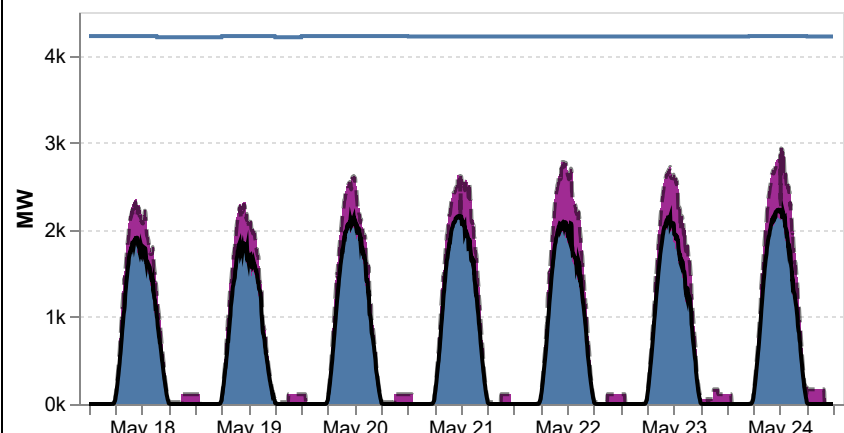
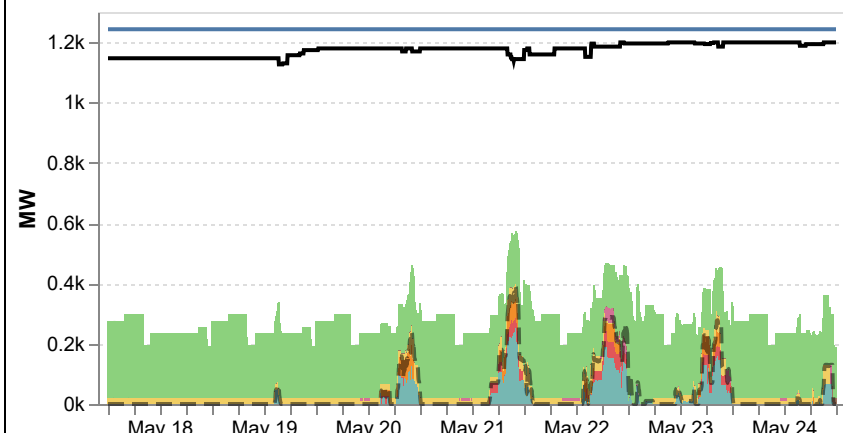
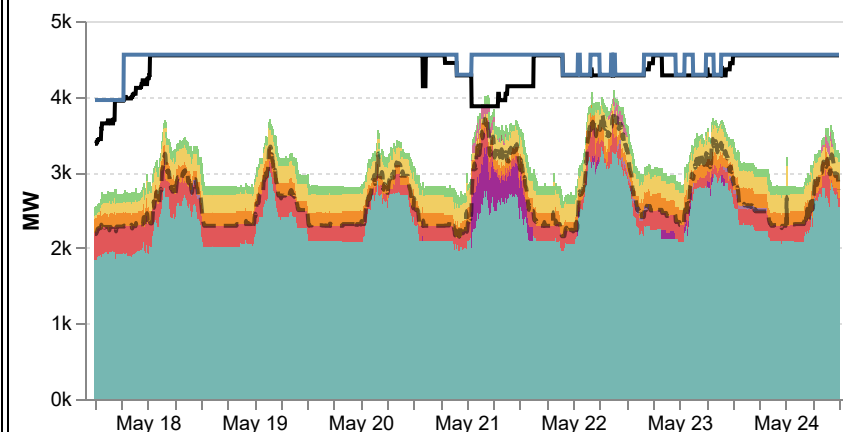
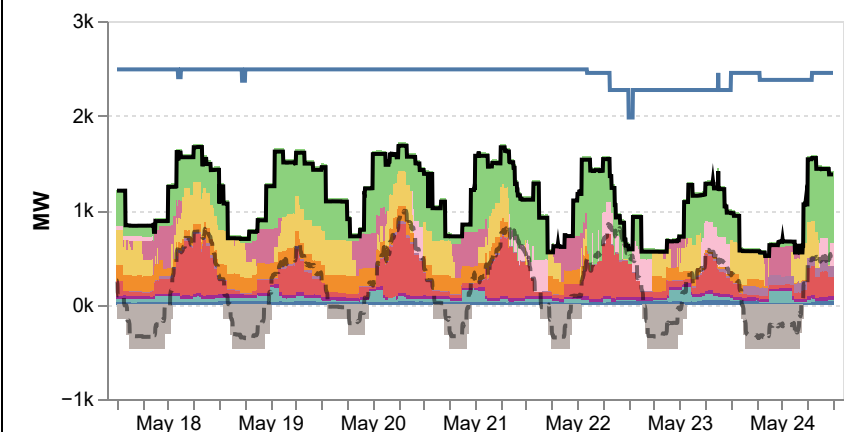
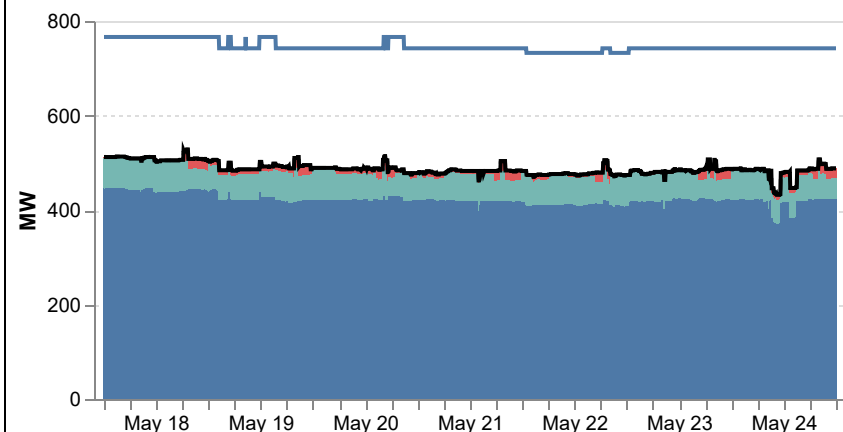
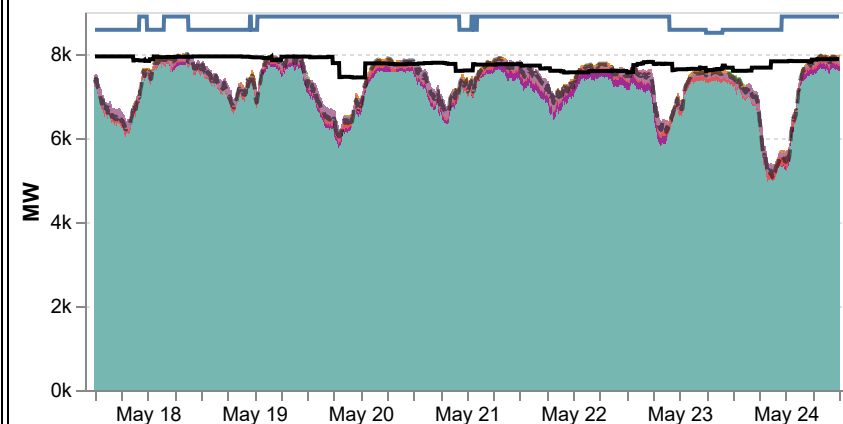
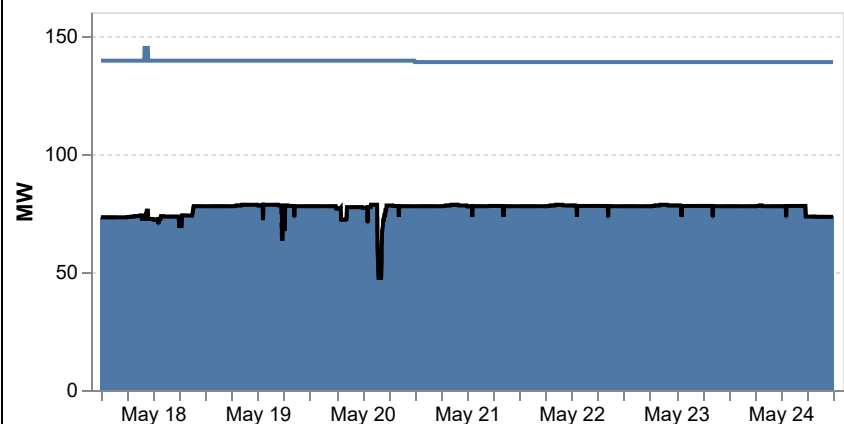
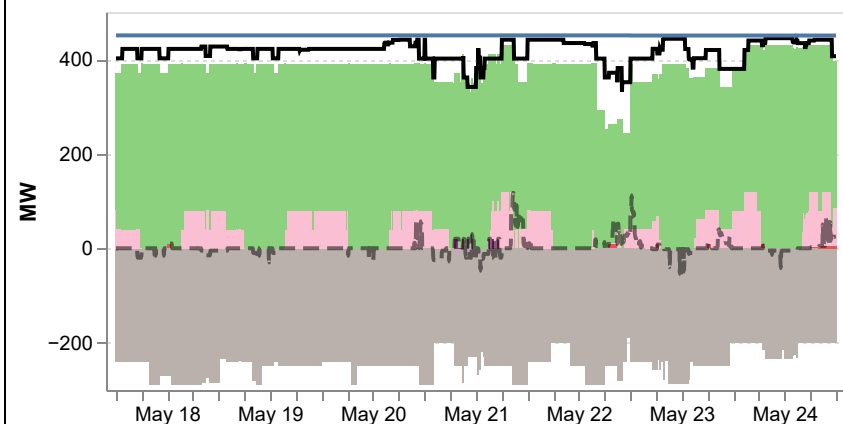
### MINDANAO SUPPLY AND DEMAND



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

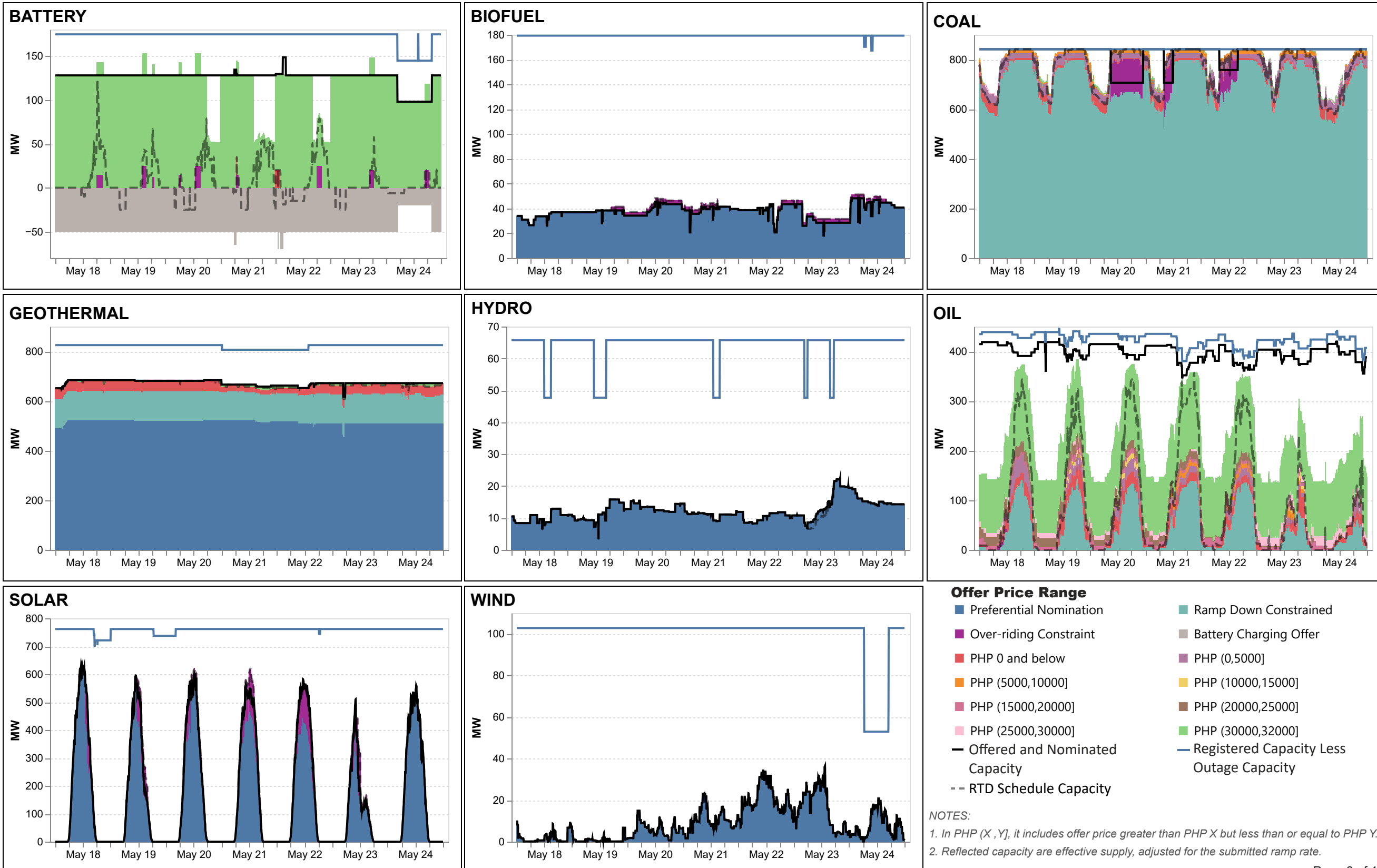


**Offer Price Range**

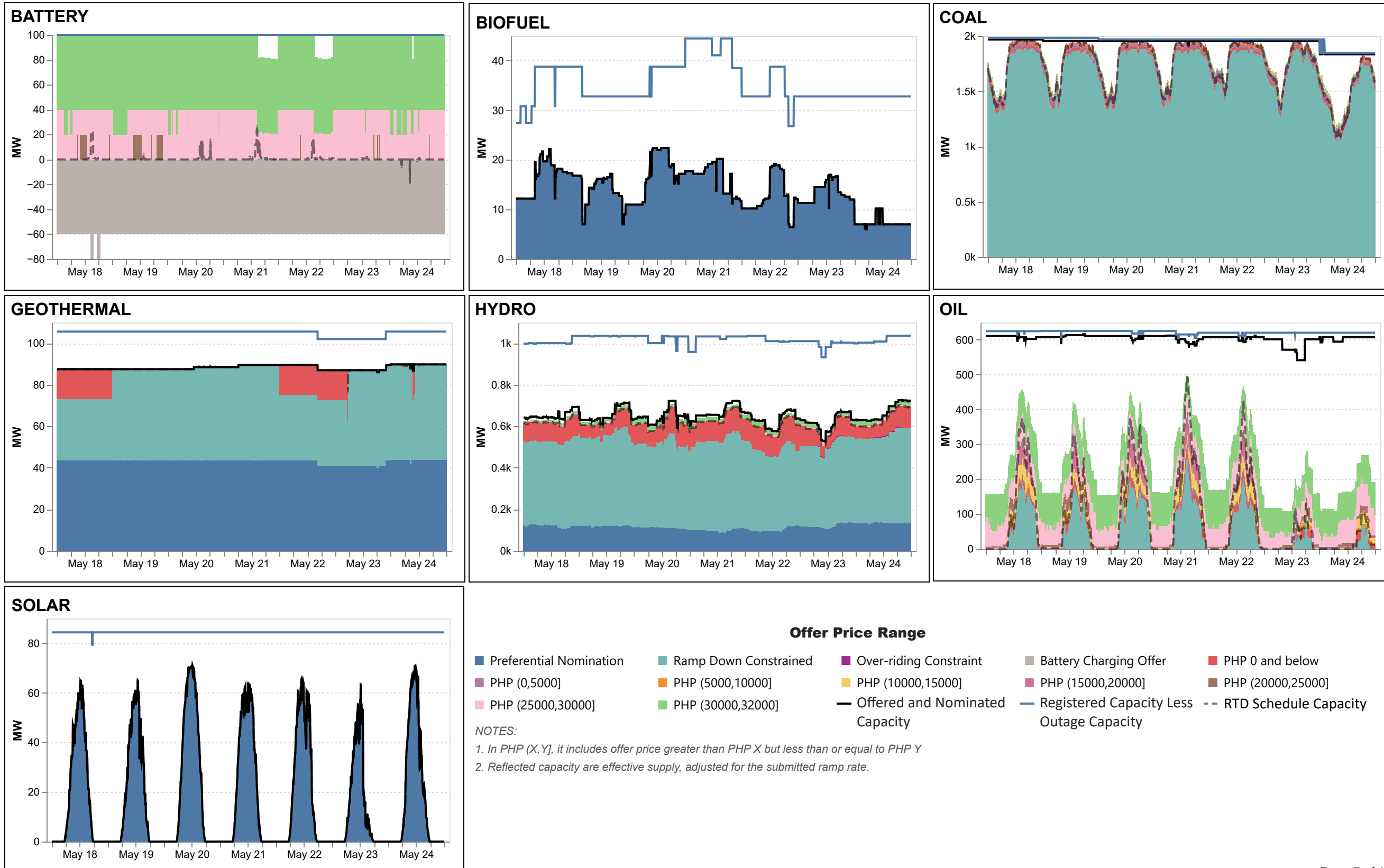
|                           |                         |                                  |                                             |                         |
|---------------------------|-------------------------|----------------------------------|---------------------------------------------|-------------------------|
| ■ Preferential Nomination | ■ Ramp Down Constrained | ■ Over-riding Constraint         | ■ Battery Charging Offer/Pumping Nomination | ■ PHP 0 and below       |
| ■ PHP (0,5000]            | ■ PHP (5000,10000]      | ■ PHP (10000,15000]              | ■ PHP (15000,20000]                         | ■ PHP (20000,25000]     |
| ■ PHP (25000,30000]       | ■ PHP (30000,32000]     | ■ Offered and Nominated Capacity | ■ Registered Capacity Less Outage Capacity  | ■ RTD Schedule 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.

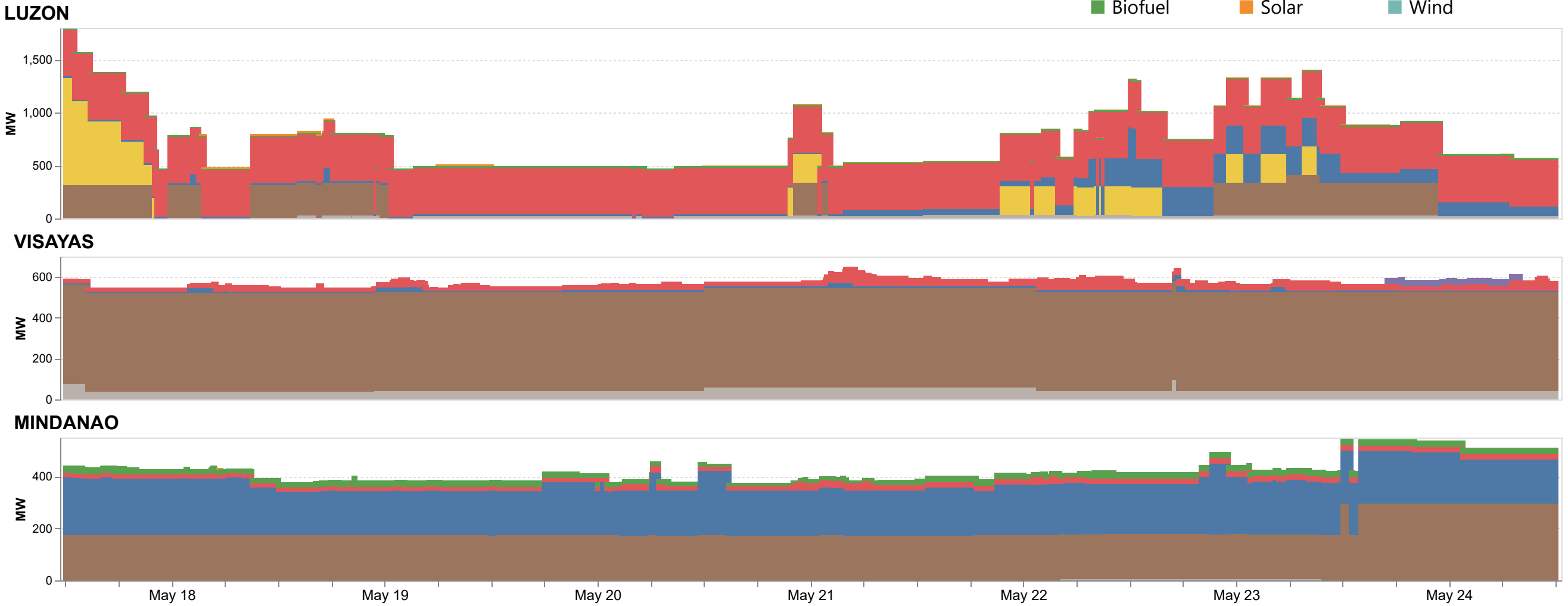
### ENERGY OFFER PATTERN - VISAYAS



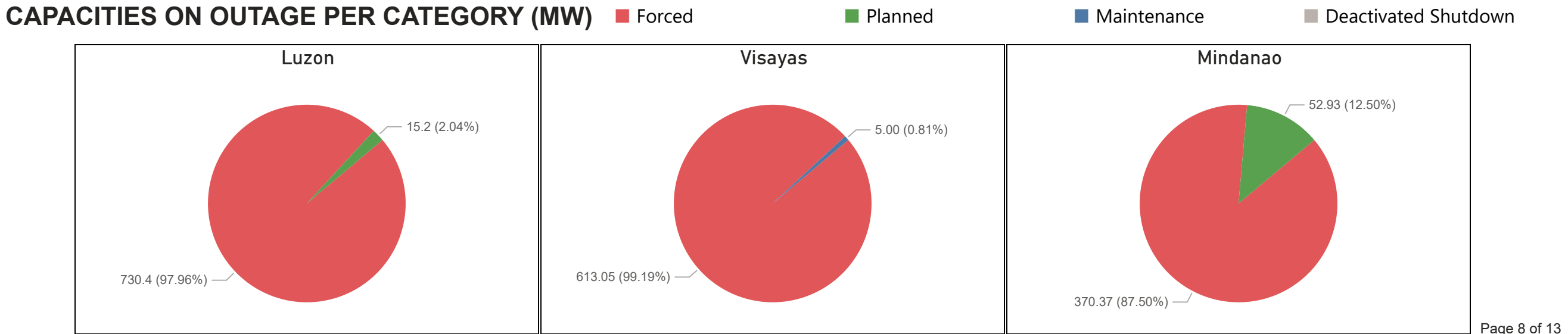
### ENERGY OFFER PATTERN - MINDANAO



### CAPACITIES ON OUTAGE PER PLANT TYPE

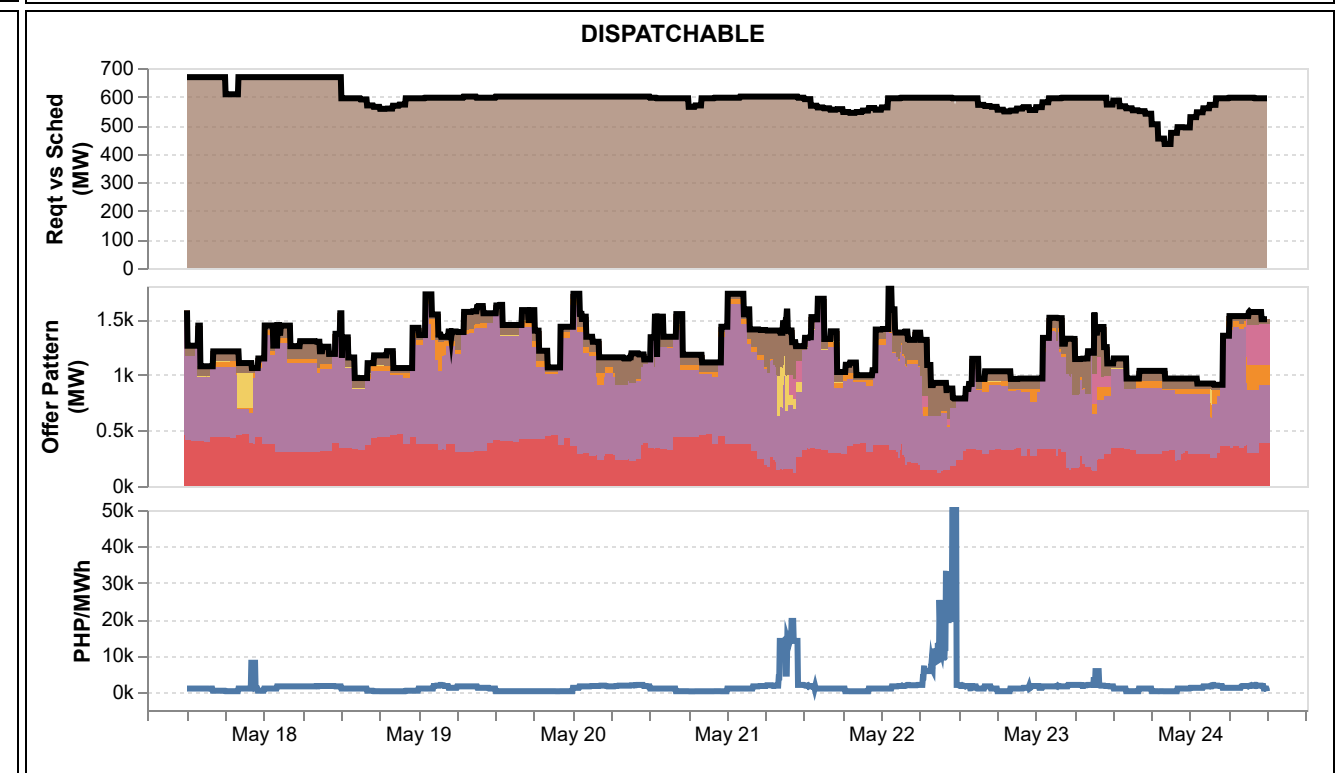
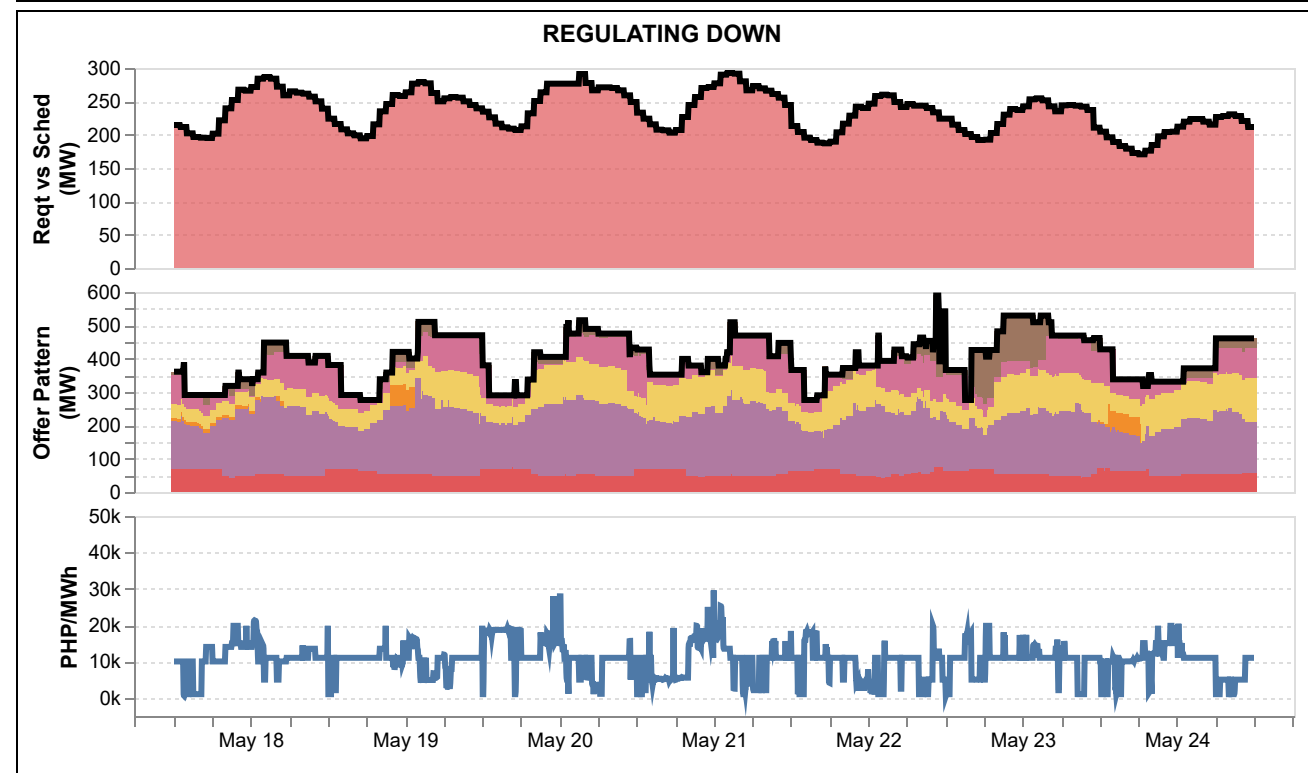
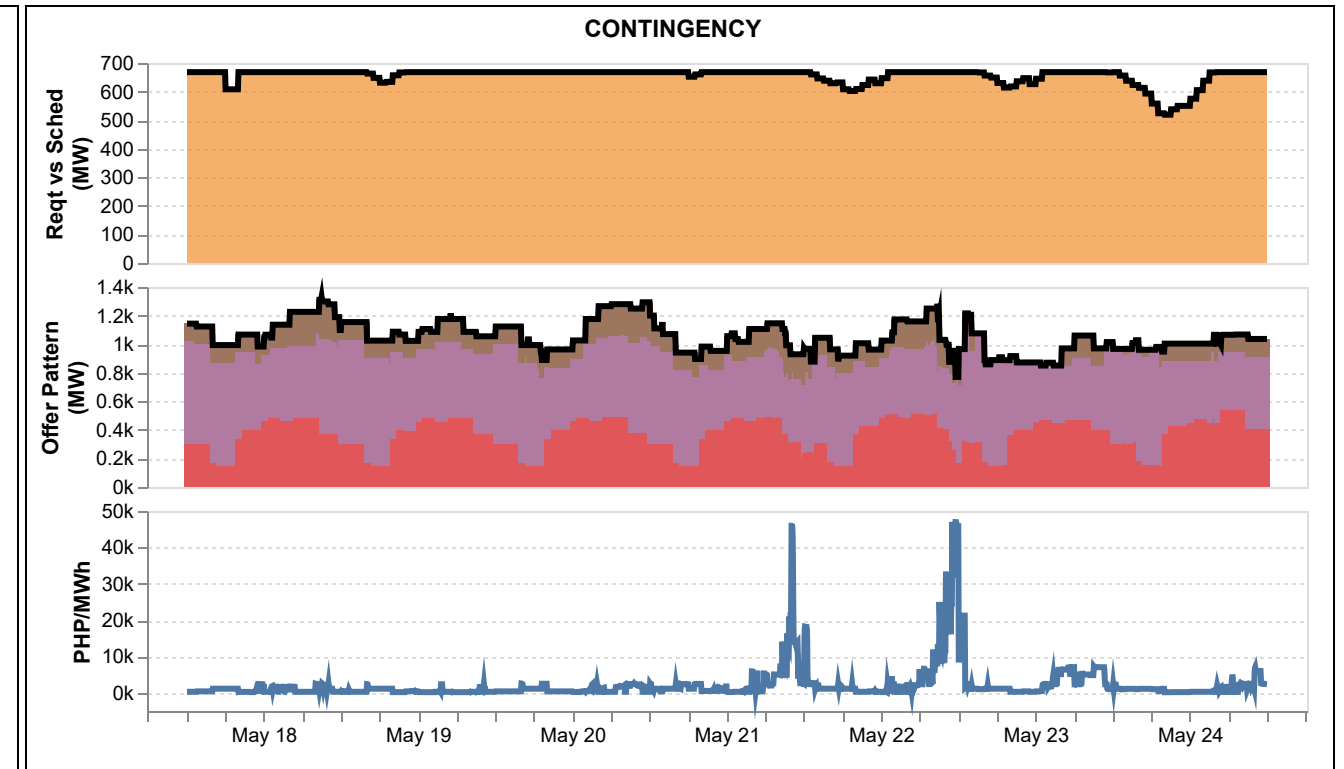
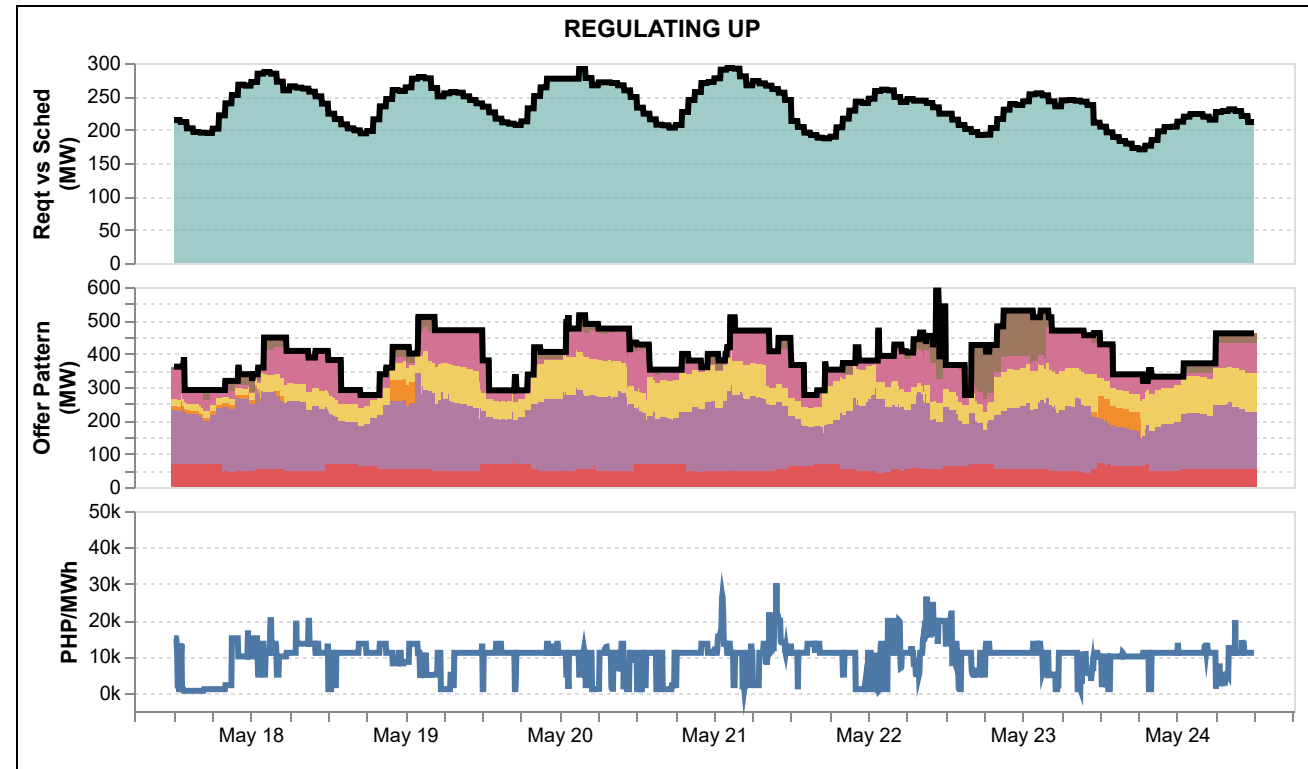


### CAPACITIES ON OUTAGE PER CATEGORY (MW)



### 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

#### Price Offer Range

NOTES: 1. In PHP (X,Y), it includes offer price greater than PHP X but less than or equal to PHP Y.

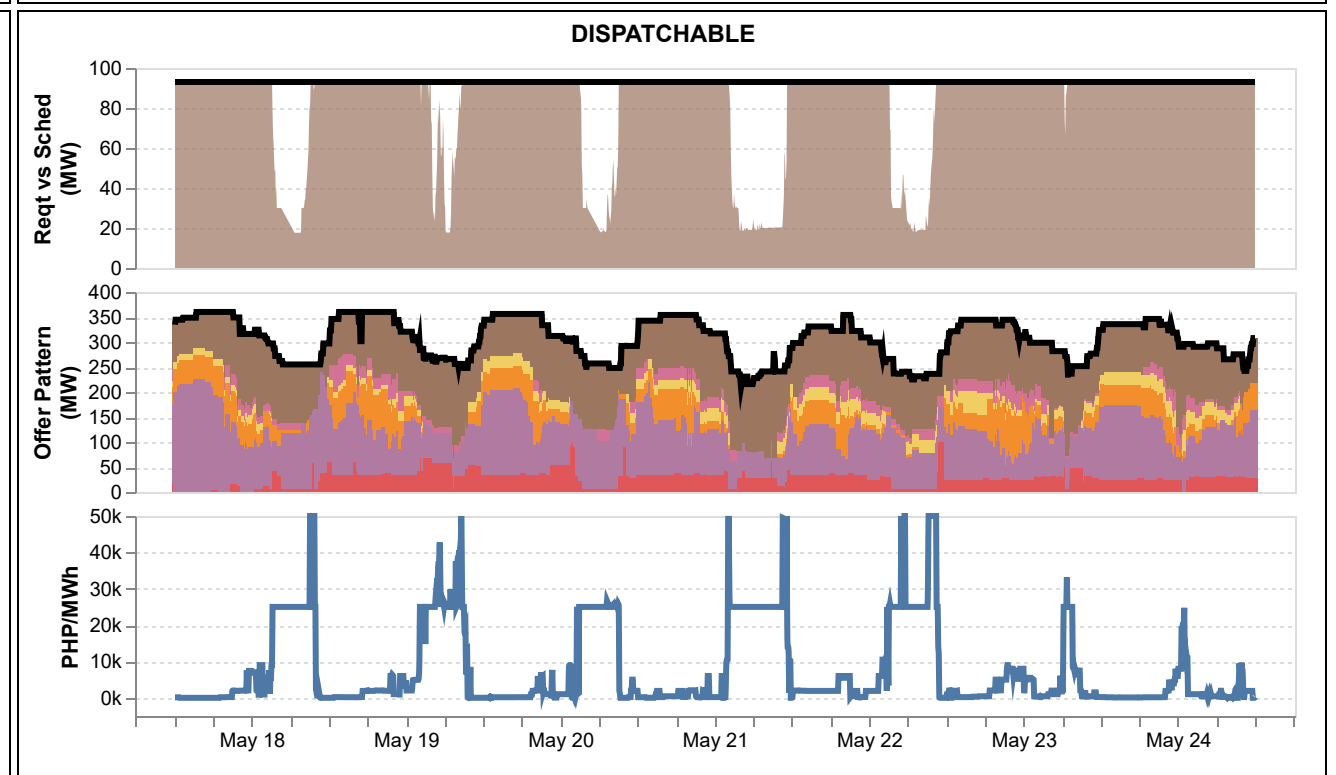
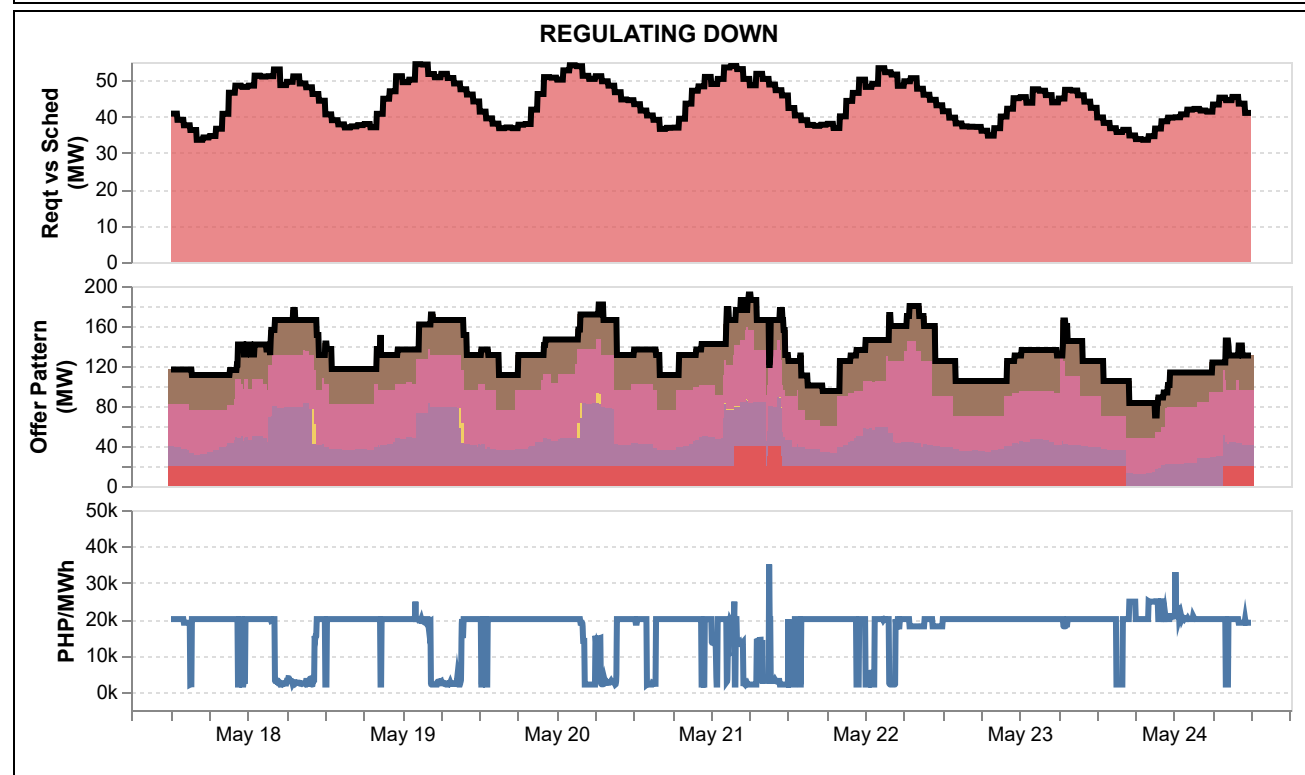
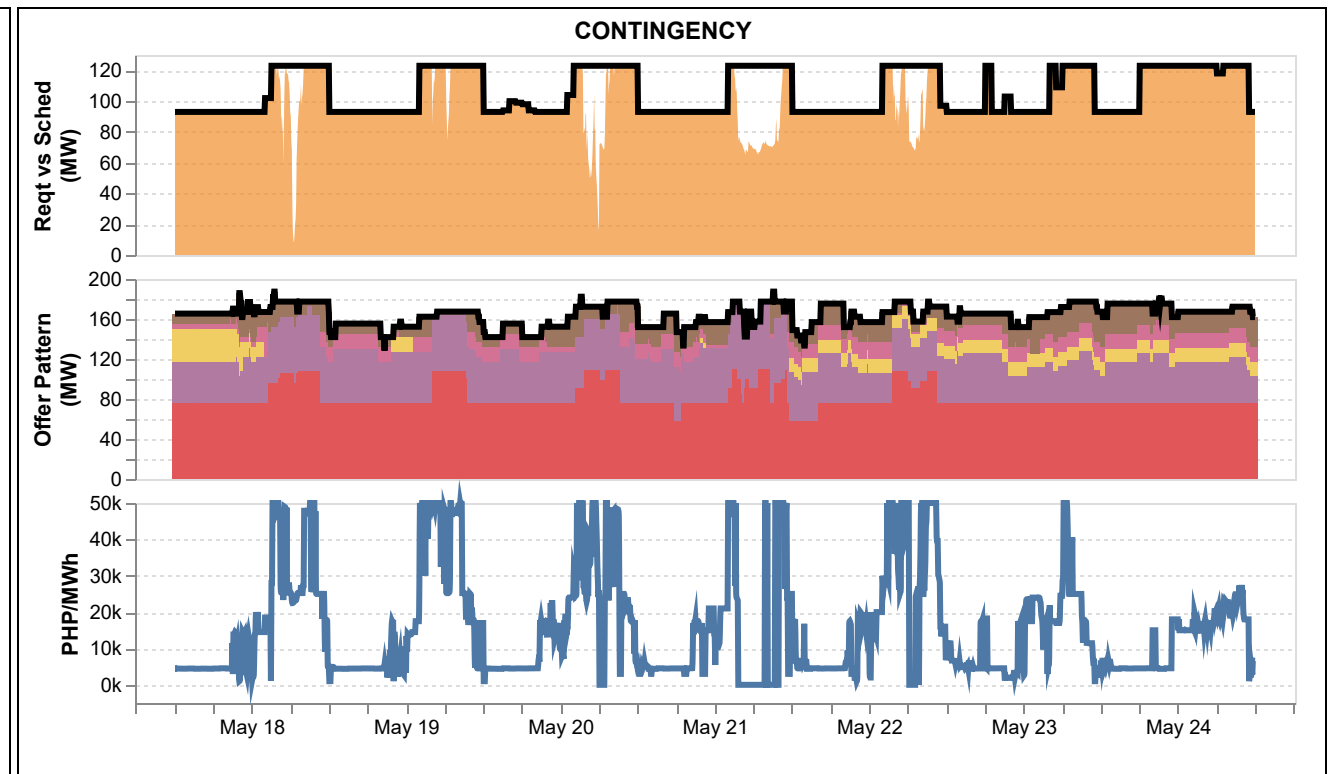
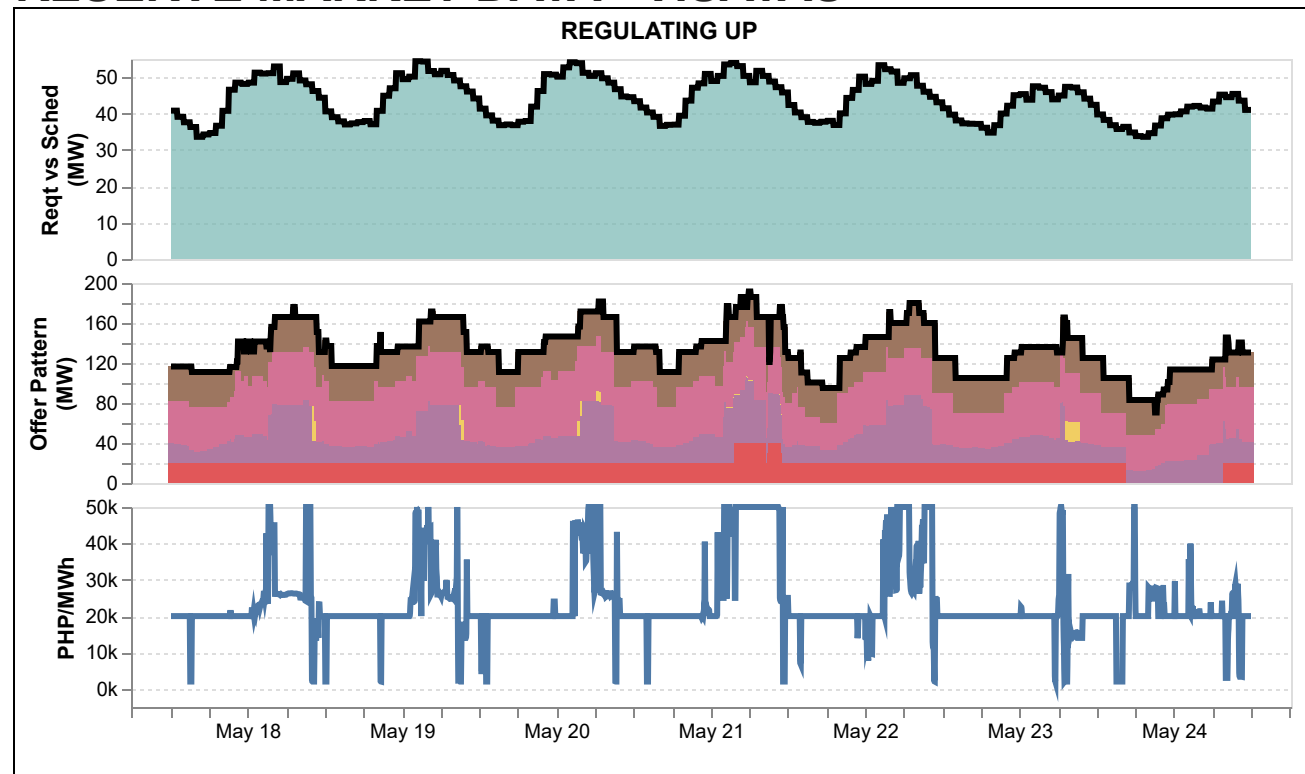
- PHP 0
- PHP (0,5000]
- PHP (5000,10000]
- PHP (10000,15000]
- PHP (15000,20000]
- PHP (20000,25000]
- Offered Capacity

#### Price (PHP/MWh)

- Reserve Market Price

### 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



#### Reqd vs Sched Legends

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

#### Price Offer Range

NOTES: 1. In PHP (X,Y), it includes offer price greater than PHP X but less than or equal to PHP Y.

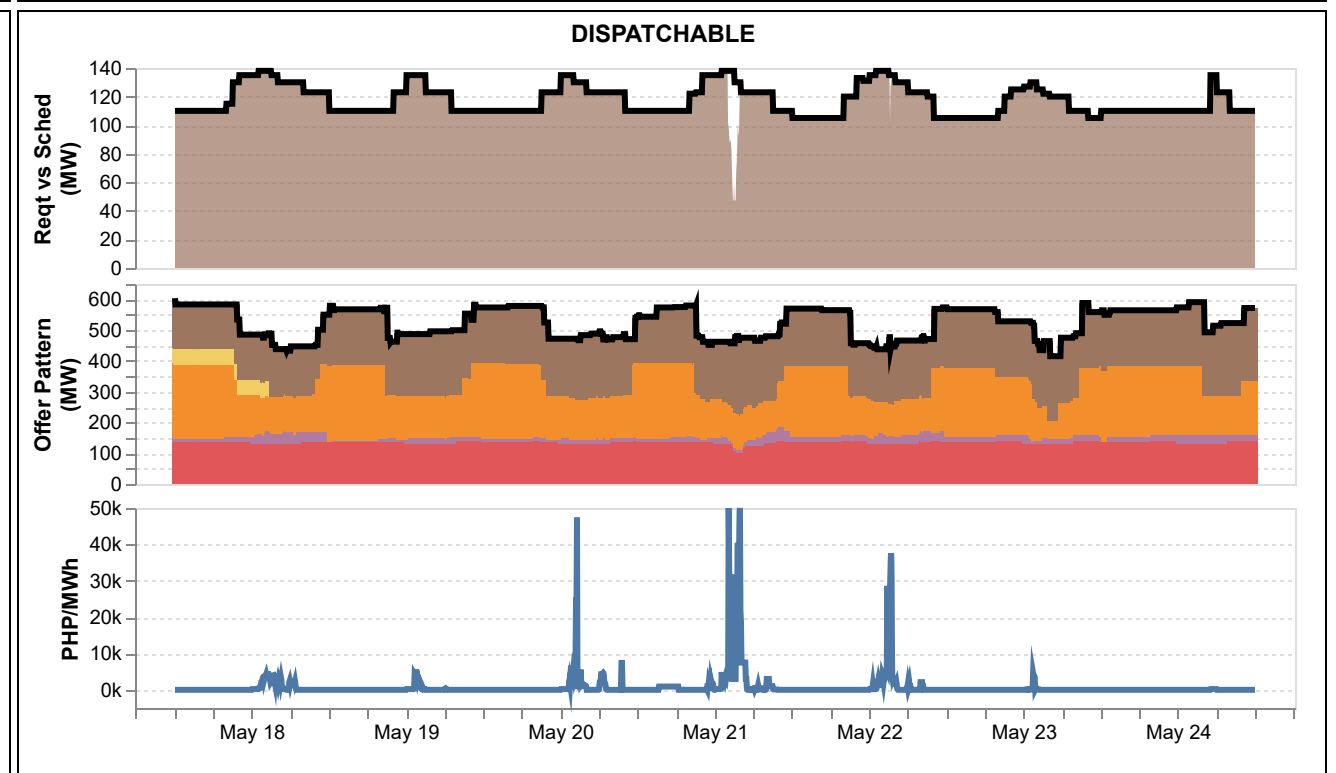
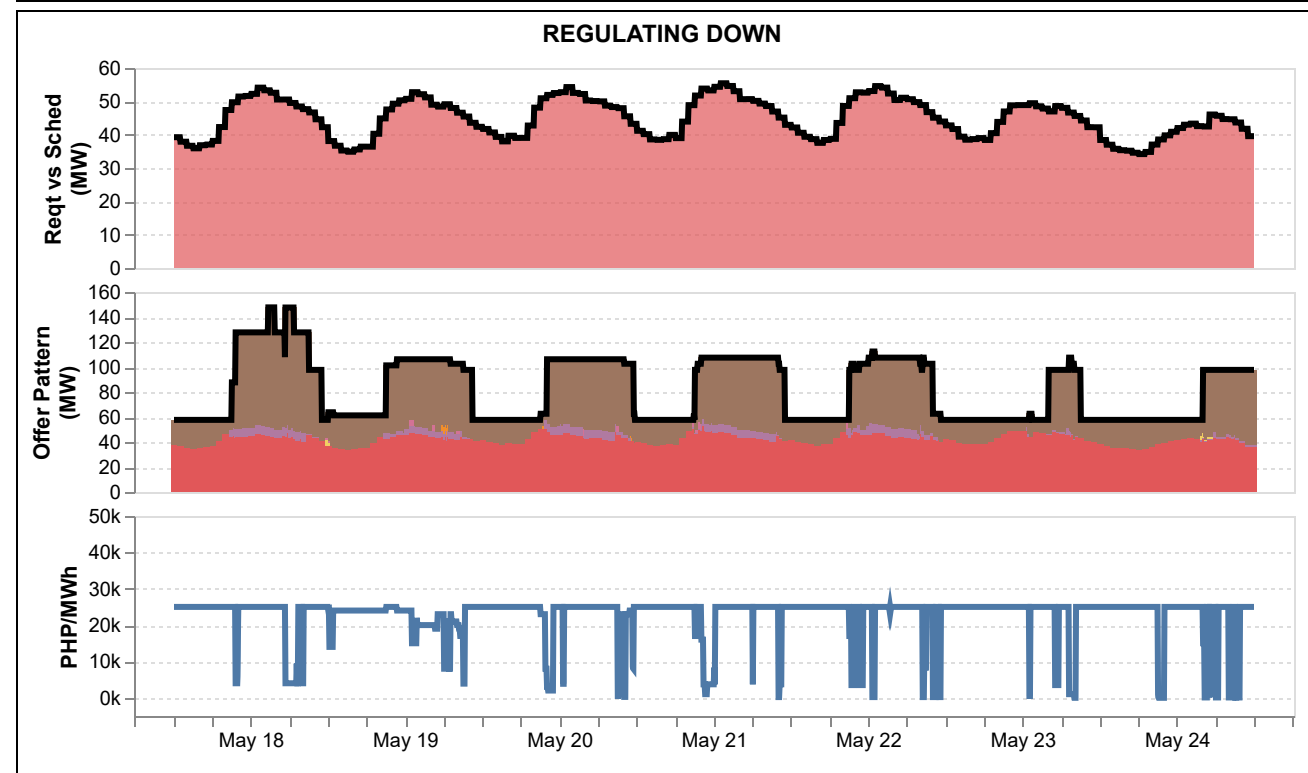
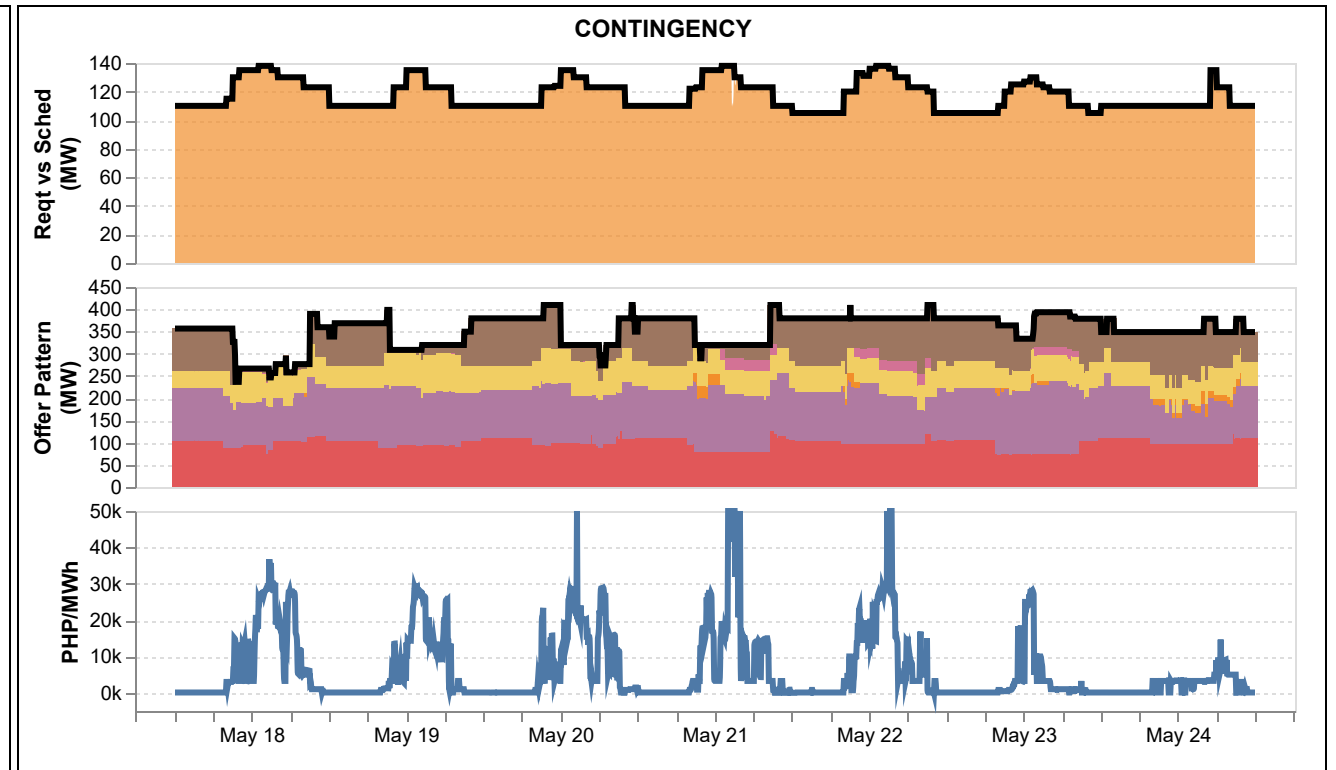
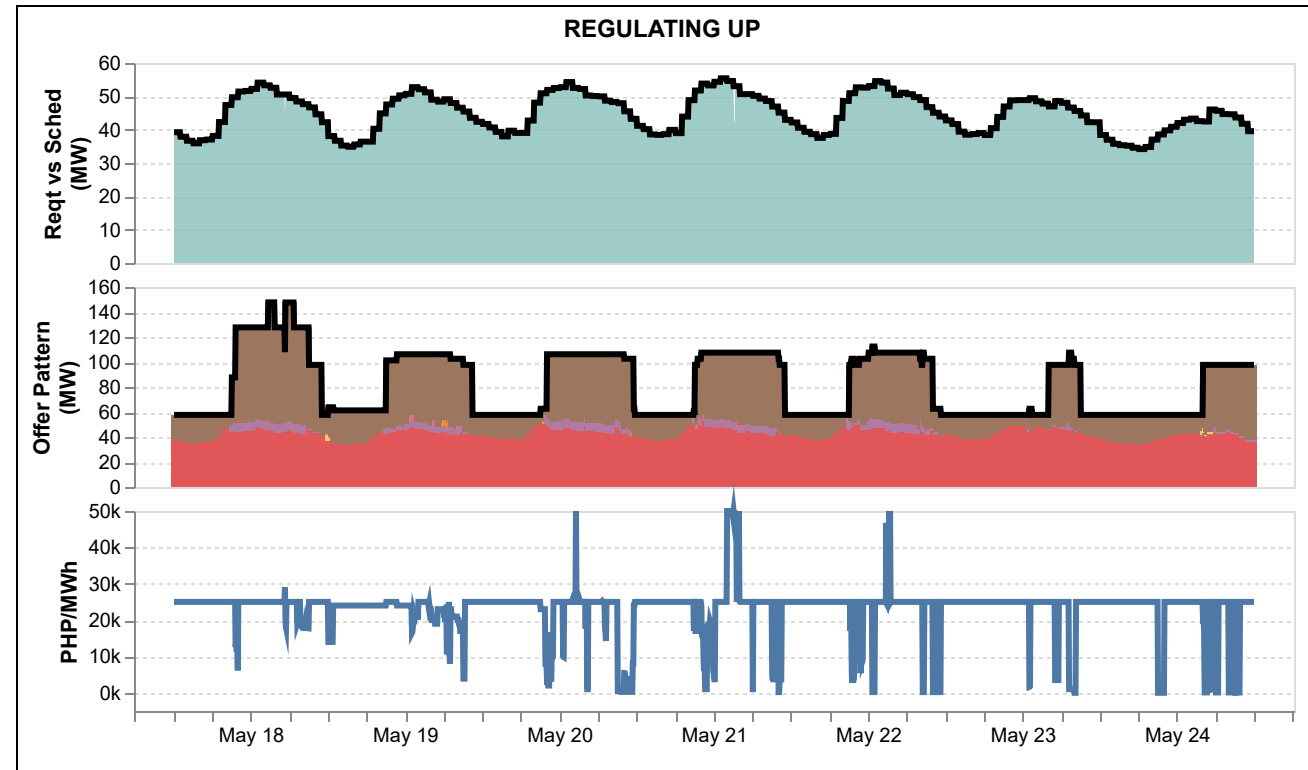
- PHP 0
- PHP (0,5000]
- PHP (5000,10000]
- PHP (10000,15000]
- PHP (15000,20000]
- PHP (20000,25000]
- Offered Capacity

#### Price (PHP/MWh)

- Reserve Market Price

### 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



#### Reqt vs Sched Legends

■ Reserve Requirement  
 ■ RU Schedule  
 ■ RD Schedule  
 ■ FR Schedule  
 ■ DR Schedule

#### Price Offer Range

■ PHP 0  
 ■ PHP (0,5000]  
 ■ PHP (5000,10000]  
 ■ PHP (10000,15000]  
 ■ PHP (15000,20000]  
 ■ PHP (20000,25000]

NOTES: 1. In PHP (X,Y], it includes offer price greater than PHP X but less than or equal to PHP Y.

#### Price (PHP/MWh)

■ Reserve Market Price

■ Offered Capacity



## 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.
- 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 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 up 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.

**RAMP DOWN CONSTRAINED CAPACITY**

Calculated for each 5-minute trading interval as the sum of the offered capacity of all scheduled generators considering their offered ramp down rates

**OVER-RIDING CONSTRAINTS CAPACITY**

Constraints imposed in the market dispatch optimization model (MDOM) by the Market Operator, at the recommendation of the System Operator, with the intention of over-riding the effect of Trading Participant's offers.

**RTD SCHEDULE CAPACITY**

Calculated for each 5-minute trading interval as the sum of the RTD capacity, grouped by technology.

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