

MARKET ASSESSMENT HIGHLIGHTS

Demand, Supply, and Price

- The average weekly demand increased across all regions.
- The average weekly capacity on outage decreased in the Luzon and Mindanao regions, while it increased in the Visayas region.
- Imports from Luzon to Visayas occurred 63.44% of the time, while the flow from Mindanao to Visayas was observed 92.81% of the time. Instances of power flow from Visayas to Mindanao may have been affected by outages in hydro plants during the week.
- The average weekly GWAP decreased by 8.73% and 4.39% in the Luzon and Mindanao regions, respectively, while it increased by 6.31% in the Visayas region.
- Pivotal suppliers were present 46.43% of the time.

Energy Offer Pattern Analysis

Luzon

- Biofuel plants recorded dips in nominated capacities due to an outage on 04 February.
- Coal plants recorded a decreasing trend in offered capacities throughout the week.
- Hydro plants' highest daily peak pumping nominations were observed on 08 February.
- Natural gas plants recorded a decrease in offered capacities on 03 to 04 February due to outages, with additional dips on 05 and 08 February caused by outages and resource constraints, respectively.
- Oil plants recorded dips in offered capacities due to outages on 08 February.
- Wind and Solar plants' lowest daily peak nominations were observed on 03 and 07 February, respectively.

Visayas

- Biofuel plants recorded dips in nominated capacities on 03 February due to outages caused by weekly maintenance.
- Coal plants recorded dips in offered capacities on 05 and 09 February due to outages.
- Hydro plants recorded a decreasing trend in nominated capacities caused by resource constraints during the start of the week.
- Solar plants' lowest daily peak nominations was observed on 06 February.
- Wind plants show more frequent fluctuations, increasing volatility throughout the week.

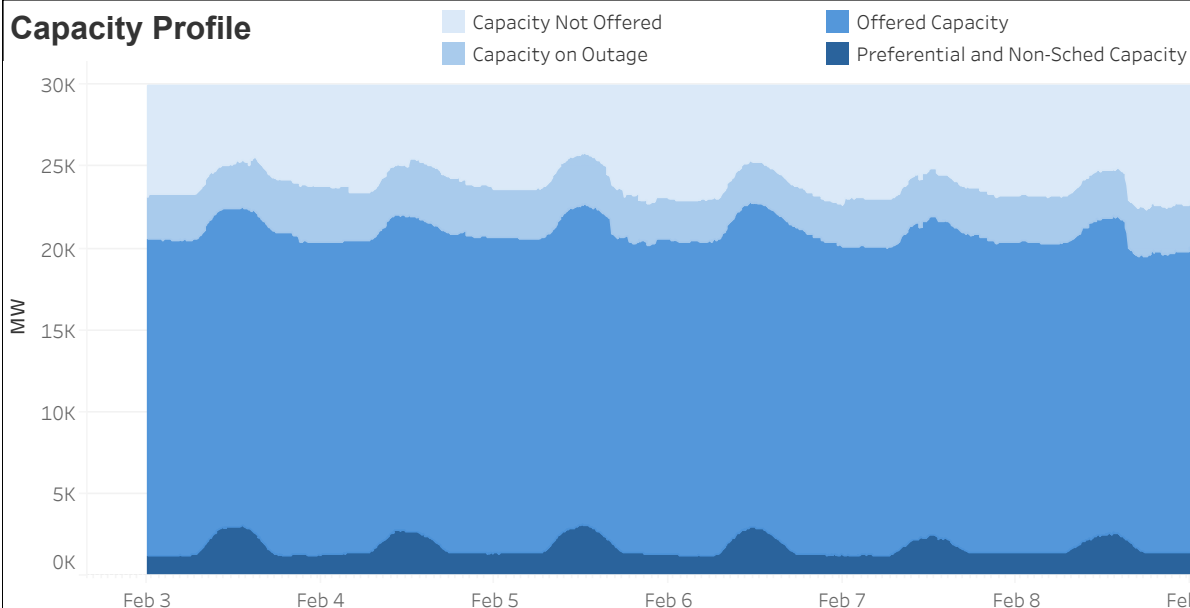
Mindanao

- Biofuel plants recorded higher nominated capacities compared to the previous week.
- Coal plants experienced a dip in offered capacities on 05 February due to an outage, followed by a decrease from 06 February onward.
- Geothermal plants recorded an increasing trend in offered capacities throughout the week.
- Hydro plants showed a decreasing trend in offered capacities due to outages throughout the week.

Market Systems Advisory

- SO initiated Market Intervention in the Visayas region due to unimplemented RTD schedule on intervals 1740h to 1845h of 08 February.

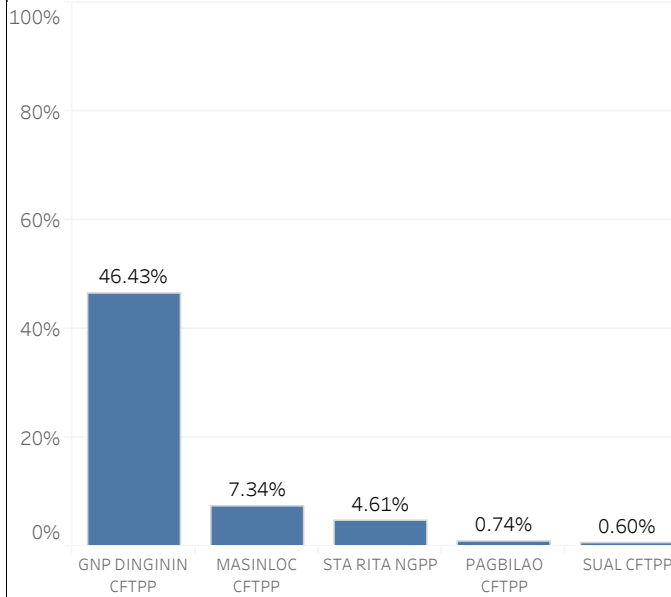
Capacity Profile



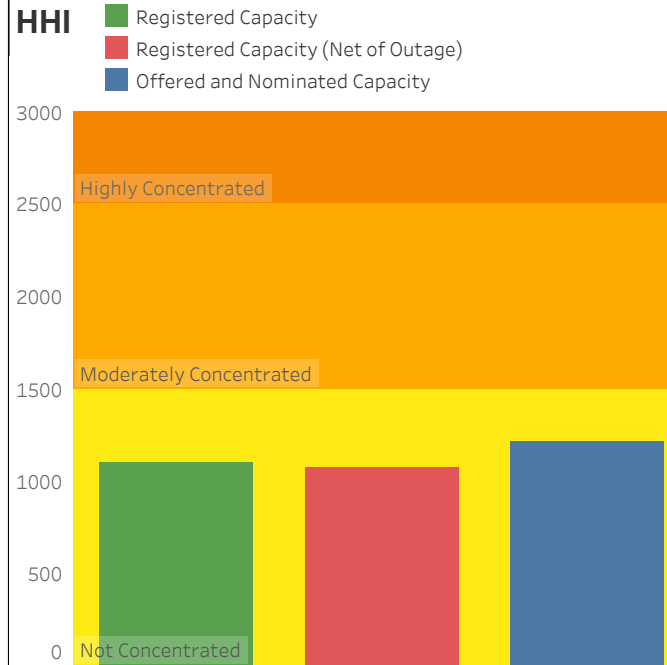
SUMMARY OF AVERAGE VALUES

Particulars	03 - 09 Feb 2025	27 Jan - 02 Feb 2025	% Change
GENERATOR WEIGHTED AVERAGE PRICE (Php/MWh)			
System	2,289.9	2,444.8	-6.34%
Luzon	2,190.4	2,399.9	-8.73%
Visayas	2,626.6	2,470.7	6.31%
Mindanao	2,489.7	2,604.1	-4.39%
EFFECTIVE SUPPLY (MW)			
Luzon	11,663	11,342	2.83%
Visayas	2,165	2,200	-1.56%
Mindanao	3,116	3,070	1.49%
DEMAND (MW)			
Luzon	9,172	8,894	3.12%
Visayas	1,886	1,872	0.74%
Mindanao	1,974	1,915	3.12%
OUTAGE (MW)			
Luzon	2,083	2,882	-27.71%
Visayas	457	455	0.37%
Mindanao	375	494	-24.06%
REGULATING UP PRICE (Php/MWh)			
Luzon	9,493	8,964	5.91%
Visayas	26,386	21,377	23.43%
Mindanao	14,426	2,231	546.76%
REGULATING DOWN PRICE (Php/MWh)			
Luzon	9,328	10,038	-7.07%
Visayas	53,813	41,572	29.44%
Mindanao	15,567	1,879	728.42%
CONTINGENCY RESERVE PRICE (Php/MWh)			
Luzon	1,775	1,822	-2.59%
Visayas	16,358	12,470	31.18%
Mindanao	466	982	-52.54%
DISPATCHABLE RESERVE PRICE (Php/MWh)			
Luzon	165	74	122.50%
Visayas	4,507	2,183	106.51%
Mindanao	14	0	

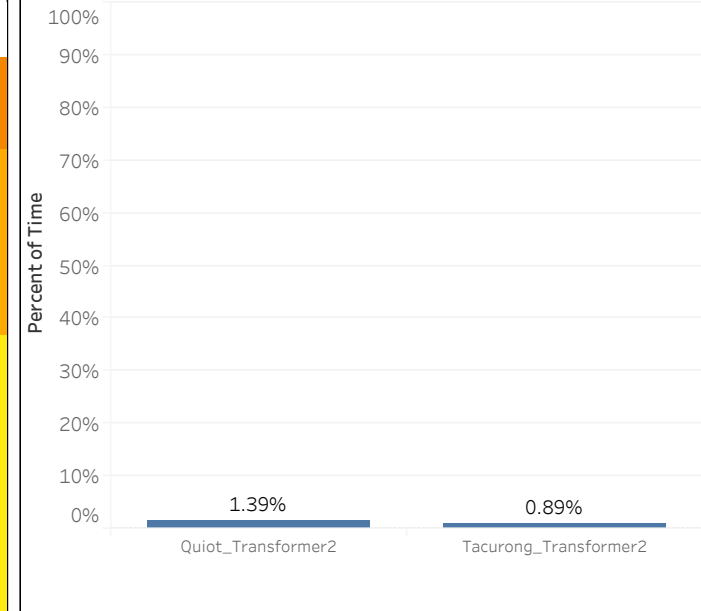
Top 5 Pivotal Plants



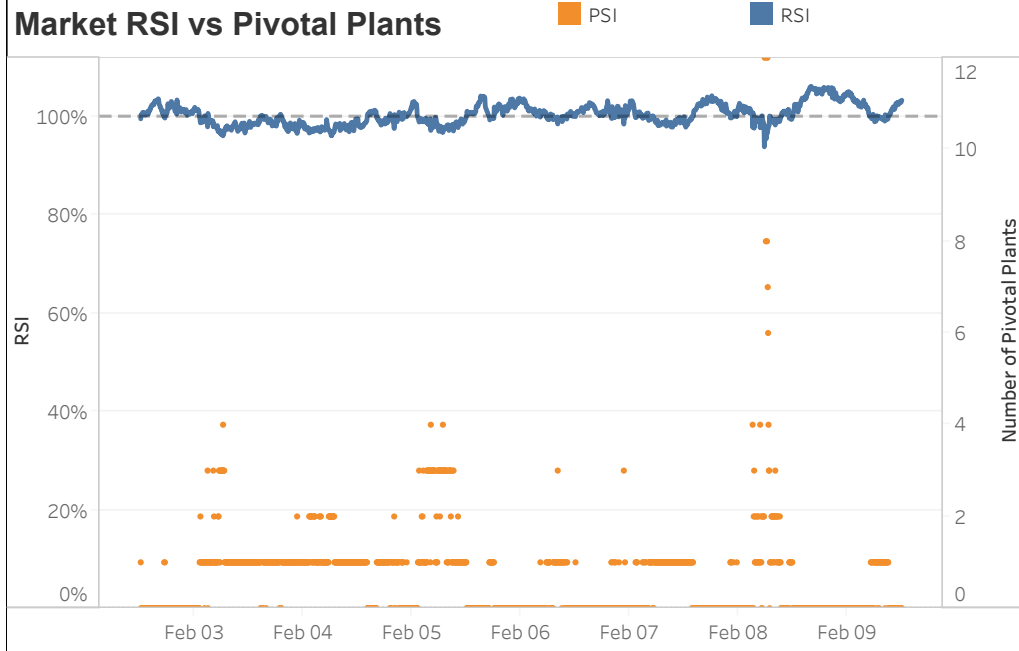
HHI



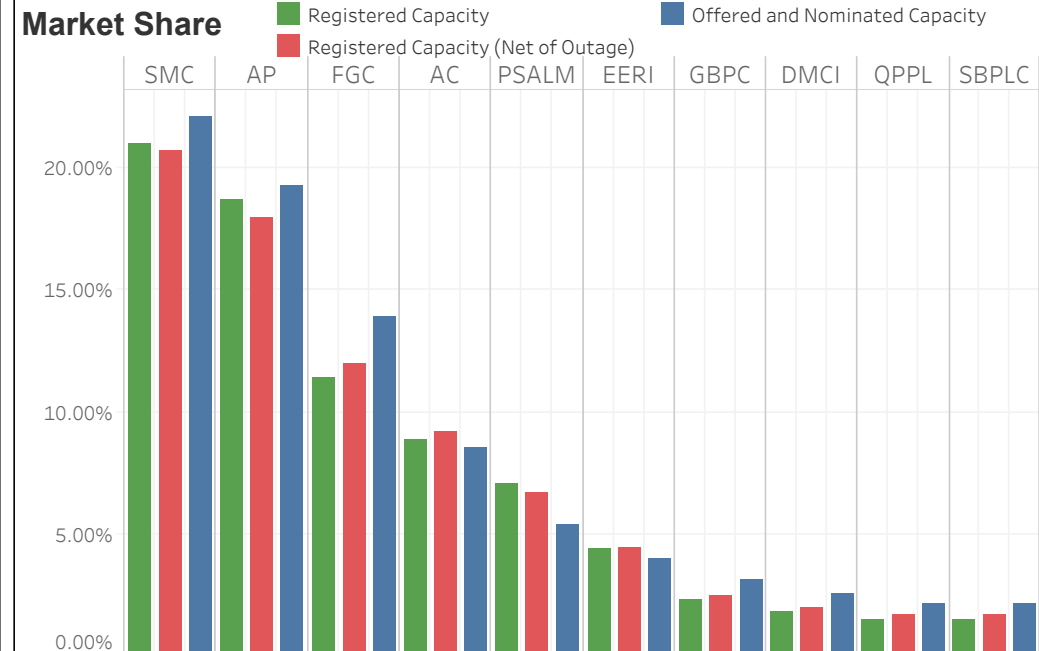
RTD Congestion



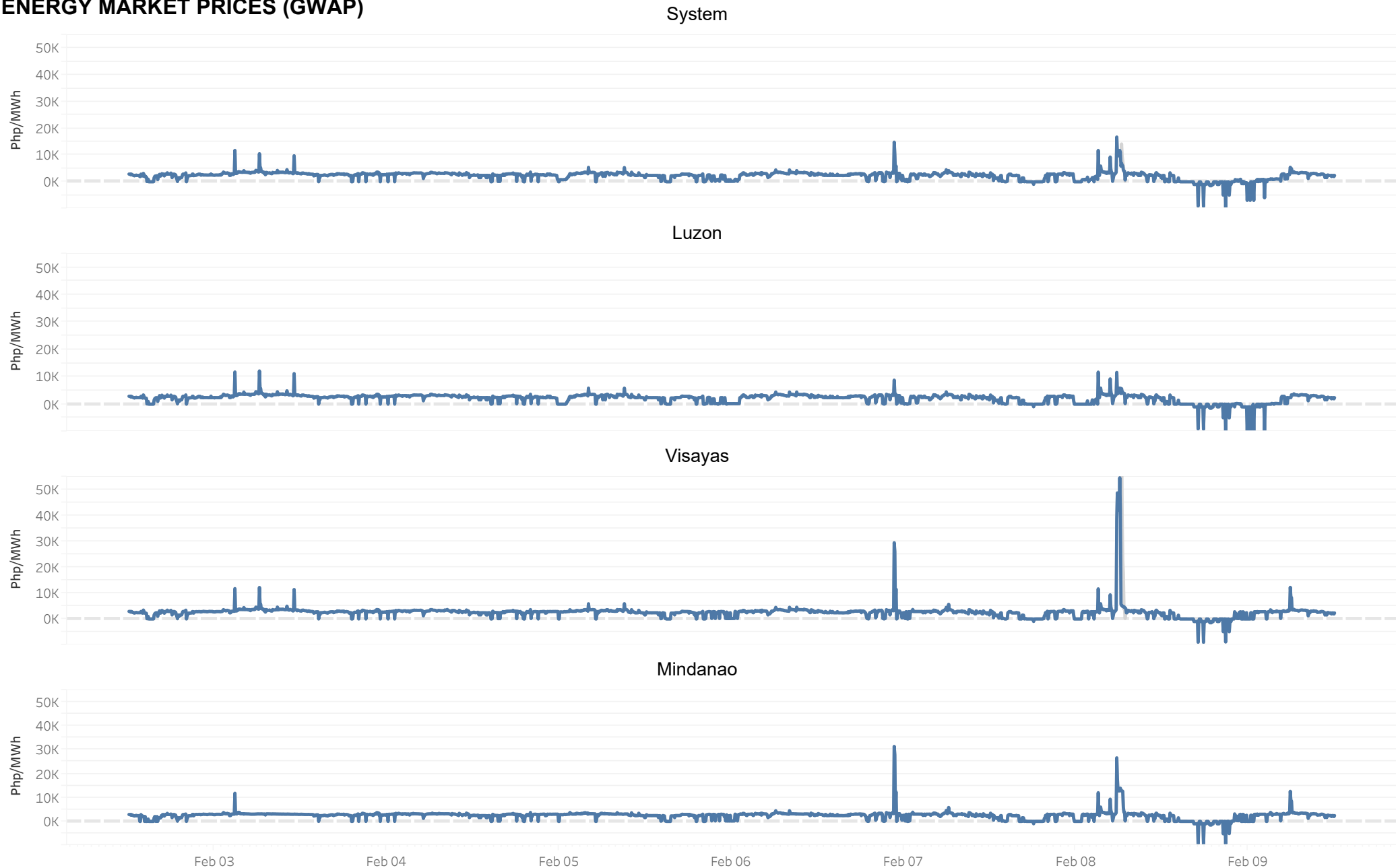
Market RSI vs Pivotal Plants



Market Share



ENERGY MARKET PRICES (GWAP)

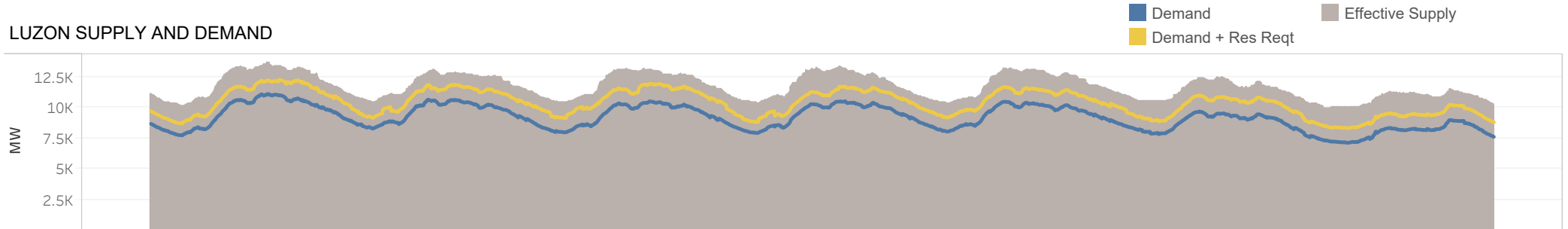


The charts show the market prices by region based on generator weighted average price (GWAP). Prices are subject to the finalization of settlement data.

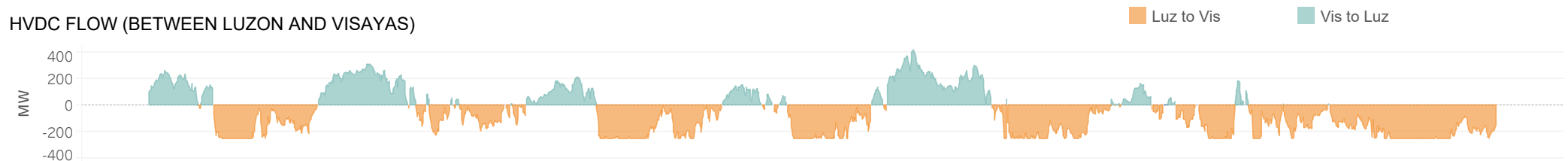
■ GWAP

■ GWAP (before post market run calculation)

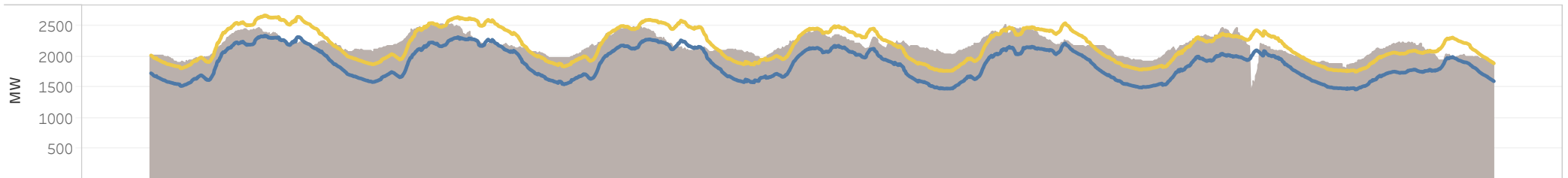
LUZON SUPPLY AND DEMAND



HVDC FLOW (BETWEEN LUZON AND VISAYAS)



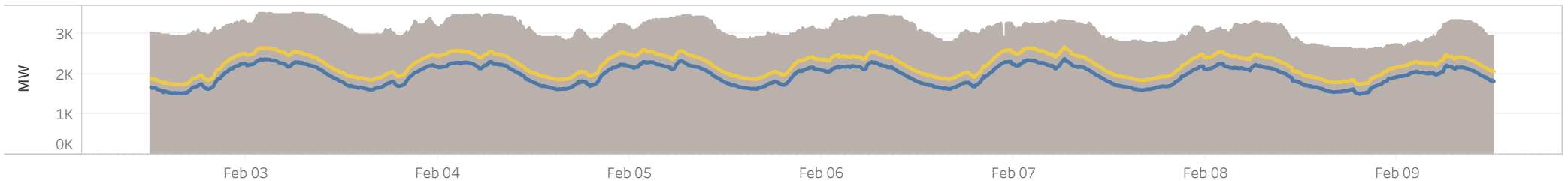
VISAYAS SUPPLY AND DEMAND



HVDC FLOW (BETWEEN VISAYAS AND MINDANAO)

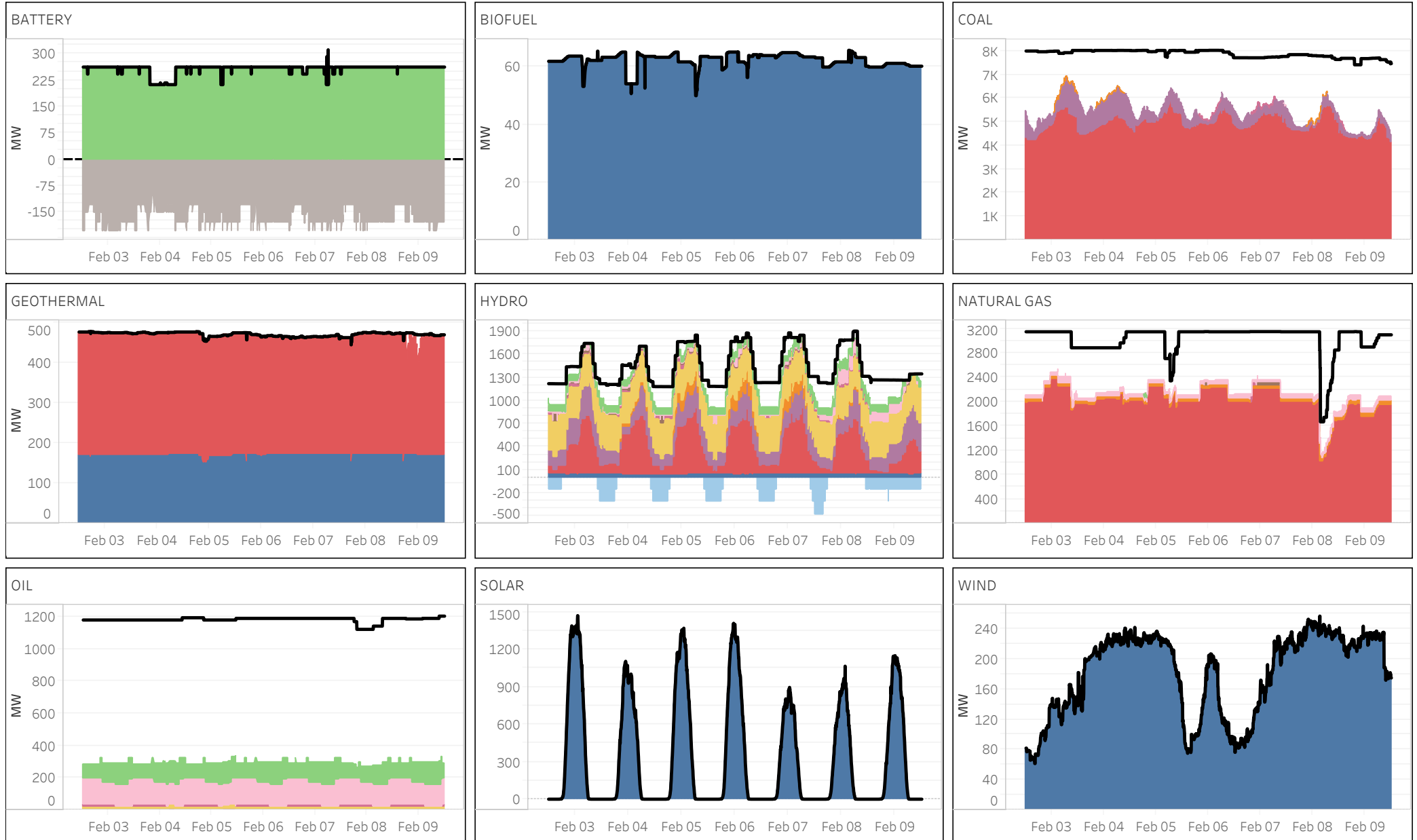


MINDANAO SUPPLY AND DEMAND



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

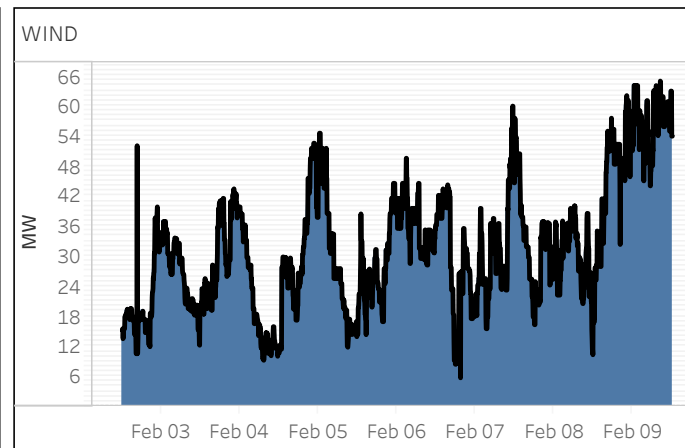
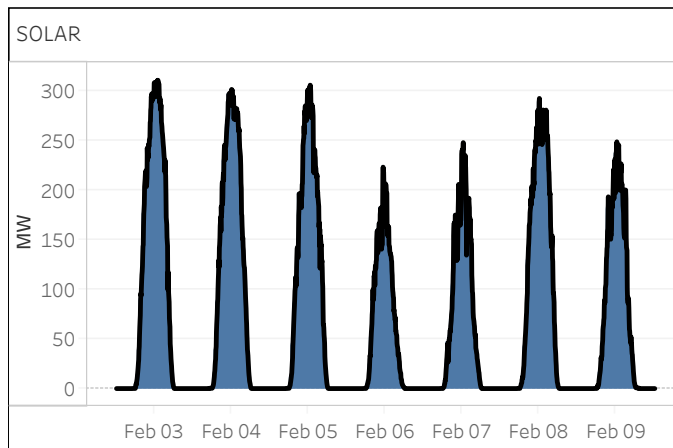
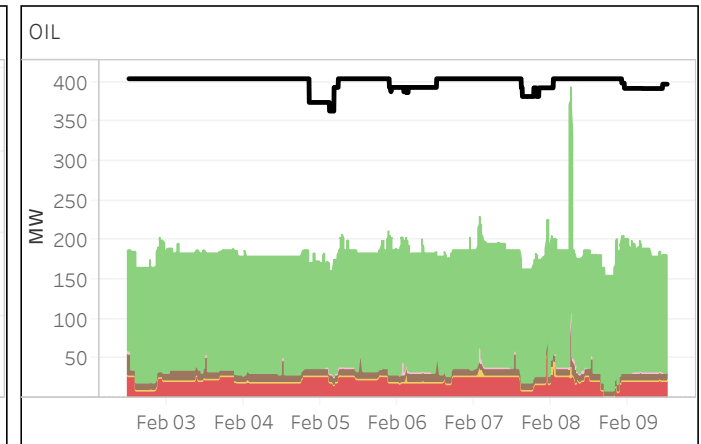
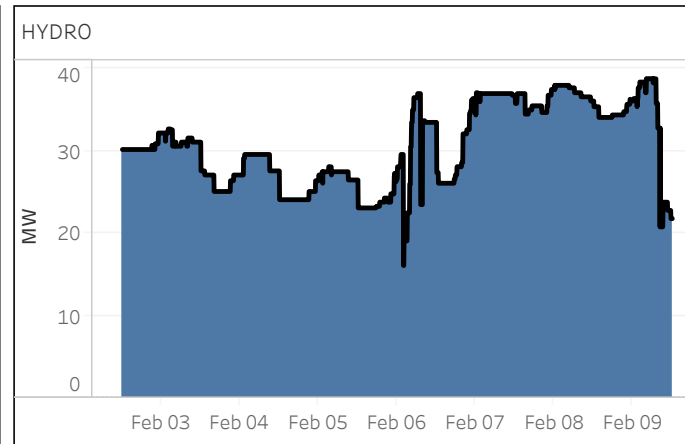
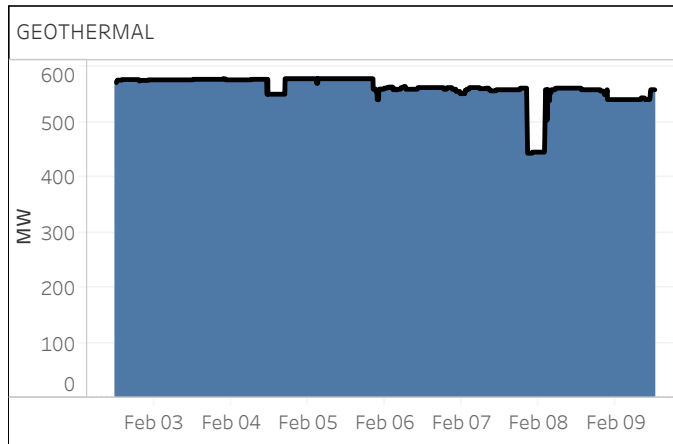
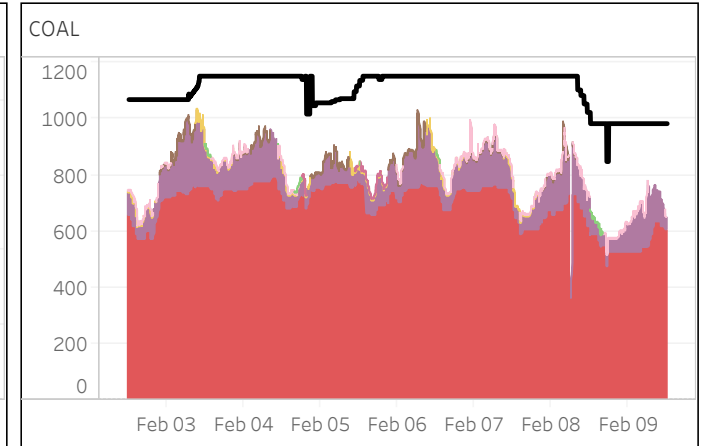
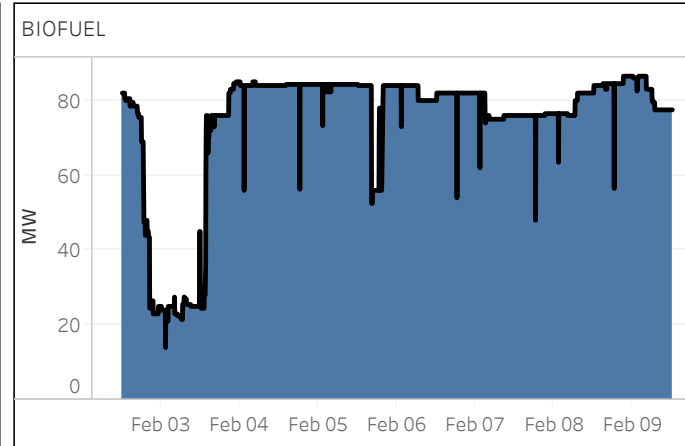
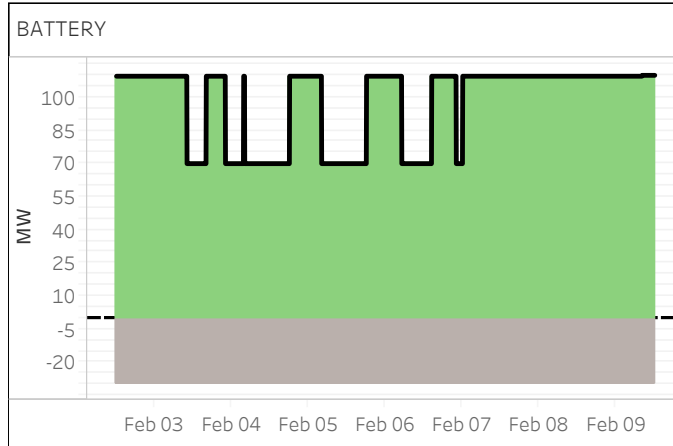
ENERGY OFFER PATTERN - LUZON



NOTES:

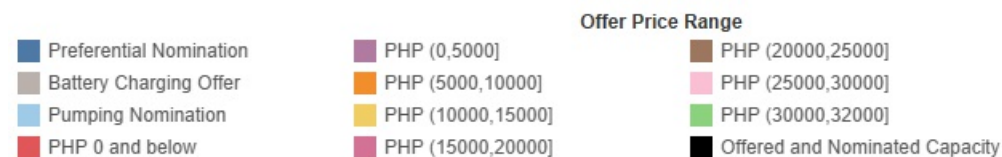
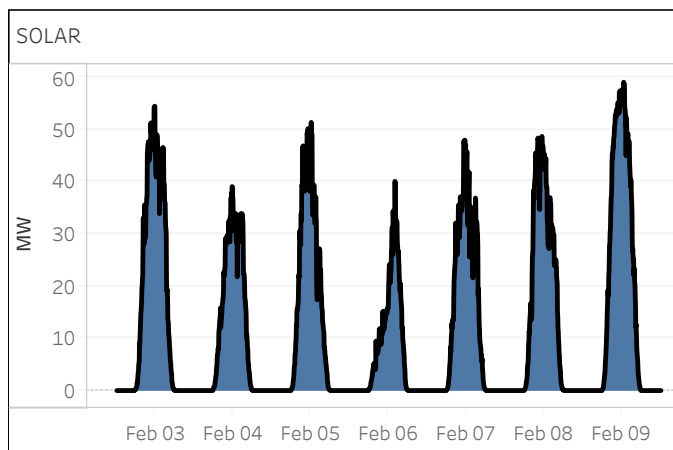
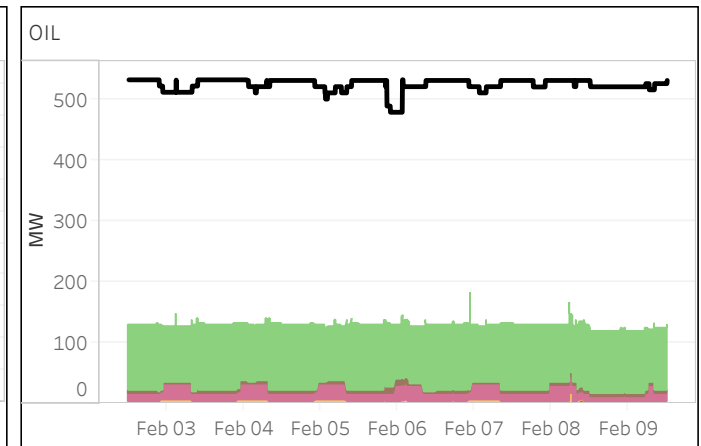
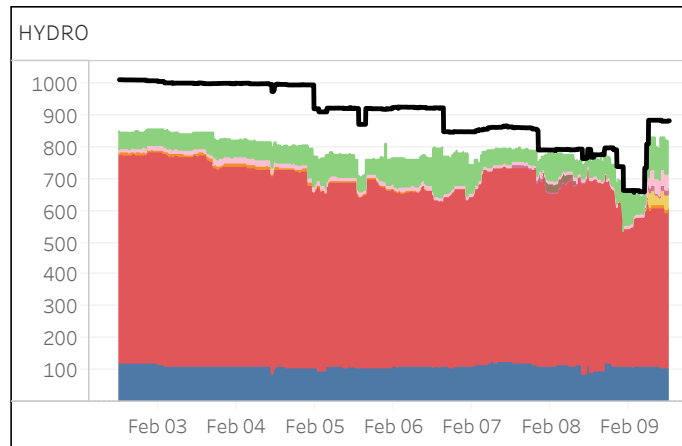
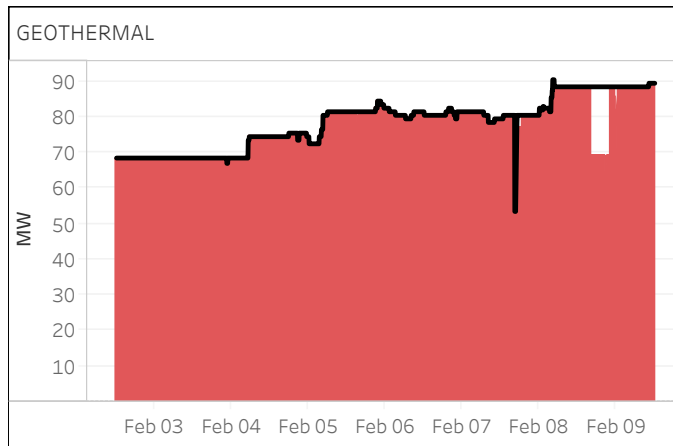
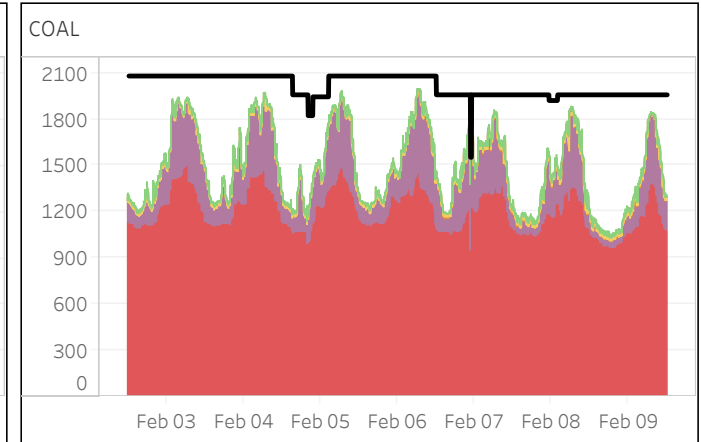
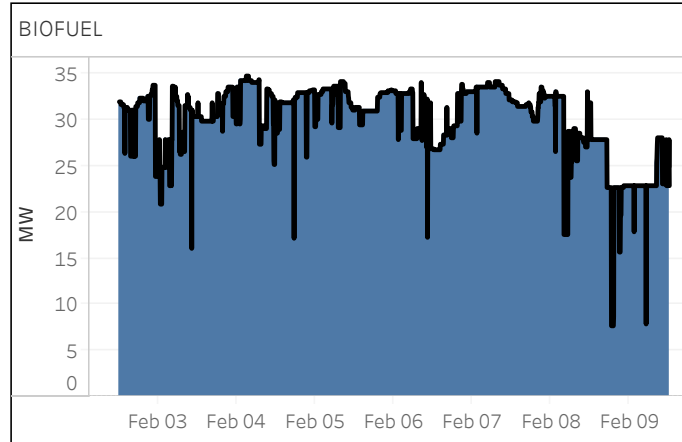
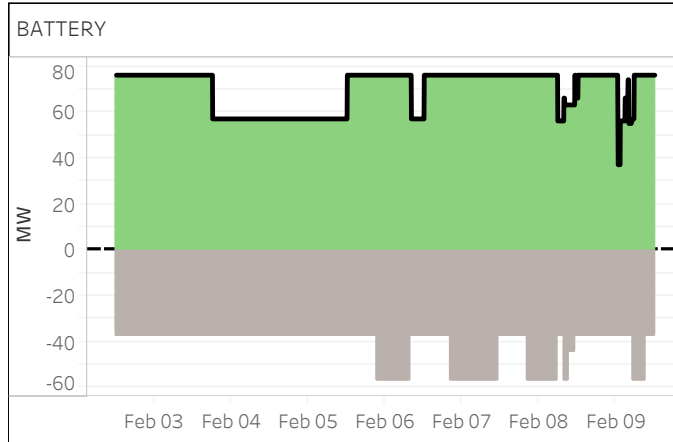
1. In Php (X, Y], it includes offer price greater than Php X but less than or equal to Php Y. 2. Reflected capacity are effective supply, adjusted for the submitted ramp rate and excluding any overriding constraint.

ENERGY OFFER PATTERN - VISAYAS



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 - MINDANAO

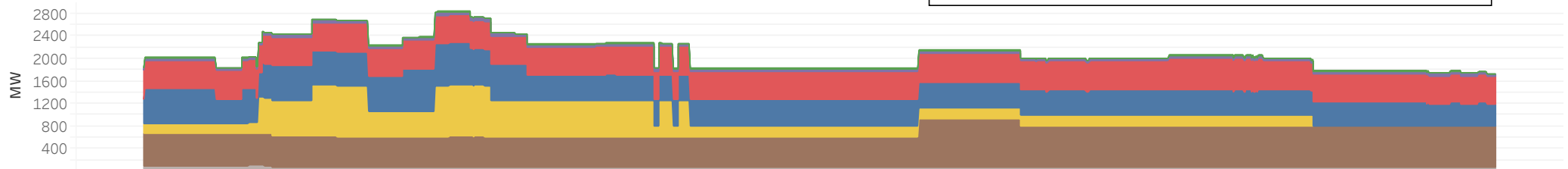


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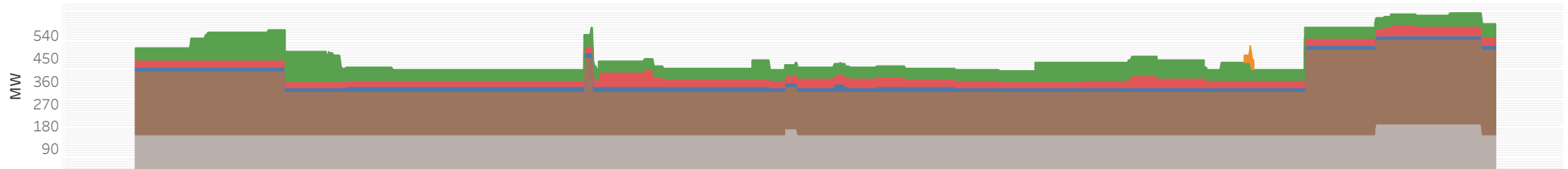
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CAPACITIES ON OUTAGE PER PLANT TYPE

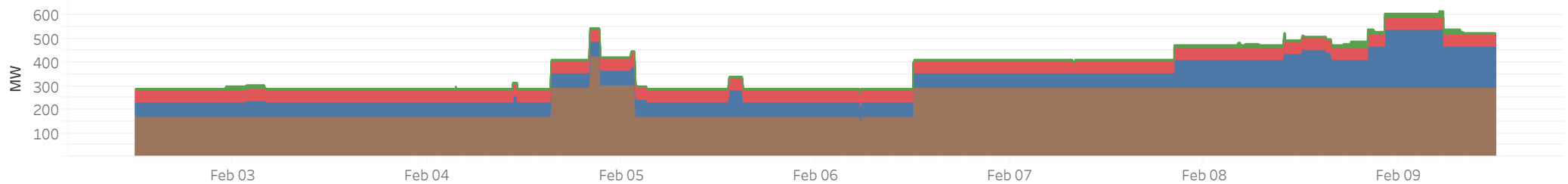
Luzon



Visayas

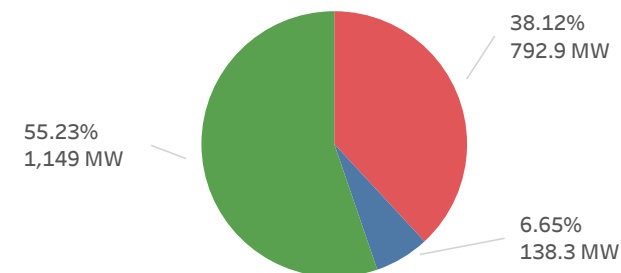


Mindanao

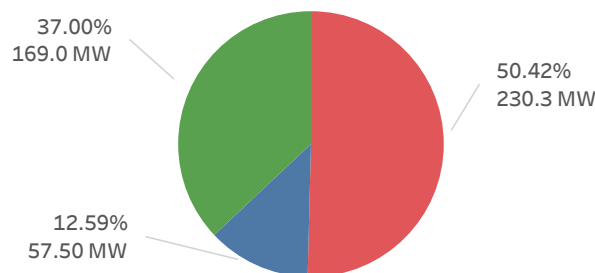


CAPACITIES ON OUTAGE PER CATEGORY

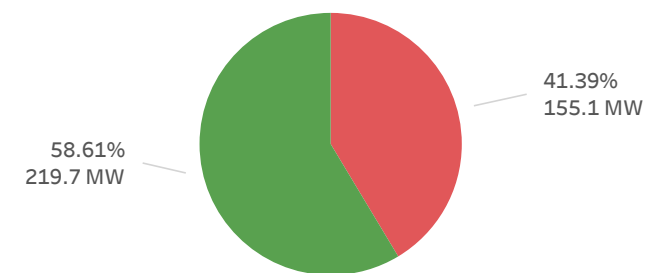
Luzon



Visayas

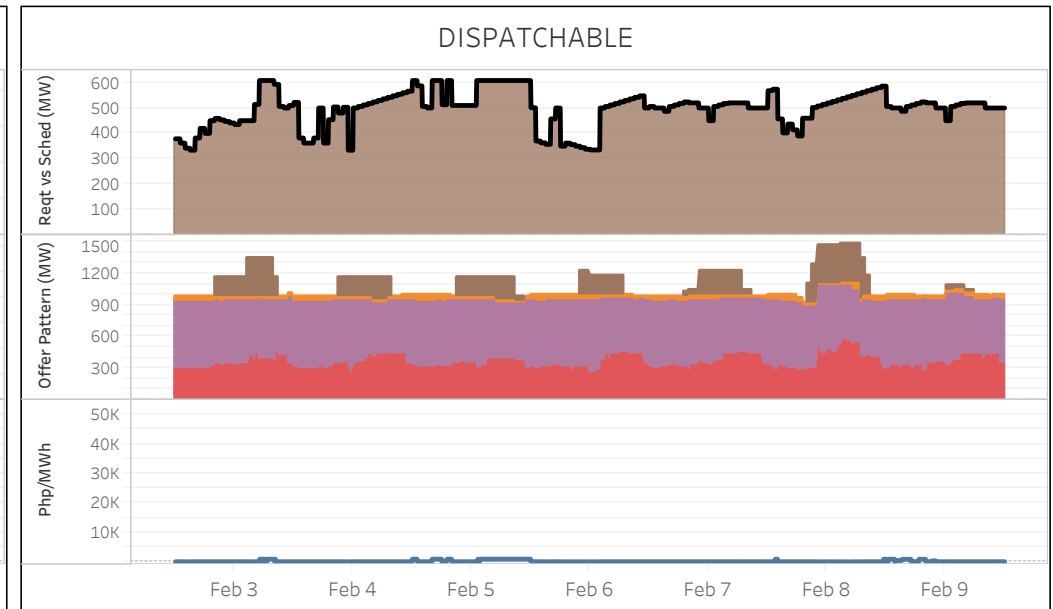
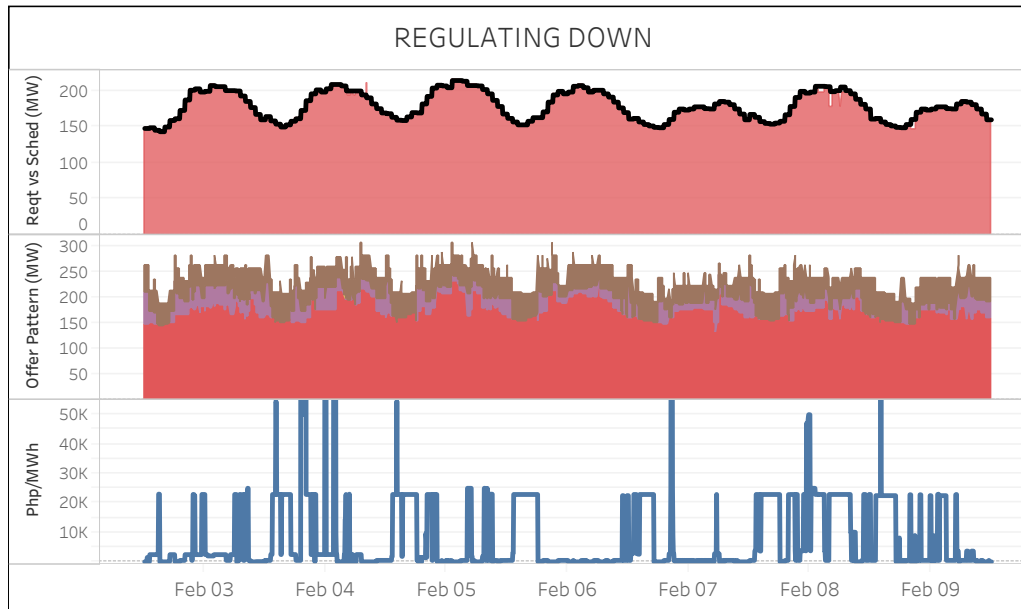
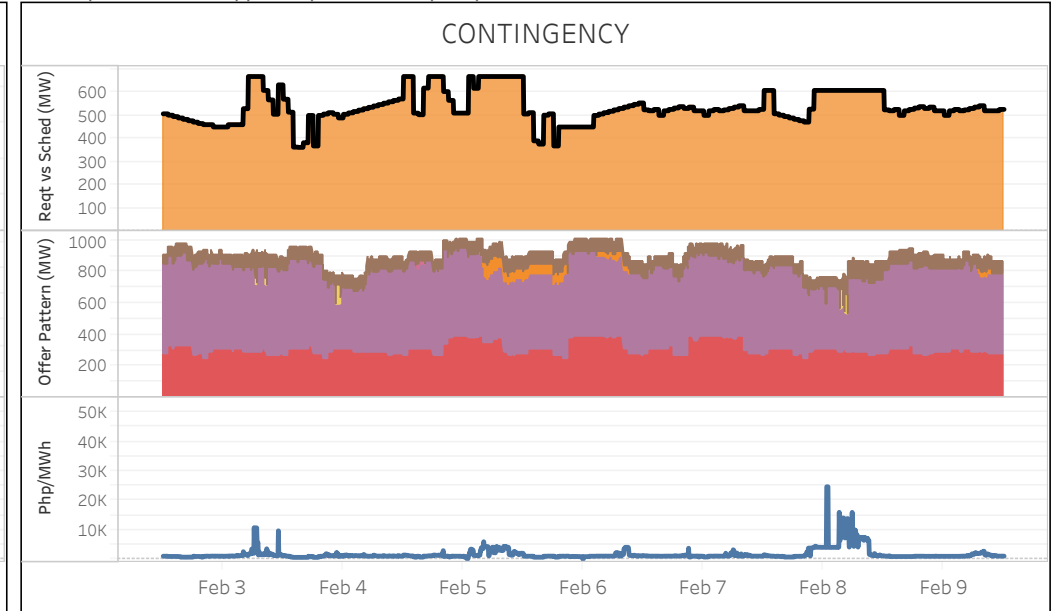
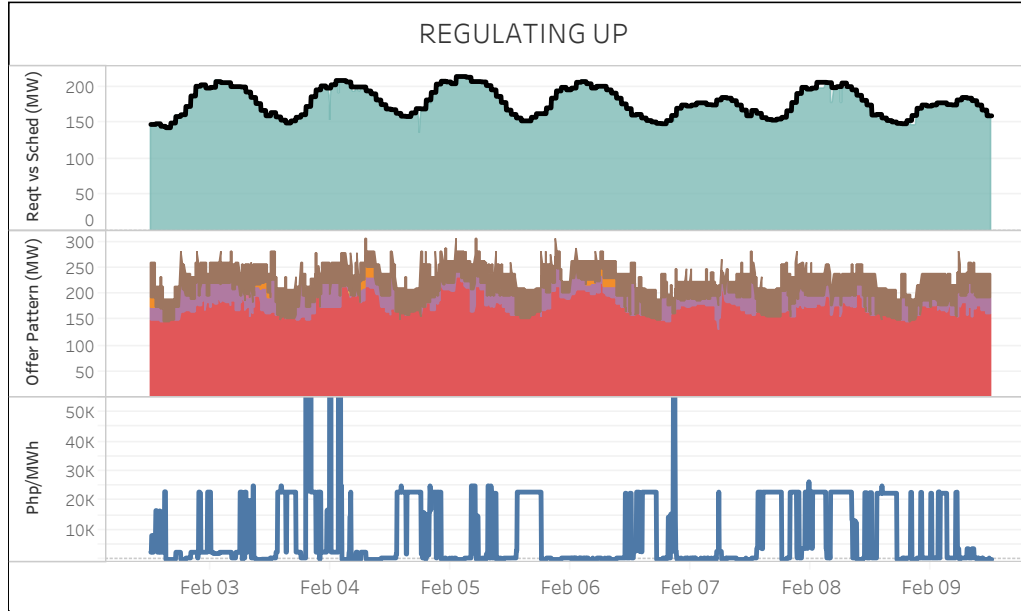


Mindanao



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

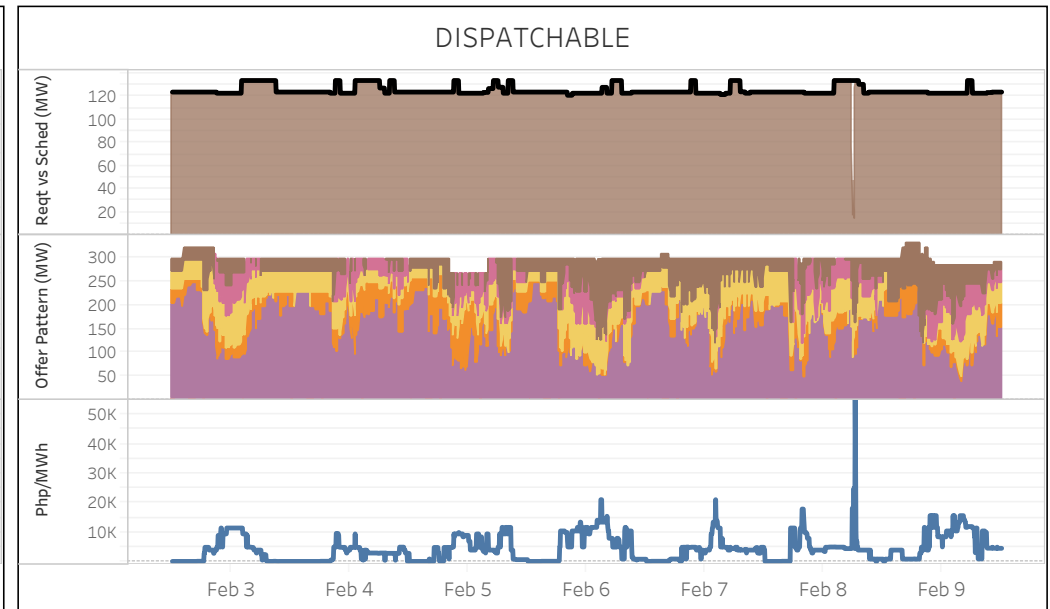
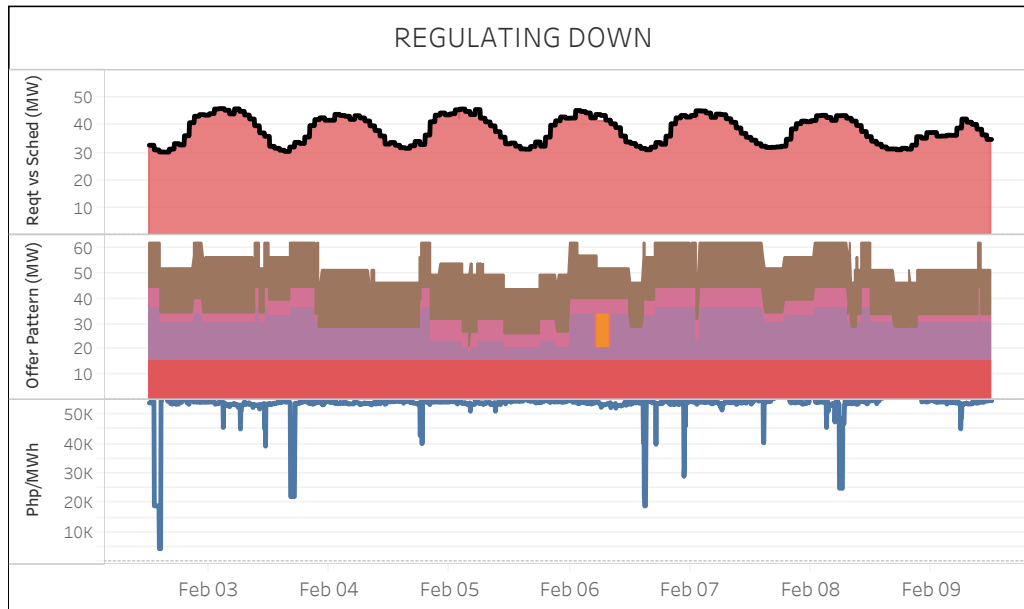
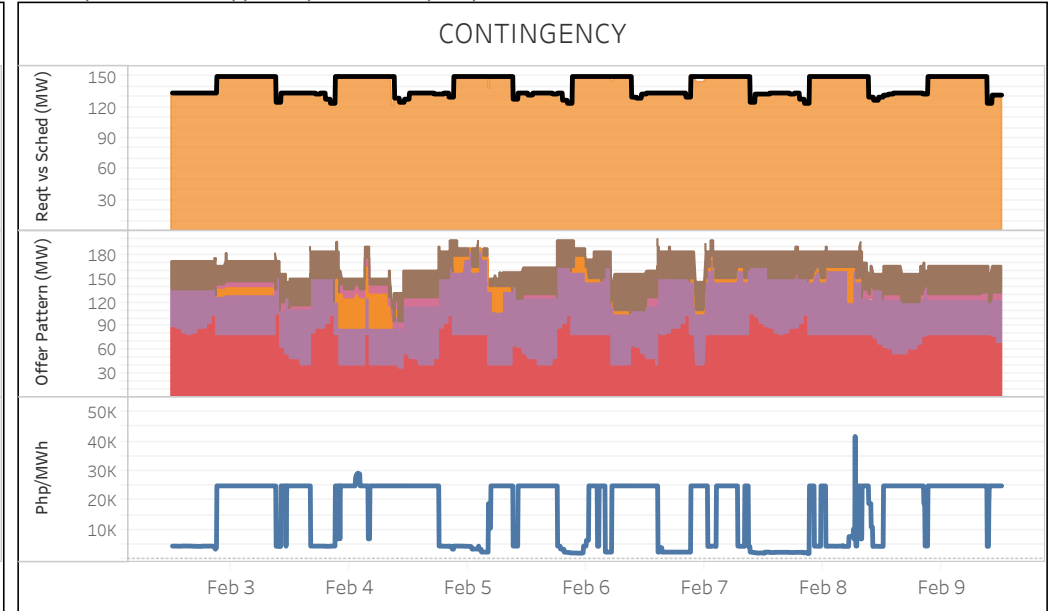
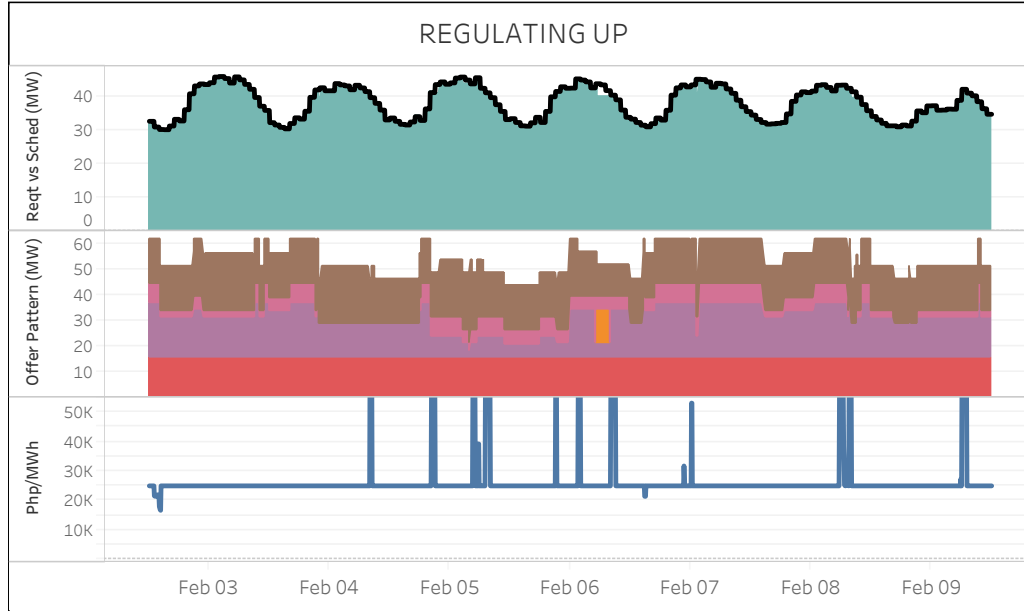
- Reserve Requirement
- RU Schedule
- RD Schedule
- FR Schedule
- DR Schedule

Offer Price Range

- PHP
- PHP (0,5000]
- PHP (5000,10000]
- PHP (10000,15000]
- PHP (15000,20000]
- PHP (20000,25000]
- PHP (25000,30000]
- PHP (30000,32000]

RESERVE MARKET DATA - VISAYAS

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Req't vs Sched Legends

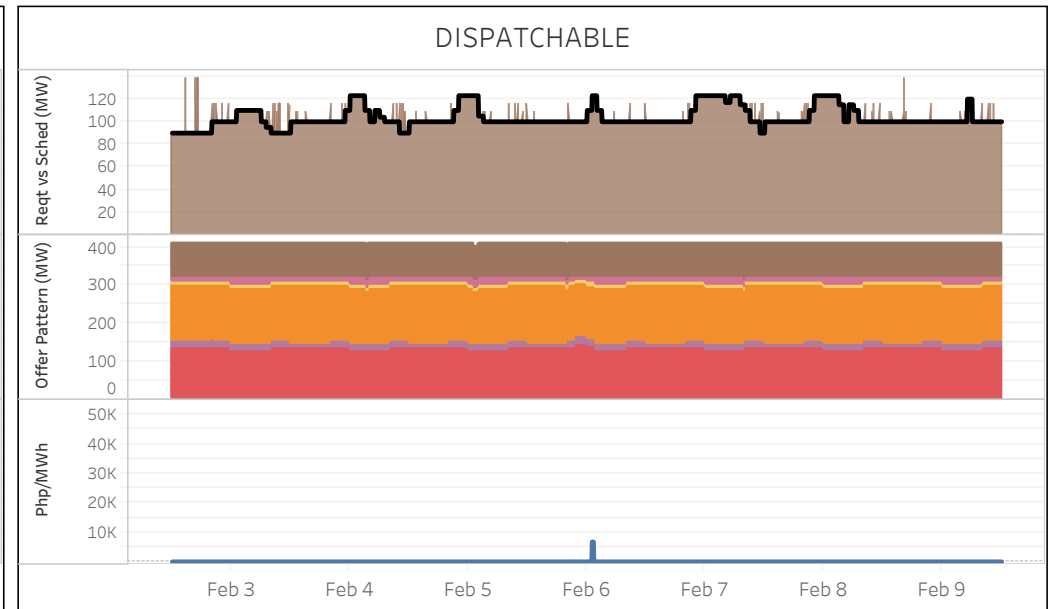
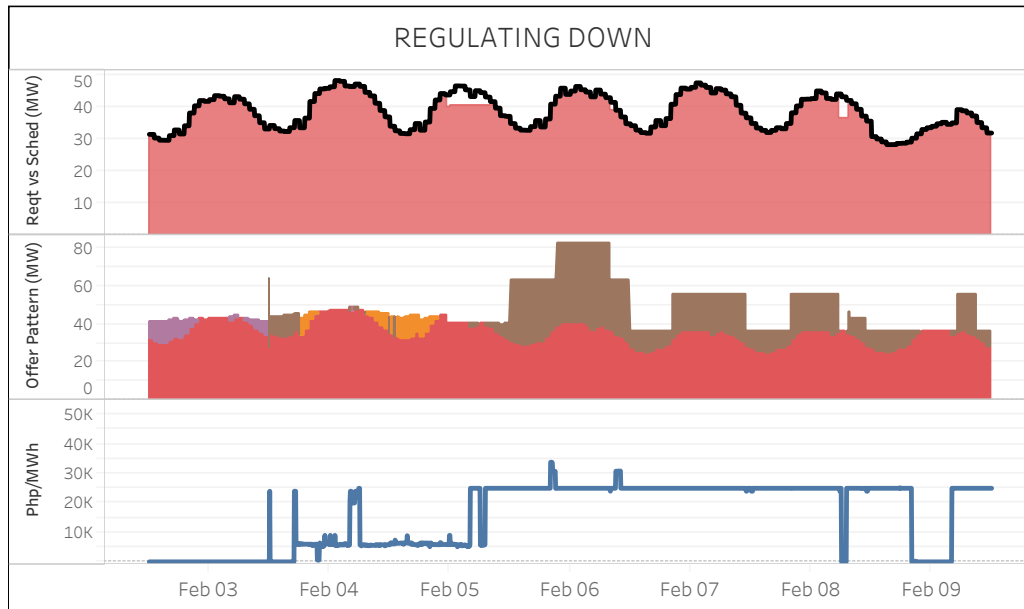
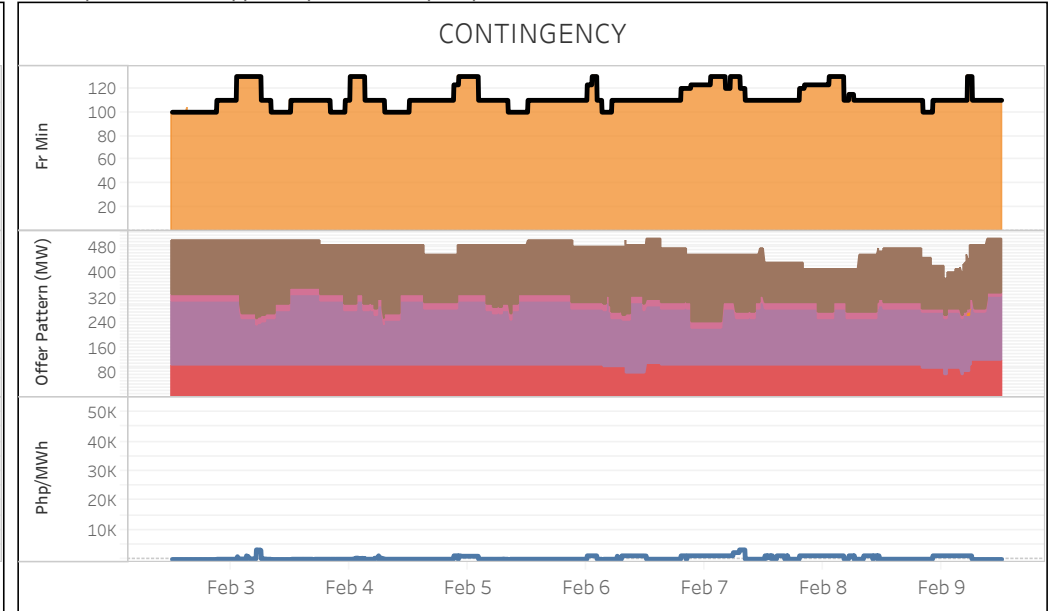
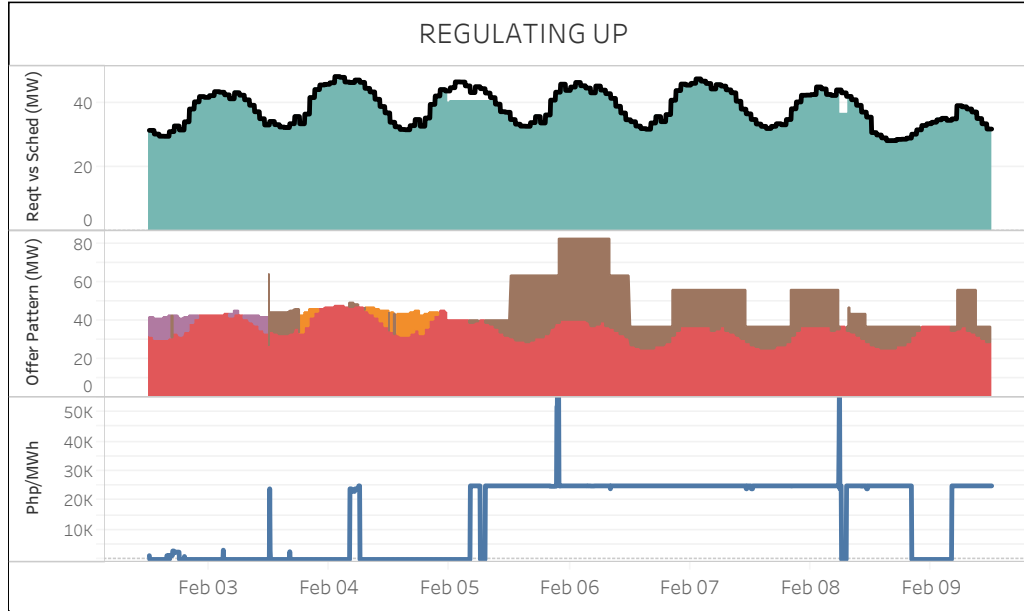
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- PHP (25000,30000]
- PHP (30000,32000]
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RESERVE MARKET DATA - LUZON

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Offer Price Range

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- PHP (15000,20000]
- PHP (20000,25000]
- PHP (25000,30000]
- PHP (30000,32000]
- PHP (0,5000]

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 1,500 - 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.

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.