

PEMC MARKET ASSESSMENT HIGHLIGHTS

· The average demand and the reserve schedule, recorded at 13,628 MW during the week of 03 - 09 June 2024, was higher than the previous week at 13,588 MW and higher than the same week last year at 12,339 MW.

· The average effective supply during the week was 14,118 MW, higher than the 13,827 MW of the previous week and higher than the 13,084 MW during the same week last year. Ramping limitations were considered in the calculation of the effective supply.

· The capacity on outage averaged at 2,152 MW, lower than last week's 3,504 MW. In terms of capacity on outage by plant type, about 30% of the 2,152 MW involved Hydroelectric Plants, while in terms of category, about 79% were Forced Outages.

· As a result, an average supply margin of 490 MW was observed during the week, which is higher by about 105% relative to the previous week and lower by about 34.245% in comparison with the same week last year. A supply deficit based on MMS solution of 185.45 MW was observed on 03 June 2024 at 21:15h. The average supply margin was 483.18 MW at peak intervals and 494.99 MW at off-peak intervals.

· Correspondingly, average GWAP was recorded at PHP 6,059/MWh from PHP 8,707/MWh last week. This is lower than the PHP6,731/MWh during the same week last year.

· The secondary price cap was imposed during 217 intervals out of the 2,016 intervals of the week (about 11% of the time).

· The top 5 participant groups accounted for about 79% of the offered capacity. The Herfindahl-Hirschman Index (HHI) by participant group indicated moderately concentrated market based on the offered and registered capacities.

· The top 5 pivotal plants during the week were –

1. GNP DINGININ CFTPP (about 99.95% of the time)
2. ILJUAN NGPP (about 99.95% of the time)
3. STA RITA NGPP (about 99.85% of the time)
4. MARIVELES CFTPP (about 97.97% of the time)
5. MASINLOC CFTPP (about 97.62% of the time)

· Based on the MMS Solution, the top 5 congested equipment during the week were –

1. 138kV Maasin-Ubay Line 1 (about 45.7% of the time)
2. 138kV Samboan-Amlan Line1 (about 15.4% of the time)
3. 138kV Barotac-Dingle Line 2 (about 9.5% of the time)
4. 138kV Barotac-Dingle Line 1 (about 9.3% of the time)
5. Dasmariñas_Corridor (about 6.4% of the time)

OFFER PATTERN ANALYSIS

- The offered capacity of coal plants was higher than the previous week due to the resumption of operations of plants on outage.
- The offered capacity of the hydro plants was lower from June 4 to 6 due to an increase in capacity on outage. Moreover, observed capacities of around 400 MW were offered at prices ranging from Php 30,000/MWh to Php 32,000/MWh for the first three days of the week
- The offered capacity of natural gas was higher than the previous week due to the resumption of operations of plants on outage.
- The lowest solar plant nomination was recorded on June 05, while the highest was recorded on June 03.
- The lowest nomination by wind plants was recorded on June 06, while the highest was on June 03.

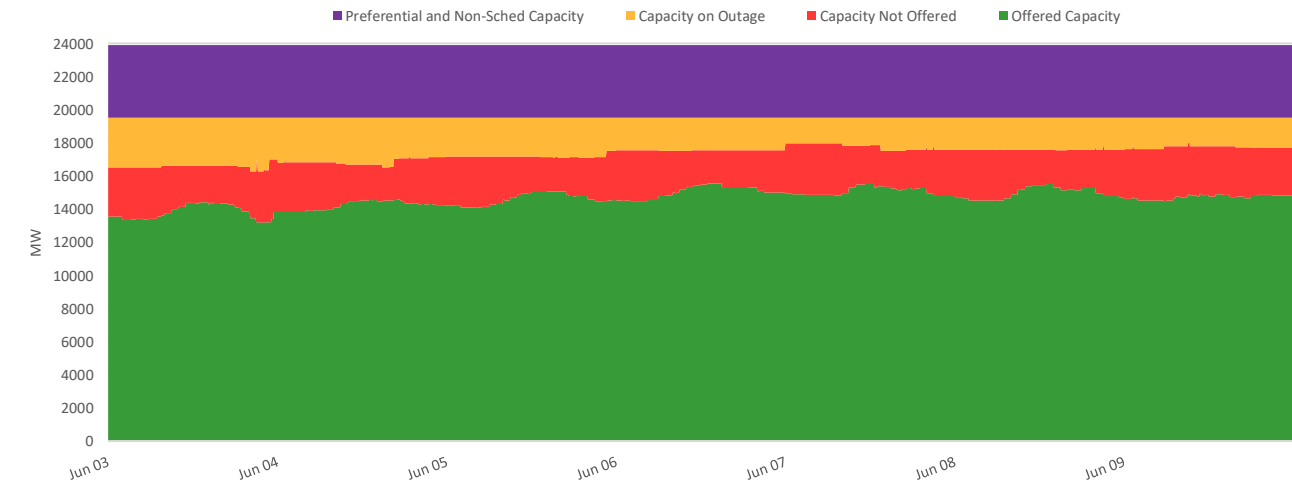
IEMOP MARKET SYSTEMS ADVISORY

- Market Intervention was initiated by Visayas System Operator due to manual load dropping implementation to prevent overloading of Ubay-Maasin 138kV Line for the following intervals:
 - Forty-seven (47) intervals from 15:20h to 19:10h on June 3
 - Thirty-nine (39) intervals from 13:20h to 16:30h on June 6
 - Thirty (30) intervals from 14:10h to 16:35h on June 7

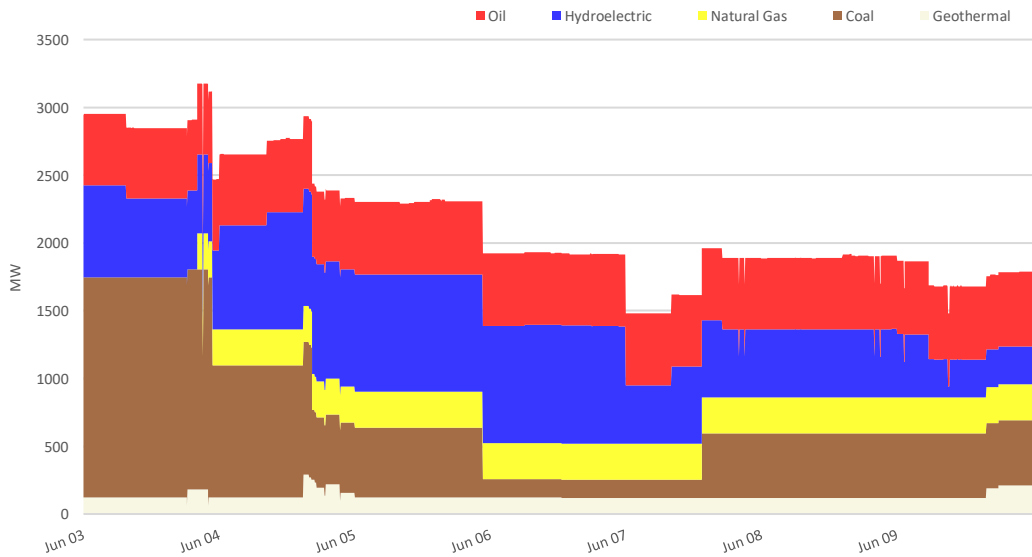
SUMMARY (PRICE, SUPPLY, DEMAND AND RESERVE SCHEDULE)

Particulars		03 - 09 Jun 2024	Previous Week (27 May - 02 Jun 2024)	Same Week, Previous Year (05 - 11 Jun 2023)	Percent Change From	
					Previous Week	Same Week, Prev Year
GWAP (PHP/MWh)	max	45,083.343	48,902.837	35,212.207	-7.810%	28.033%
	min	-5,586.118	-1,874.750	-1,029.371	-197.966%	-442.673%
	ave	6,058.826	8,707.124	6,731.152	-30.415%	-9.988%
Effective Supply (MW)	max	16,836.127	16,549.031	15,409.894	1.735%	9.255%
	min	11,750.568	10,444.468	10,923.862	12.505%	7.568%
	ave	14,118.421	13,826.887	13,084.187	2.108%	7.904%
System Demand (MW)	max	16,081.260	15,819.210	14,168.420	1.657%	13.501%
	min	10,208.160	9,136.760	9,281.440	11.726%	9.985%
	ave	12,975.606	13,073.242	11,740.068	-0.747%	10.524%
Demand + Reserve Schedule (MW)	max	16,699.400	16,447.080	14,989.110	1.534%	11.410%
	min	10,997.160	9,726.590	9,825.440	13.063%	11.925%
	ave	13,628.389	13,588.309	12,338.946	0.295%	10.450%
Supply Margin (MW)	max	1,034.458	842.637	1,281.591	22.764%	-19.283%
	min	-185.445	-27.410	-388.496	-576.560%	52.266%
	ave	490.031	238.578	745.241	105.397%	-34.245%

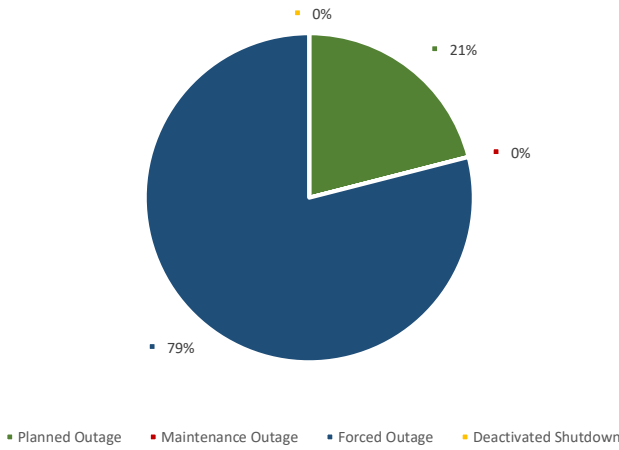
CAPACITY PROFILE



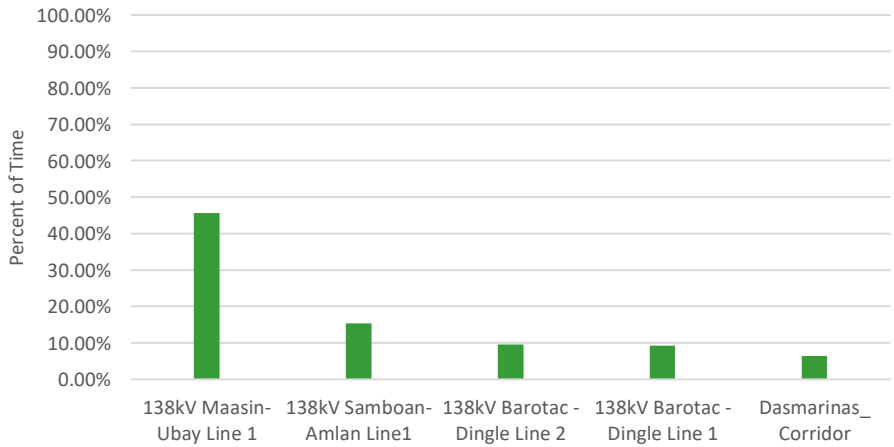
CAPACITY ON OUTAGE BY PLANT TYPE



CAPACITY ON OUTAGE BY OUTAGE CATEGORY

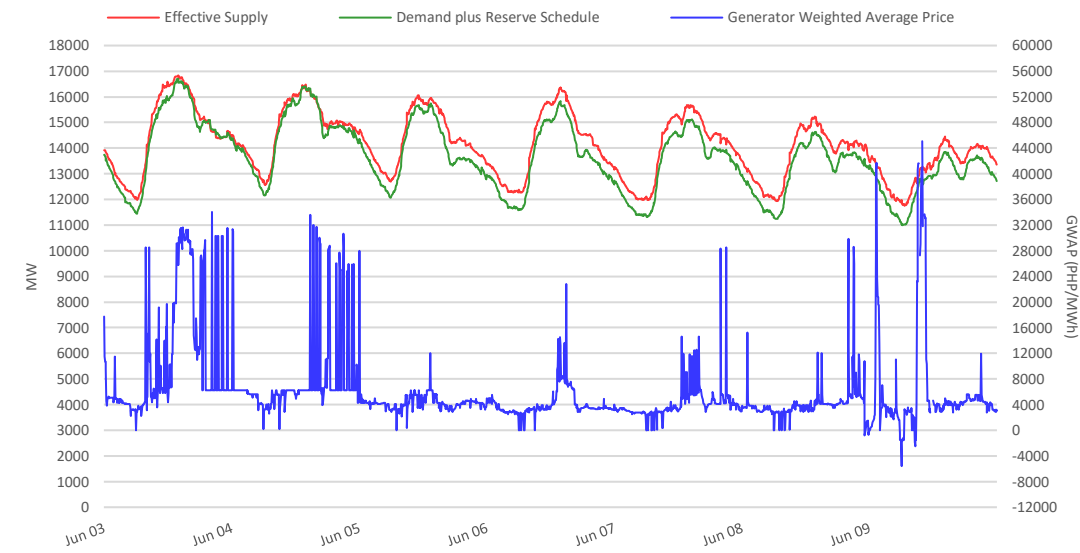


RTD CONGESTION

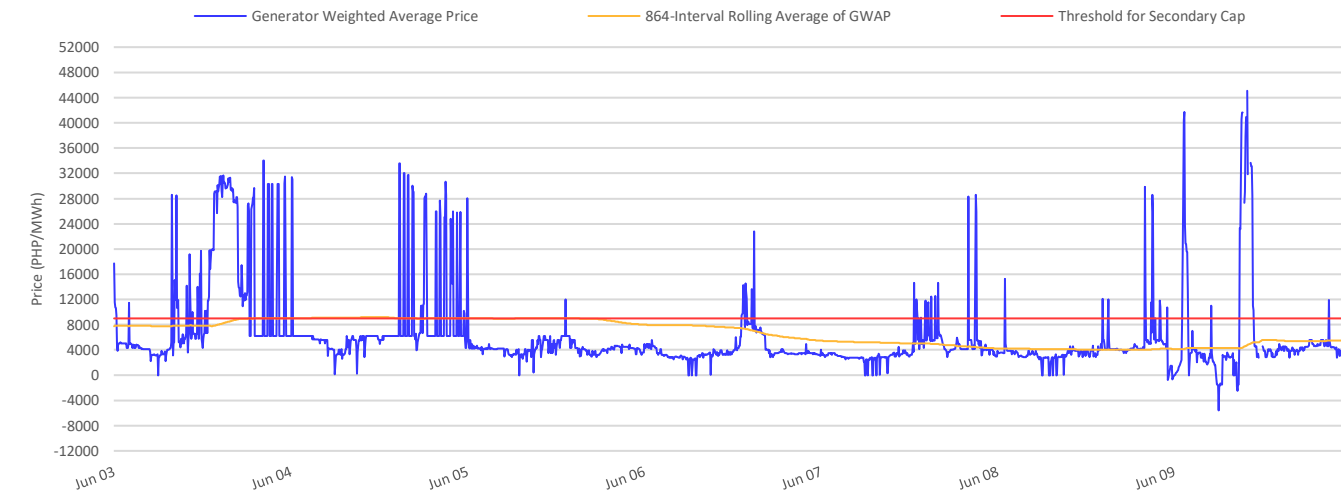




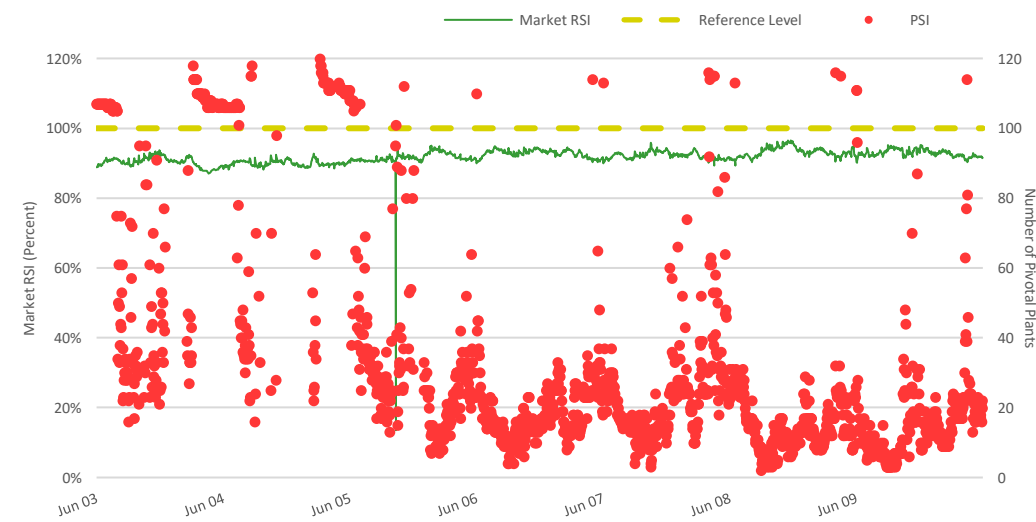
SUPPLY, DEMAND AND PRICE



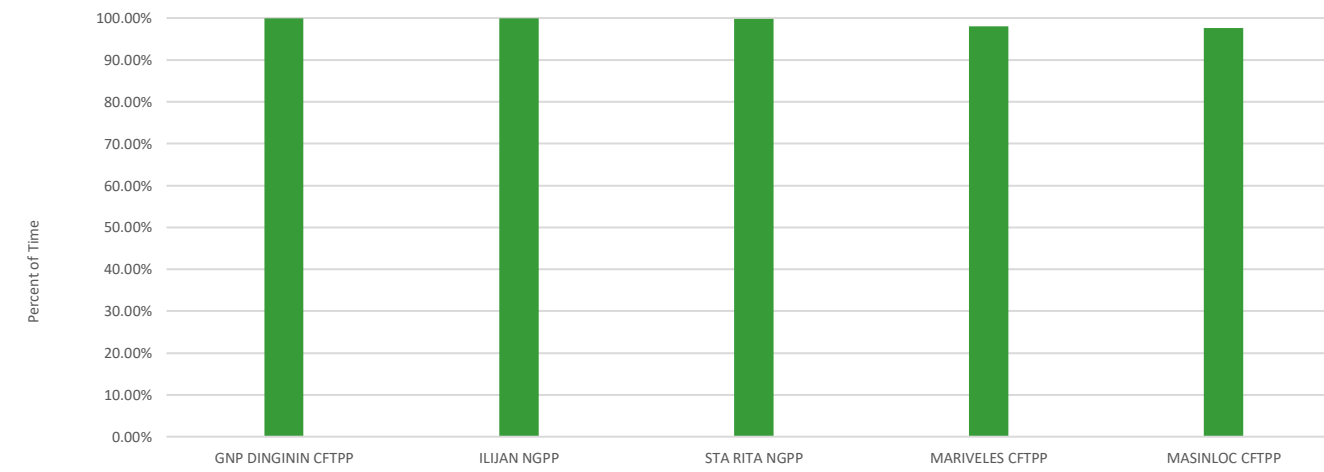
GENERATOR WEIGHTED AVERAGE PRICE



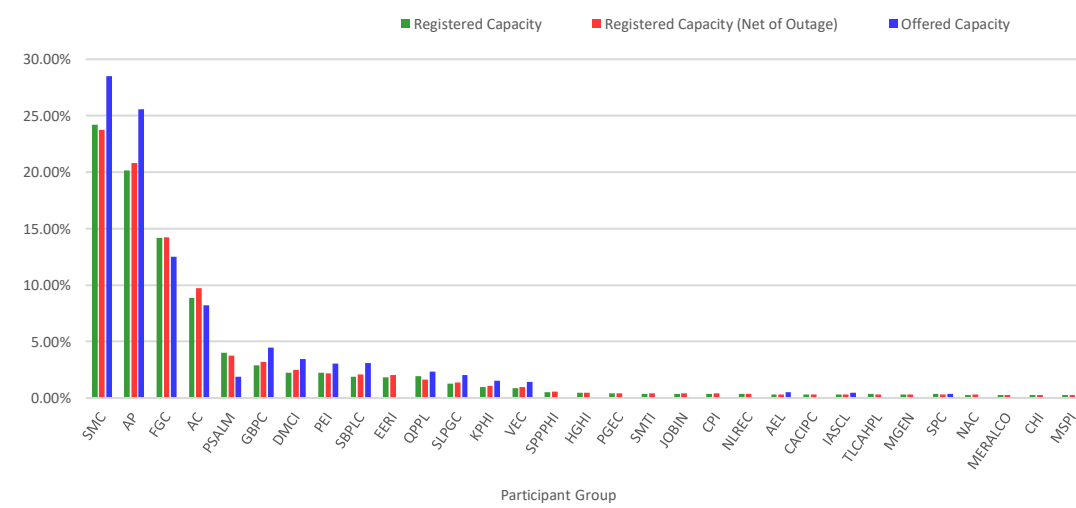
MARKET RSI VS PIVOTAL PLANTS



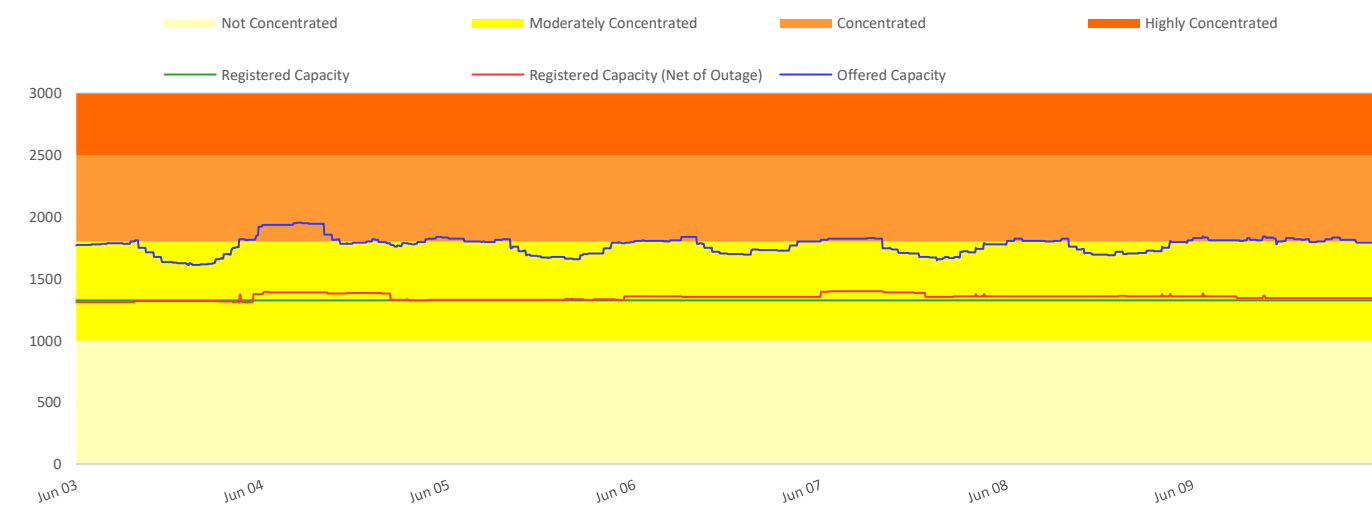
PSI



MARKET SHARE

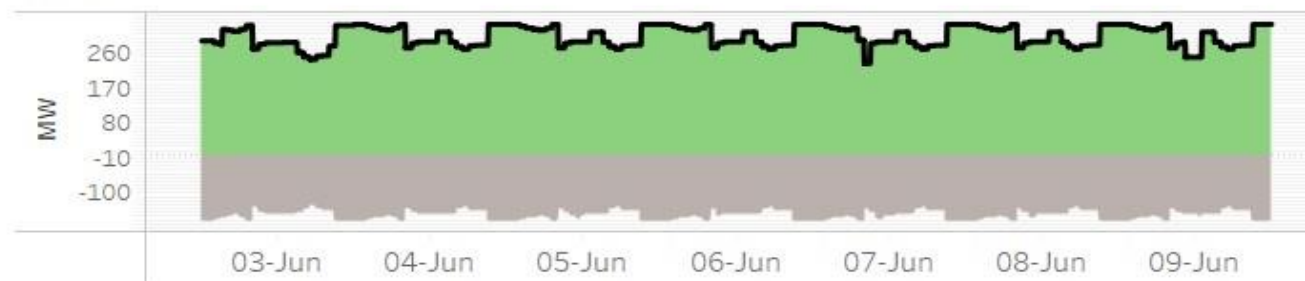


HERFINDAHL-HIRSCHMAN INDEX

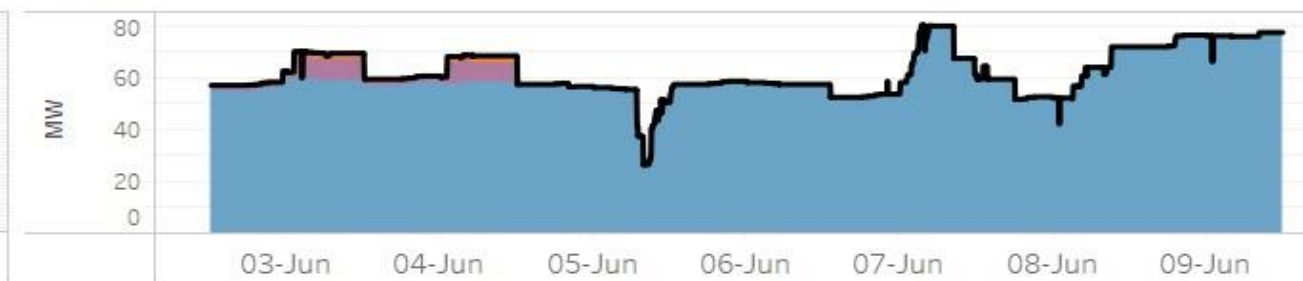


OFFER PATTERN ANALYSIS

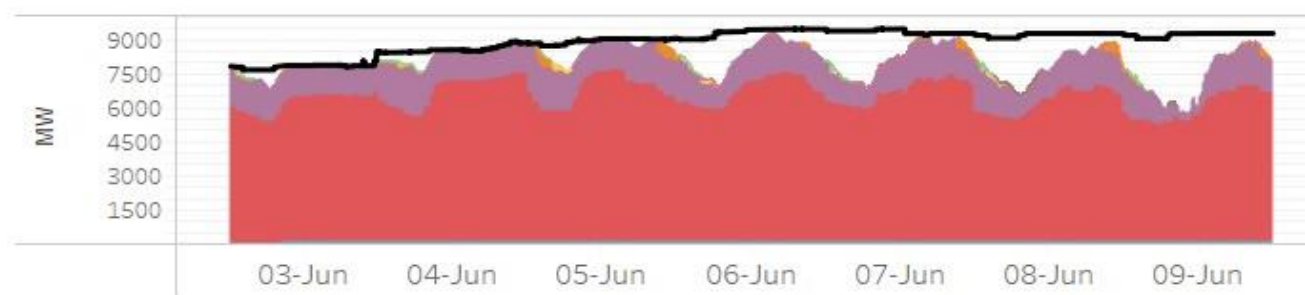
BATTERY



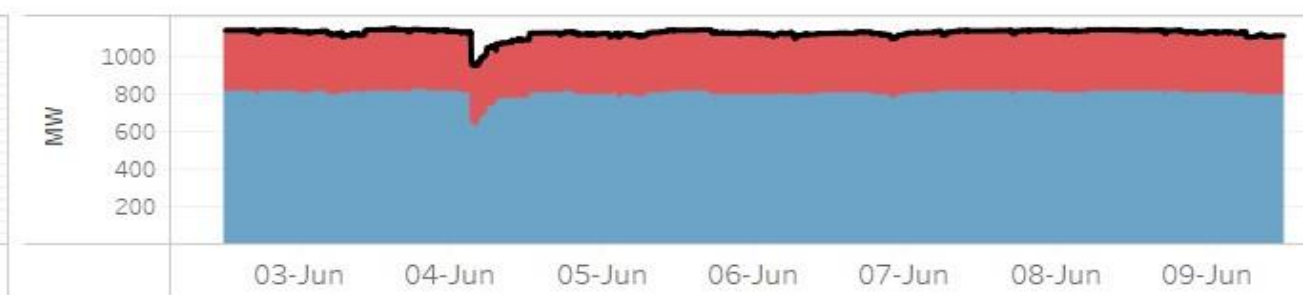
BIOFUEL



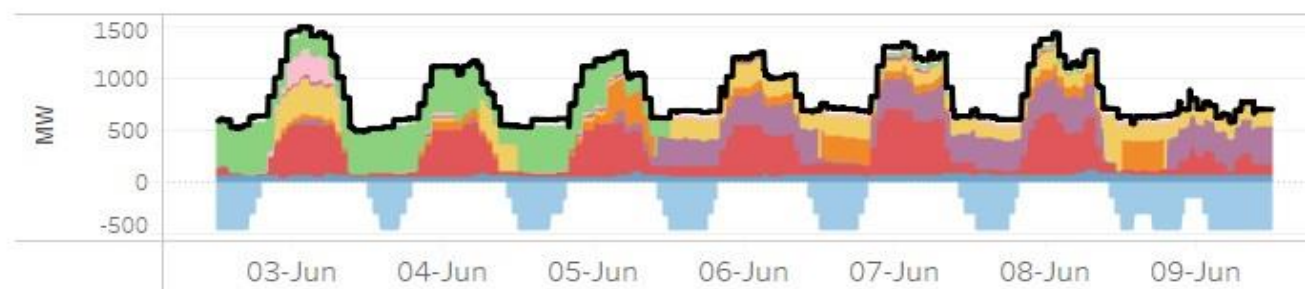
COAL



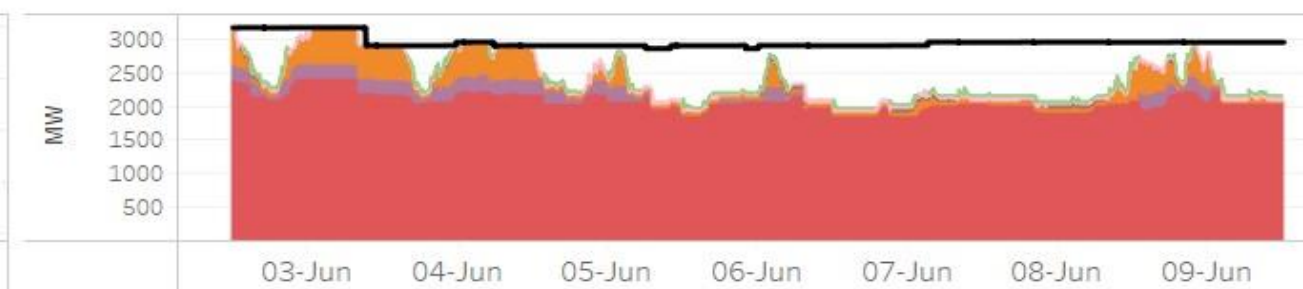
GEO THERMAL



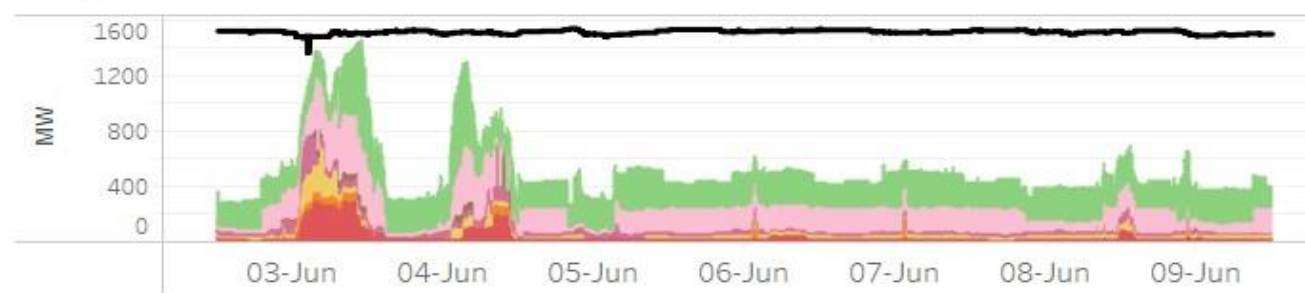
HYDRO



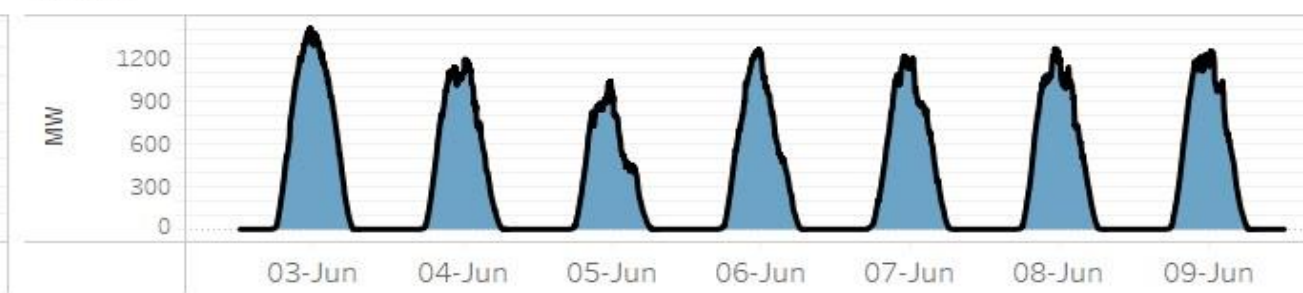
NATURAL GAS



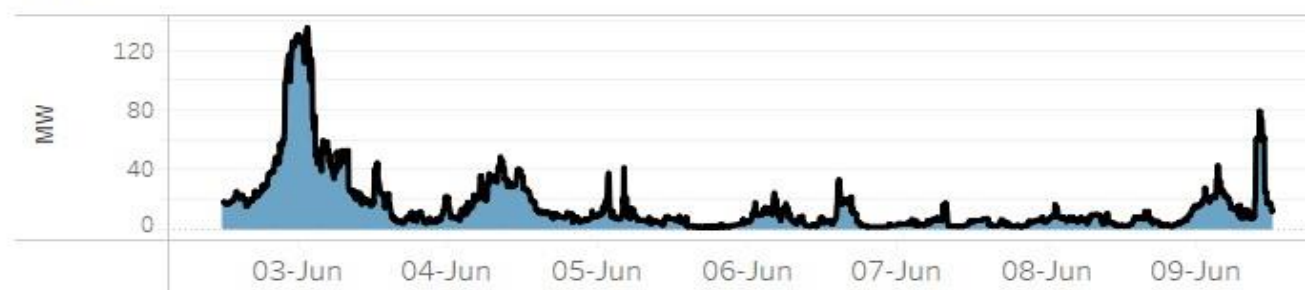
OIL-BASED



SOLAR



WIND



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 includes offered capacity of all scheduled generators, nominated loading level of nonscheduled generators and projected output of preferential dispatch generators adjusted based on submitted ramp rate limitations.

GLOSSARY OF TERMS

EFFECTIVE SUPPLY - The effective supply is equal to the offered capacity of all scheduled generator resources, nominated loading level of non-scheduled generating units and projected output of preferential dispatch generating units, adjusted for any security limit provided by the System Operator and other constraints considered during MMS simulation such as generator offered ramp rates. Scheduled output of plants on testing and commissioning through the imposition of security limit by SO and scheduled output of Malaya plant when it is called to run as Must Run Unit (MRU) are likewise accounted for in the effective supply.

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.

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).

HERFINDAHL-HIRSCHMAN INDEX (HHI) - 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; (3) greater than 1,800 - concentrated; and (4) greater than 2,500 - highly concentrated.

REGISTERED CAPACITY - The capacity registered by a generator with WESM.

REGISTERED CAPACITY (NET OF OUTAGE) - The capacity registered by a generator to WESM less capacity on outage.

OFFERED CAPACITY - The offer to supply electricity submitted by a generator.

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