Philippine Electricity Market Corporation

WEEKLY MARKET WATCH- LUZON-VISAYAS

10 - 16 Jun 2024

PEMC MARKET ASSESSMENT HIGHLIGHTS

· The average demand and the reserve schedule, recorded at 13,748 MW during the week of 10 - 16 Jun 2024, was higher than the previous week at 13,628 MW and higher than the same week last year at 12,228 MW.

· The average effective supply during the week was recorded at 14,340 MW, higher than the 14,118 MW of the previous week and higher than the 13,000 MW during the same week last year. Ramping limitations were considered in the calculation of the effective supply.

· The capacity on outage averaged at 1,515 MW, lower than last week's 2,189 MW. In terms of capacity on outage by plant type, about 35% of the 1,515 MW involved Oil Plants, while in terms of category, about 90% were Forced Outages.

· As a result, an average supply margin of 593 MW was observed during the week, which is higher by about 21% relative to the previous week and lower by about 23.315% in comparison with the same week last year. The thinnest supply margin based on MMS solution was 0.04 MW on 10 June 2024 17:35h. The average supply margin was 567.89 MW at peak intervals and 606.32 MW at off-peak intervals.

· Correspondingly, average GWAP was recorded at PHP 5,069/MWh from PHP 6,059/MWh last week. This is lower than the PHP6,097/MWh during the same week last year.

· No secondary price cap was imposed for this week

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

· The top 5 pivotal plants during the week were –

1. GNP DINGININ CFTPP (about 99.9% of the time)
2. STA RITA NGPP (about 99.01% of the time)
3. MASINLOC CFTPP (about 95.78% of the time)
4. MARIVELES CFTPP (about 95.59% of the time)
5. SUAL CFTPP (about 93.3% of the time)

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

1. 138kV Maasin-Ubay Line 1 (about 36.7% of the time)
2. 138kV Samboan-Amlan Line 1 (about 18.6% of the time)
3. 138kV Barotac-Dingle Line 2 (about 7.04% of the time)
4. 138kV Samboan-Amlan Line 2(about 6.5% of the time)
5. 138kV Barotac-Dingle Line 1 (about 4.5% of the time)

· OFFER PATTERN ANALYSIS

- The offered capacity of coal plants was higher than the previous week due to the resumption of operations at some plants.
- The offered capacity of the hydro plants was higher than the previous week due to decrease in capacity on outage.
- The offered capacity of natural gas was lower on June 11 due to the increase on outages.
- The lowest solar plant nomination was recorded on June 16, while the highest was recorded on June 12.
- The lowest nomination by wind plants was recorded on June 10, while the highest was on June 12.

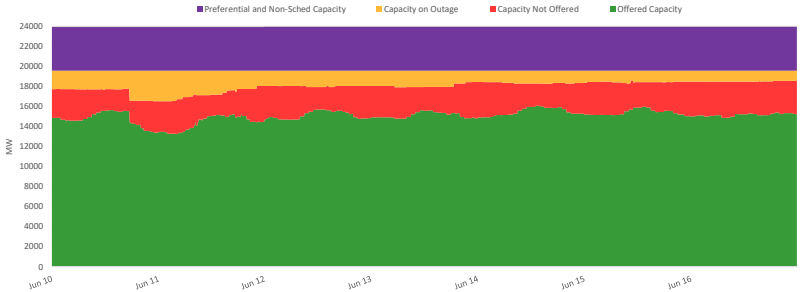
IEMOP MARKET SYSTEMS ADVISORY

· MO-initiated market intervention has been declared for all regions, with no RTD results generated for the trading intervals 17:55h and 18:00h on June 11, 2024.

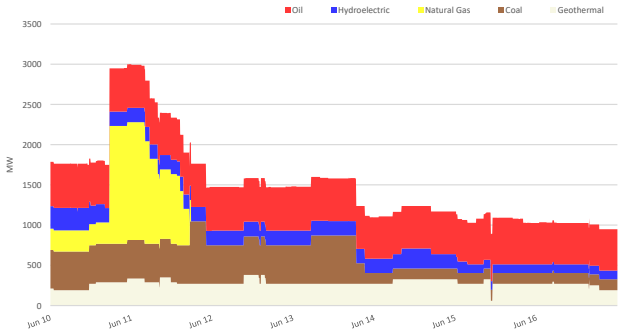
SUMMARY (PRICE, SUPPLY, DEMAND AND RESERVE SCHEDULE)

Particulars		10 - 16 Jun 2024	Previous Week (03 - 09 Jun 2024)	Same Week, Previous Year (12 - 18 Jun 2023)	Percent Change From	
					Previous Week	Same Week, Prev Year
GWAP (PHP/MWh)	max	33,235.770	45,083.343	31,223.609	-26.279%	6.444%
	min	-8,519.934	-5,586.118	-9,909.154	-52.520%	14.020%
	ave	5,069.282	6,058.826	6,097.117	-16.332%	-16.858%
Effective Supply (MW)	max	17,135.551	16,836.127	15,229.059	1.778%	12.519%
	min	11,745.069	11,750.568	10,146.610	-0.047%	15.754%
	ave	14,340.461	14,118.421	13,000.281	1.573%	10.309%
System Demand (MW)	max	15,754.640	16,081.260	14,161.970	-2.031%	11.246%
	min	10,275.460	10,208.160	8,389.140	0.659%	22.485%
	ave	13,034.677	12,975.606	11,621.852	0.455%	12.157%
Demand + Reserve Schedule (MW)	max	16,710.650	16,699.400	14,828.260	0.067%	12.695%
	min	11,043.810	10,997.160	8,949.140	0.424%	23.406%
	ave	13,747.898	13,628.389	12,227.557	0.877%	12.434%
Supply Margin (MW)	max	1,067.930	1,034.458	1,369.880	3.236%	-22.042%
	min	0.040	-185.445	82.654	100.022%	-99.952%
	ave	592.563	490.031	772.724	20.924%	-23.315%

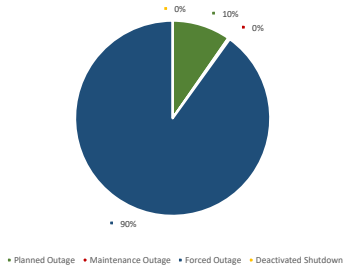
CAPACITY PROFILE



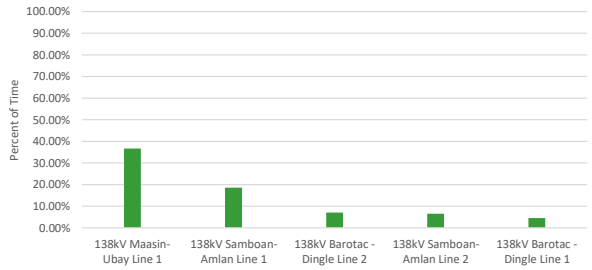
CAPACITY ON OUTAGE BY PLANT TYPE



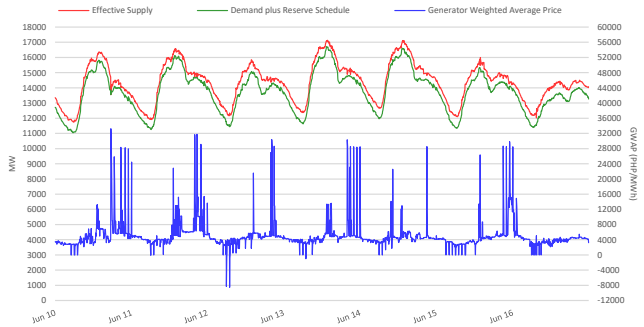
CAPACITY ON OUTAGE BY OUTAGE CATEGORY



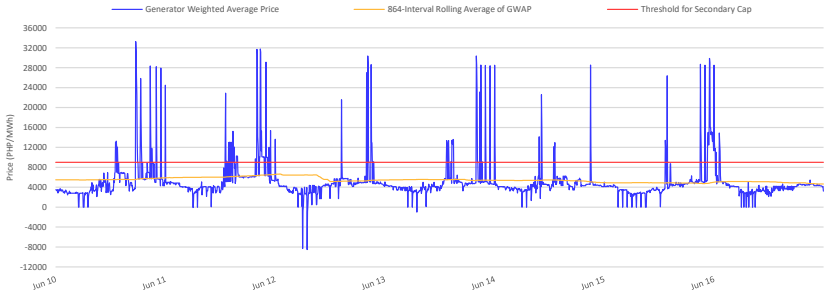
RTD CONGESTION



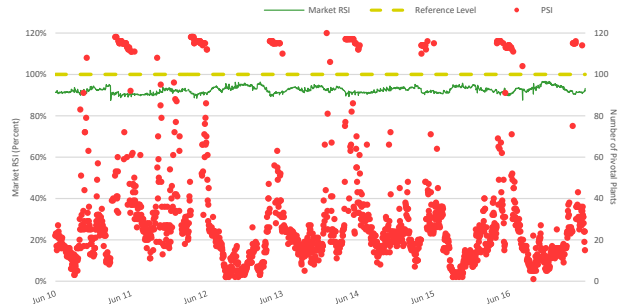
SUPPLY, DEMAND AND PRICE



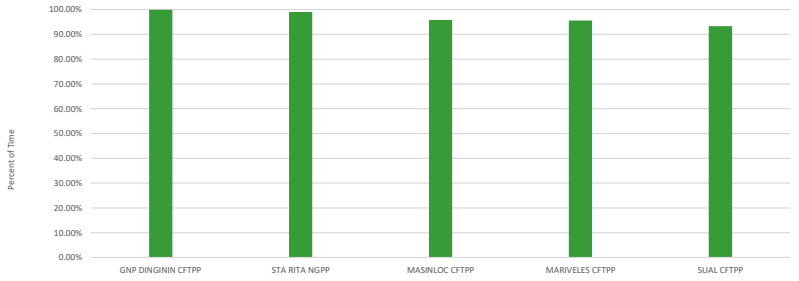
GENERATOR WEIGHTED AVERAGE PRICE



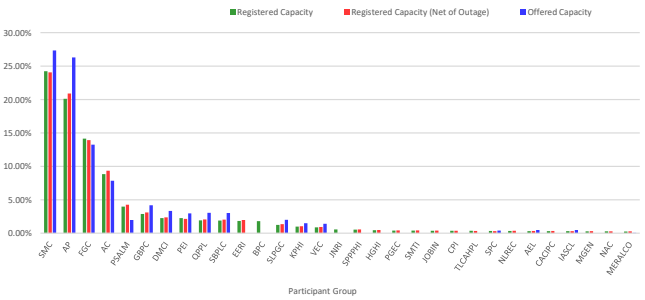
MARKET RSI VS PIVOTAL PLANTS



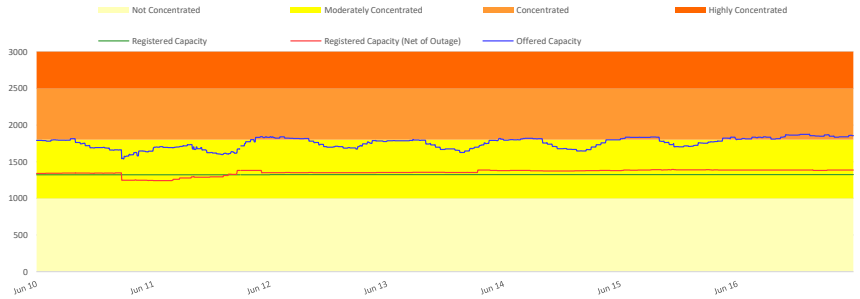
PSI



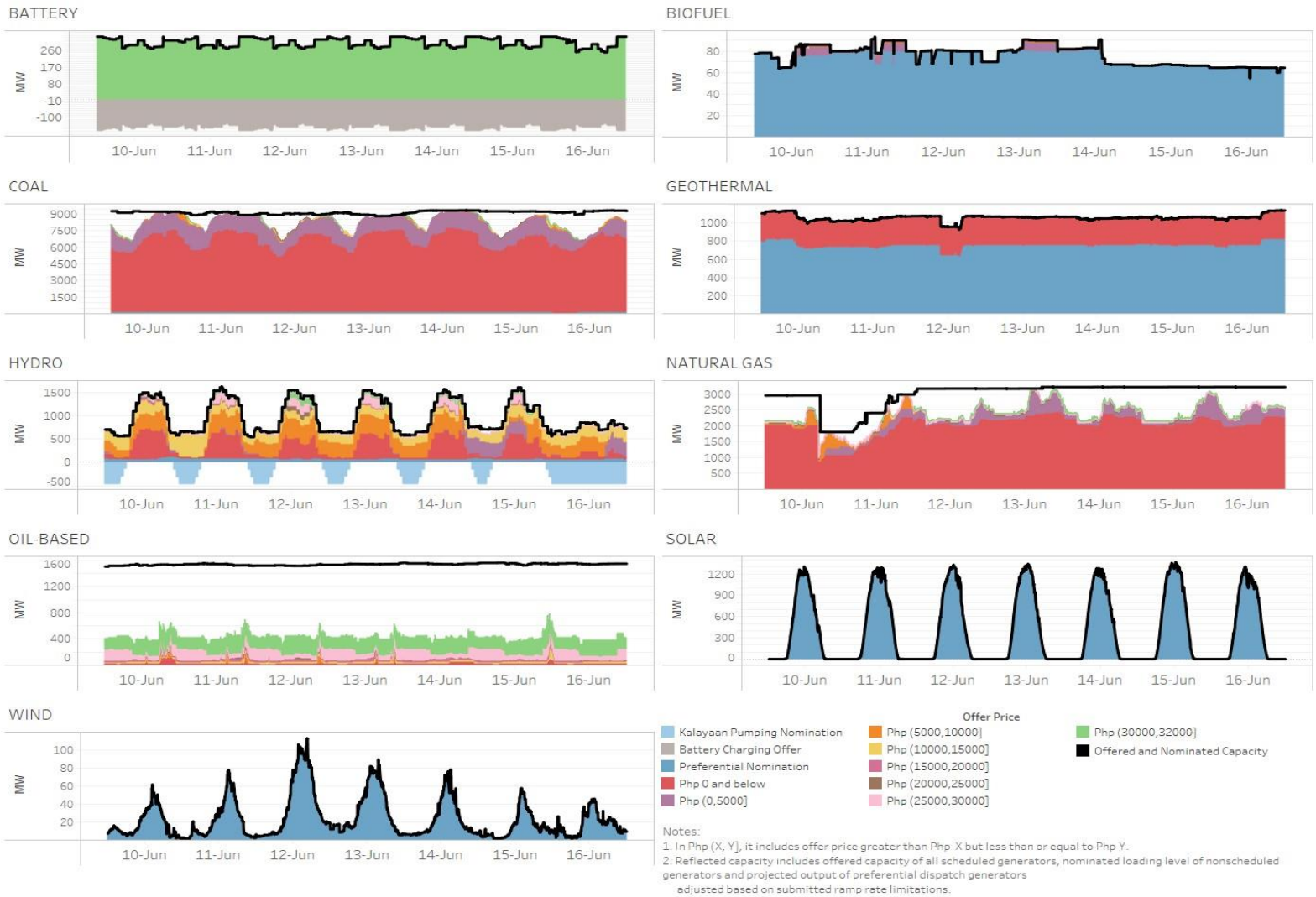
MARKET SHARE



HERFINDAHL-HIRSCHMAN INDEX



OFFER PATTERN ANALYSIS



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 with WESM less capacity on outage.

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