

MSC-ANREP-2017

Market Surveillance Committee 2017 Annual Report

JANUARY 2017 TO DECEMBER 2017

MARCH 2018

This Report is prepared by the Philippine Electricity Market Corporation-Market Assessment Group for the Market Surveillance Committee.



**Philippine Electricity
Market Corporation**

TABLE OF CONTENTS

I.	2017 ACCOMPLISHMENTS	1
	A. Review of Market Reports	1
	B. Review of Compliance Monitoring Reports	7
	C. Review of Monitoring Report on Nomination of Loading Level and Projected Output	15
	D. Review of Over-riding Constraints	16
	E. Review of ECO Investigation Reports.....	18
	F. Review of Market Intervention Events	19
	G. Review of Proposed Amendments to the WESM Rules and Market Manuals	20
	H. Other Activities	25
II.	2018 WORK PLAN	29
III.	MEMBERSHIP	34
IV.	RESPONSIBILITIES	34

LIST OF FIGURES AND TABLES

Figure 1 <i>Trading Intervals with Deviation on the RTD Schedule, per Resource, Luzon</i>	8
Figure 2 <i>Trading Intervals with Deviation on the RTD Schedule, per Resource, Visayas</i>	9
Figure 3 <i>Trading Intervals with Capacity Gap, per Resource, Luzon</i>	11
Figure 4 <i>Trading intervals with Capacity Gap, per Resource, Visayas</i>	13
Table 1 <i>Summary of Trading Intervals with Deviation on the RTD Schedule, Luzon</i>	8
Table 2 <i>Summary of Trading Intervals with Deviation on the RTD Schedule, Visayas</i>	10
Table 3 <i>Summary of Trading Intervals with Capacity Gap, Luzon</i>	12
Table 4 <i>Summary of Trading Intervals with Capacity Gap, Visayas</i>	13
Table 5 <i>Summary of Trading Intervals with Capacity Gap, Luzon (with SER)</i>	14
Table 6 <i>Summary of Trading Intervals with Capacity Gap, Visayas (with SER)</i>	14
Table 7 <i>Summary of Requests for Investigation Submitted to the PEM Board</i>	15
Table 8 <i>Summary of Over-riding Events</i>	17

The Market Surveillance Committee (MSC) submits this Annual Report covering the MSC's accomplishments for the year 2017. This report also presents the proposed activities of the MSC for the year 2018.

The Market Assessment Group (MAG) provides both technical as well as administrative support to the MSC in performing its functions and obligations under the WESM Rules and applicable WESM Manuals.

I. 2017 ACCOMPLISHMENTS

A. Review of Market Reports

A.1. Monthly Market Assessment Reports for November 2016 – October 2017

As provided for under Section 7.3. of the Market Surveillance, Compliance and Enforcement Market Manual (MSCEMM), the MSC reviewed twelve (12) Monthly Market Assessment Reports, submitted by the MAG, for the billing months of November 2016 to October 2017.

The Monthly Market Assessment Report provides an assessment of the development of market behavior covering the period under review, including the development and analysis of the monitoring indices as contained in the Catalogue of Market Monitoring Data and Indices.

After due deliberation during the MSC's meetings, the MSC approved and subsequently submitted to the Philippine Electricity Market (PEM) Board, for its reference, a total of twelve (12) MSC Monthly Monitoring Reports covering the billing months of November 2016 to October 2017. The same were also furnished to the Energy Regulatory Commission (ERC) and the Department of Energy (DOE).

After the transmittal of the MSC Monthly Monitoring Reports to the PEM Board, the Monthly Market Assessment Reports, were subsequently published in the PEMC market information website for the information of WESM Participants¹.

A.2. 2016 Annual Market Assessment Report

The MSC reviewed and deliberated the Annual Market Assessment Report covering the period 26 December 2015 to 25 December 2016, submitted by the MAG. After due deliberation, the MSC approved and subsequently submitted the 2016 Annual Market Assessment Report to the PEM Board on 11 August 2017, for its reference. The same was also furnished to the ERC and DOE. The 2016 Annual Market Assessment Report was also published in the PEMC market information website².

A.3. Quarterly Retail Market Assessment Reports for Q4 2016 and Q1 to Q3 2017

Pursuant to Section 3.1 of the Catalogue of Retail Market Monitoring Data and Indices, the MSC reviewed and deliberated four (4) quarterly Retail Market Assessment Reports, submitted by the MAG, covering the fourth quarter of 2016 to third quarter of 2017.

The quarterly Retail Market Assessment Report discusses the outcome of monitoring indices as set out in the Catalogue of Retail Market Monitoring Data and Indices. Said indices also provide indications on the development of the retail market from the time of its integration into the WESM.

¹ Link: http://www.wesm.ph/inner.php/downloads/retail_market_assessment_report

² Link: http://www.wesm.ph/inner.php/downloads/annual_market_assessment_reports

The MSC thereafter submitted the Retail Market Monitoring Reports for the said quarters, attaching the quarterly Retail Market Assessment Reports, which the MSC reviewed and adopted during the discussion of the said reports in its Committee meetings.

After due deliberation, the MSC approved and submitted the four (4) quarterly Retail Market Monitoring Reports for Q1 2016, Q1 2017, Q2 2017 and Q3 2017, to the PEM Board, ERC and DOE, for its reference.

After the transmittal of the Retail Market Monitoring Reports to the PEM Board, the quarterly Retail Market Assessment Reports were published in the market information website³.

A.4. 2016 Annual Retail Market Assessment Report

The MSC reviewed and approved the Annual Retail Market Assessment Report covering the period 26 December 2015 to 25 December 2016 as submitted by the MAG. After due deliberation, the MSC approved and subsequently submitted the 2016 Annual Retail Market Assessment Report to the PEM Board, ERC and DOE on 22 May 2017, for its reference. The 2016 Annual Retail Market Assessment Report was also published in the PEMC market information website⁴.

A.5. Market Situationer Special Report for the period April 8 -10, 2017

The MSC reviewed the preliminary assessment report prepared by the MAG for the period April 8-10, 2017, on the price spikes experienced by the spot market due to low supply of power vis-à-vis demand, as a result of the recent earthquakes in the Province of Batangas. The said preliminary assessment report was included in the Market Assessment Report for

³ Link: http://www.wesm.ph/inner.php/downloads/retail_market_assessment_report

⁴ Link: http://www.wesm.ph/inner.php/downloads/retail_market_assessment_report

April 2017 which was submitted to the PEM Board on 03 June 2017. The same was furnished to the ERC and DOE.

The final Market Situationer Report covering the period April 1 – 18, 2017 was submitted by PEMC to the DOE on 26 April 2017, per the directive of the DOE in its letter to PEMC dated 18 April 2017, to submit a report on the price spike events within five (5) working days from receipt of the letter.

- **Review of Hydro Plants Offer Pattern**

Aside from reviewing the preliminary assessment report for the period April 8 -10, 2017, the MSC also reviewed the result of assessment prepared by the MAG on the offer pattern of hydro plants that set the price during the said event. The scope of the assessment covered the period 26 December 2013 - 25 August 2017.

The summary observations were as follows:

- The historical offer price of hydro plants ranged from negative PhP 10,000/MWh to as high as PhP 32,000/MWh with Angat HEP, Kalayaan PSPP, and San Roque HEP as the usual plants to offer at such level.
- High offer prices were observed during dry months than in wet months due to low water supply and typically high demand requirement.
- Angat HEP and San Roque HEP, which were both under San Miguel Corp., offered their capacities at high prices and were subsequently dispatched on 08-16 April 2017.
- Angat HEP showed a significant variation in its bidding behaviour since it offered its capacities at higher prices in response to the high capacity on outage caused by the earthquake event on 08 April 2017 compared to its bidding behaviour prior to the said event. Further, a review of its historical offer pattern showed that there were instances when Angat offered its capacities at higher prices whenever major coal or natural gas plant were unavailable.

- A higher schedule for energy than for reserve was observed during the earthquake event than in other intervals in April.

A.6. Interesting Pricing Events Report

In addition to the monthly and annual Market Assessment Reports, the MSC also reviewed and deliberated the Interesting Pricing Events Reports for Q1 and Q2 2017 submitted by the MAG. These reports provided an in-depth analysis of intervals determined to have price outliers based on the relationship of market price and supply margin or also known as “interesting pricing events”. The determination of the interesting pricing events was based on the methodology approved by the MSC. Moreover, these reports were submitted to the DOE in compliance with the DOE’s instruction to the MSC in its letter dated 28 October 2016.

- **Interesting Pricing Event for Q1 2017**

For Q1 2017, which covered the period from 26 December 2016 to 25 March 2017, only one interval was determined to be an interesting pricing event. This was recorded on 18 February 2017 at 1900H (Saturday) when the market price reached PhP 24,854/MWh with only 450 MW available supply margin. This was driven primarily by the increase in demand, from 9,374 MW to 9,557 MW and the decrease in effective supply from 10,663 MW to 10,007 MW. The sudden drop in the supply level was attributed to the forced outage of one major coal-fired thermal power plant due to the tripping of its boiler feed pump at 1753H, on top of the existing outages from other major plants. Moreover, planned outage of two large coal plants did not end as scheduled contributing further to the high capacity on outage. The combined capacity of said plants at 759 MW could have augmented the supply level during the interesting pricing event if they were able to resume operations as scheduled.

- **Interesting Pricing Event for Q2 2017**

Four intervals were identified to be interesting pricing events in Q2 2017. These occurred on 09 April at 0500H and 1900H, 10 April at 2200H, and 02 May at 1600H, with market prices reaching as high as PhP27,872/MWh.

The interesting pricing events on 09 April at 0500H and 1900H and on 10 April at 2200H were mainly influenced by the limited supply available in the market brought about by the outages incurred in the Batangas region related to the series of earthquakes in the area. In addition, other outages, both forced and planned, further decreased the available supply during the period.

High level of capacity not offered in the market was also observed during the period which further tightened the supply condition during the events. This is more evidently noted during the 10 April at 2200H and 02 May at 1600H. These trading intervals with capacity gap were subjected to MSC's evaluation and were issued Request for Investigation (RFI) for possible non-compliance with the Must-Offer Rule.

Noting the impact on electricity supply of earthquake and similar natural events, the MSC sees the need for trading participants to put in place an emergency response and contingency plan for its generating facilities including related facilities in preparation for such occurrences. Thus, the MSC requested the Technical Committee (TC) to recommend on the minimum measures and standards that should be set forth in said emergency response and contingency plan. In response, the TC noted that setting the minimum measures and standards for generating facilities including related facilities in the event of emergency needs to be harmonized with the on-going efforts of the DOE in promoting power resiliency in the power industry. The Inter-Agency Task Force on Securing Energy Facilities (IATFSEF), which was formed by the DOE and with the TC representative as a member, may address said concerns. Meanwhile, the TC will make a parallel review of the Resiliency Standards, Business Continuity Plans, Contingency Plans and best practices in other jurisdictions related to the same.

The MSC approved and subsequently submitted to the DOE for its reference, the Interesting Pricing Events Reports for Q1 and Q2 2017 on 24 May 2017 and 05 January 2018, respectively.

B. Review of Compliance Monitoring Reports

The MSC reviewed the activities of the Trading Participants in terms of their compliance with the Real Time Dispatch (RTD) schedule and the Must Offer Rule (MOR), as contained in the Compliance Monitoring Reports submitted by the MAG. The said reports contain the list of Trading Participants in Luzon and Visayas, and the number of trading intervals with capacity gaps and deviations from the RTD schedule.

B.1. Compliance of Trading Participants with the Real Time Dispatch Schedule for October 2016 to October 2017

As regards the deviations to the RTD schedule for the period covered, the MSC observed 62,144 total resource trading intervals with deviation exceeding the dispatch tolerance limit in Luzon, and 9,414 total trading intervals in Visayas, that are recommended for the issuance of request for investigation. It may be noted that trading intervals with deviations exceeding the dispatch tolerance limit due to generator problem and non-compliance to dispatch instructions are recommended for the issuance of request for investigation.

Effective 17 June 2017, the dispatch tolerance limit was revised based on Section 12.4.1 of the Dispatch Protocol Manual 12.0, which provides that *“All scheduled and priority dispatch generating units shall not deviate beyond the dispatch tolerance limit of +1.5% or –3% of the dispatch target or ± 1 MW, whichever is higher.”* In this regard, the Trading Participants’ compliance to the RTD schedule for the period 26 May – 16 June 2017 was still based on

the dispatch tolerance limit of $\pm 3\%$ of the dispatch target as approved by the PEM Board per Resolution No. 2005-15.

The monthly breakdown of trading intervals with deviations exceeding the dispatch tolerance limit for Luzon is shown in Figure 1. The noticeable decrease in the number of trading intervals with deviation for Luzon starting July 2017 was attributable to the new dispatch tolerance limit. It may be noted that deviations of hydro and biomass plants which used to exceed the previous $\pm 3\%$ dispatch tolerance limit, were found to be within the bounds of the new dispatch tolerance limit, particularly the ± 1 MW dispatch tolerance limit.

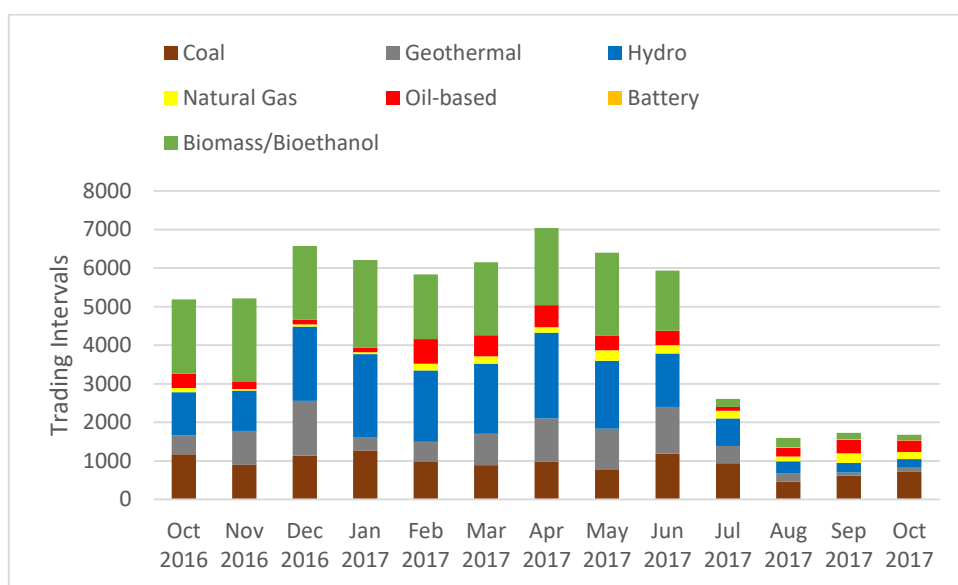


Figure 1 | Trading Intervals with Deviation on the RTD Schedule, per Resource, Luzon

Table 1 | Summary of Trading Intervals with Deviation on the RTD Schedule, Luzon

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017
Coal	1,171	895	1,142	1,269	973	893	979	765	1,190	936	456	616	717
Geothermal	492	882	1,413	336	520	811	1,124	1,067	1,213	449	226	80	104
Hydro	1,117	1,047	1,927	2,164	1,855	1,819	2,220	1,761	1,379	713	306	255	226
Natural Gas	106	40	55	51	172	186	144	274	221	198	129	242	184
Oil-based	376	186	129	113	641	547	568	371	375	101	221	355	299
Battery	0	0	0	0	0	0	0	0	0	5	13	11	10
Biomass/Bioethanol	1,922	2,164	1,906	2,274	1,677	1,893	2,003	2,165	1,553	208	242	167	139
Total	5,184	5,214	6,572	6,207	5,838	6,149	7,038	6,403	5,931	2,610	1,593	1,726	1,679

As seen in Table 1, the highest total trading intervals with deviation exceeding the dispatch tolerance limit in Luzon was recorded in April 2017, mainly due to the high number of deviations from hydro plants (31.54%), followed by biomass/ bioethanol plants (28.46%) and geothermal (15.97%).

Based on plant type, biomass/ bioethanol plants recorded the most number of trading intervals with deviation exceeding the dispatch tolerance limit in Luzon. These are the cases when the biomass/ bioethanol plants had deviations that are 10 MW and below but are not included by the System Operator in its Deviation Dispatch Monitoring Report, as these deviations are negligible to the grid. Nonetheless, the MSC includes these deviations for the issuance of request for investigation.

The monthly breakdown of trading intervals with deviations exceeding the dispatch tolerance limit for Visayas is shown in Figure 2.

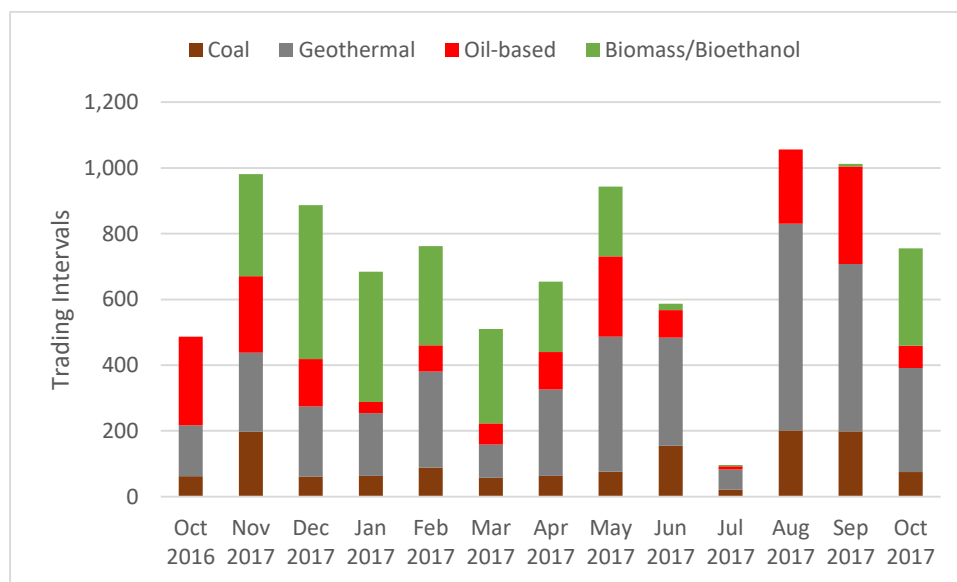


Figure 2 | Trading Intervals with Deviation on the RTD Schedule, per Resource, Visayas

Table 2 | Summary of Trading Intervals with Deviation on the RTD Schedule, Visayas

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017
Coal	62	198	61	63	89	57	63	76	155	21	201	199	75
Geothermal	155	240	213	191	292	102	263	411	329	62	629	509	316
Oil-based	270	233	145	34	79	64	114	244	83	9	226	296	68
Biomass/Bioethanol	0	310	468	396	302	287	214	212	20	4	0	8	296
Total	487	981	887	684	762	510	654	943	587	96	1,056	1,012	755

The highest total trading intervals with deviation exceeding the dispatch tolerance limit was recorded in August 2017 (Table 2), mainly due to geothermal plants (59.56%), followed by oil-based plants (21.40%) and coal plants (19.03%).

It may be noted that due to power system disturbance brought about by the intensity scale 5 earthquake in the Visayas, the ERC declared market suspension in the region on 06 July 2017 at 1700H until 01 August 2017 at 1500H. As such, a significant decrease in the number of trading intervals with deviation was observed specifically in the month of July 2017 in the Visayas region (Figure 2).

B.2. Compliance of Trading Participants with the Must-Offer Rule for October 2016 to June 2017

In reference to WESM Compliance Bulletin 6.0 issued in 2016, the MSC revised its Compliance Monitoring Process to include the evaluation of the Significant Event Reports submitted by Trading Participants. The Bulletin provides the procedures for the submission of the Significant Event Report required of Trading Participants under WESM Rules Clause 3.5.11.7⁶, and provides a description of the Significant Event Notice and the Significant Event

⁶ WESM Rules 3.5.11.7 *Trading Participants* shall immediately advise the *System Operator* and *Market Operator* of any circumstances which threaten a significant probability of material adverse change in the state of their facilities in any *trading interval* of any trading day in the current *week-ahead market horizon*. After the occurrence of the significant event referred to above, the *Trading Participant* shall submit a written report to the *Market Operator* with supporting data immediately within the following trading day.

Report Form required to be submitted to comply with the reportorial requirements under said Rule.

Upon submission of the Significant Event Reports and supporting documents within the billing cycle of the relevant billing month, the same will be evaluated to assess if the reasons given for the possible non-compliance to the MOR are justified, failing which, a request for investigation may thereafter be issued. Also, in case the concerned Trading Participant is unable to submit the Significant Event Reports and complete the supporting documents within the allowable submission period, it will automatically be issued with a request for investigation. The evaluation of Significant Event Reports was done beginning the billing period 26 September to 25 October 2016.

For the period covered, the MSC observed 142,332 total trading intervals with capacity gap for Luzon and 71,862 total trading intervals for Visayas, that are recommended for the issuance of request for investigation. The monthly breakdown of these trading intervals for Luzon is presented in Figure 3.

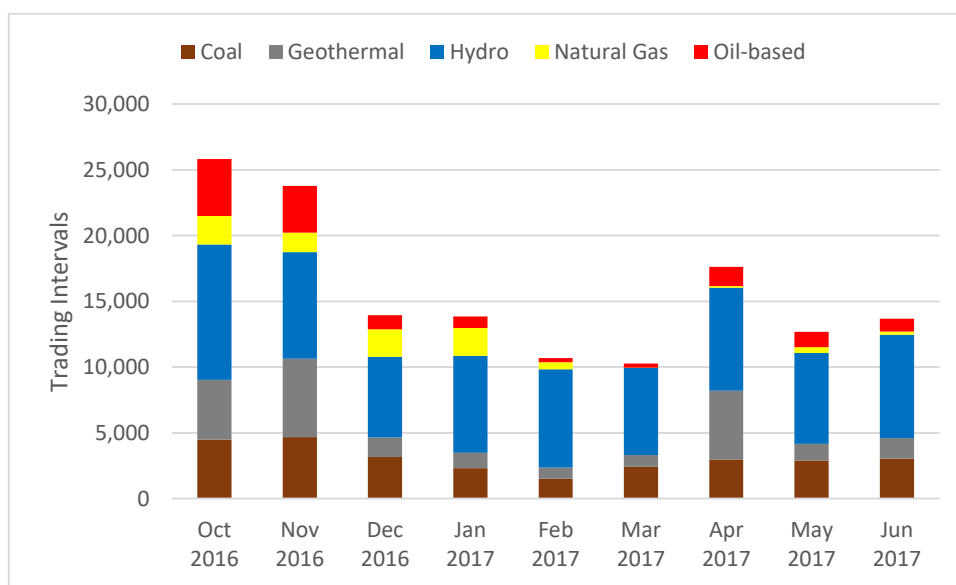


Figure 3 | Trading Intervals with Capacity Gap, per Resource, Luzon

Table 3 | Summary of Trading Intervals with Capacity Gap, Luzon

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Coal	4,471	4,678	3,177	2,302	1,509	2,409	2,976	2,900	3,048
Geothermal	4,564	5,956	1,467	1,187	864	895	5,237	1,254	1,543
Hydro	10,286	8,113	6,138	7,356	7,457	6,622	7,833	6,921	7,875
Natural Gas	2,159	1,486	2,089	2,133	545	22	109	440	245
Oil-based	4,352	3,538	1,074	881	316	316	1,460	1,174	955
Total	25,832	23,771	13,945	13,859	10,691	10,264	17,615	12,689	13,666

As seen in Table 3, the highest total trading intervals with capacity gap in Luzon was recorded in October 2016, mainly attributable to hydro plants (39.82%). Hydro plants consistently have the highest number of trading intervals with capacity gap every month, due to limitations in water availability, irrigation requirement by the National Irrigation Administration and pumping requirements of Kalayaan PSPP, among others. Consequently, hydro plants have the most number of trading intervals with capacity gap during the covered period at 48.20%. This was followed by coal plants at 19.30% and geothermal plants at 16.14%.

The monthly breakdown of trading intervals with capacity gap for Visayas is shown in Figure 4. The highest total trading intervals with capacity was recorded in November 2016 (Table 4) with oil-based plants comprising the majority trading intervals with capacity gap. These were mainly attributable to equipment-related concerns. Consequently, oil-based plants have the most number of trading intervals with capacity gap during the covered period at 62.07%. This was followed by geothermal plants at 33.59%.

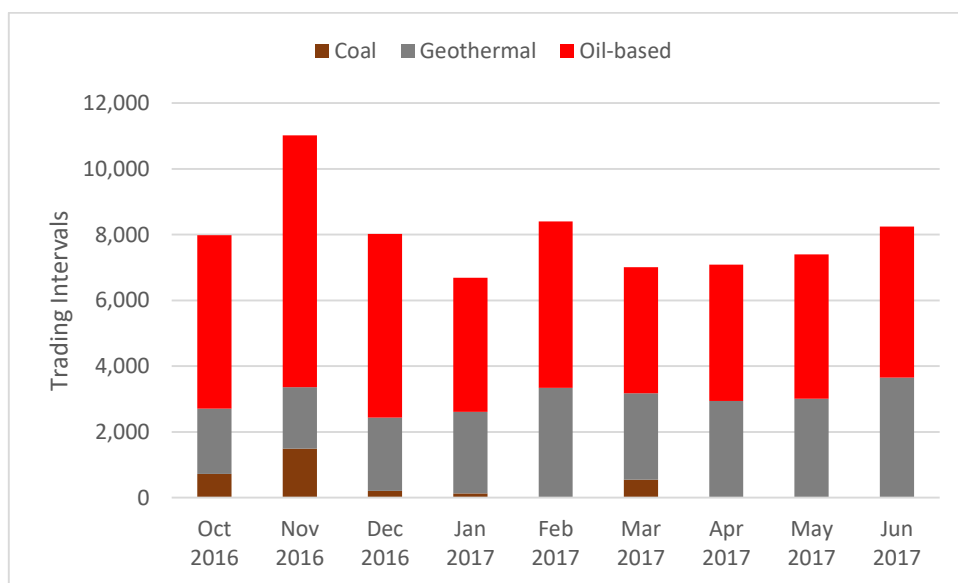


Figure 4 | Trading intervals with Capacity Gap, per Resource, Visayas

Table 4 | Summary of Trading Intervals with Capacity Gap, Visayas

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Coal	720	1,490	207	127	11	553	0	0	10
Geothermal	1,989	1,874	2,230	2,486	3,331	2,625	2,947	3,010	3,646
Oil-based	5,272	7,653	5,590	4,081	5,059	3,833	4,139	4,386	4,593
Total	7,981	11,017	8,027	6,694	8,401	7,011	7,086	7,396	8,249

In the process of evaluating the trading intervals with capacity gaps for RFI, the MSC referred to the System Operator Reports and Trading Participants' Significant Event Report submission. Generator Trading Participants that were contracted by the System Operator to provide dispatchable reserve were excluded and not subjected to requests for investigation.

Further, the MSC reviewed the result of MAG's evaluation of Significant Events Reports submitted by the Trading Participants regarding the said plants' compliance with the MOR⁷. For period covered, a total of 74,135 trading intervals with capacity gap was reviewed for

⁷ Effective 26 September 2016, the MSC started evaluating the Significant Event Reports submitted by the Trading Participants pursuant to the WESM Compliance Bulletin 6.1 (issued on 30 June 2016) and 6.2 (issued on 07 December 2016).

Luzon and 25,099 total trading intervals for Visayas, details of which are shown in Tables 5 and 6.

Table 5 | Summary of Trading Intervals with Capacity Gap, Luzon (with SER)

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Coal	75	192	581	137	849	1,031	577	965	1,226
Geothermal	1,949	1,351	5,036	4,082	5,163	3,692	0	4,282	3,745
Hydro	62	4	1,216	759	684	380	2,891	3,447	2,309
Natural Gas	0	0	0	13	527	61	0	8	0
Oil-based	820	739	1,539	3,888	3,954	3,578	3,961	3,886	4,476
Total	2,906	2,286	8,372	8,879	11,177	8,742	7,429	12,588	11,756

Table 6 | Summary of Trading Intervals with Capacity Gap, Visayas (with SER)

Plant Type	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Coal	0	7	718	983	1,407	672	755	868	739
Oil-based	1,710	0	1,069	2,480	2,127	2,649	2,969	2,707	3,239
Total	1,710	7	1,787	3,463	3,534	3,321	3,724	3,575	3,978

B.3. Issuance of Requests for Investigation

On the basis of its review of the monthly monitoring reports on the compliance of Trading Participants to the RTD schedule and MOR (See related discussions in Sections **B.1** and **B.2**), the MSC found possible non-compliances with the RTD schedules covering the billing months of October 2016 to October 2017, and MOR covering the billing months of October 2016 to June 2017, and thereafter submitted requests for investigation to the PEM Board.

In total, the MSC submitted to the PEM Board 1,089 requests for investigation, the summary of which is shown in Table 7 below.

Table 7 | Summary of Requests for Investigation Submitted to the PEM Board

Billing Month	Date Submitted to the PEM Board	No. of RFIs
October 2016 (MOR)	15-Feb-17	46
October 2016 (RTD)	15-Feb-17	58
November 2016 (RTD)	06-Mar-17	50
October 2016 (MOR Addendum)	04-Apr-17	6
December 2016 (RTD)	04-Apr-17	56
January 2017 (RTD)	04-Apr-17	55
February 2017 (RTD)	18-May-18	59
March 2017 (RTD)	08-Jun-17	57
April 2017 (RTD)	27-Jun-17	62
November 2016 (MOR)	11-Jul-17	45
May 2017 (RTD)	26-Jul-17	60
December 2016 (MOR)	08-Aug-17	38
June 2017 (RTD)	24-Aug-17	62
January 2017 (MOR)	24-Aug-17	35
July 2017 (RTD)	04-Oct-17	53
February 2017 (MOR)	04-Oct-17	32
August 2017 (RTD)	08-Nov-17	66
March 2017 (MOR)	08-Nov-17	33
September 2017 (RTD)	04-Dec-17	60
April 2017 (MOR)	04-Dec-17	33
May 2017 (MOR)	04-Dec-17	33
June 2017 (MOR)	04-Dec-17	36
October 2017 (RTD)	26-Dec-17	54
TOTAL		1,089

C. Review of Monitoring Report on Nomination of Loading Level and Projected Output

The MSC reviewed the monthly monitoring report on the submission of nomination of loading levels and projected output covering the period 26 October 2016 to 25 October 2017, submitted by the MAG. Pursuant to the WESM Rules, all non-scheduled generating units are

required to submit a nomination of loading level, while must-dispatch and priority dispatch generating units are required to submit their projected output, for each trading interval⁸.

As of 25 October 2017, there were a total of 74 resources registered as non-scheduled, must-dispatch and priority dispatch generating unit category, from 68 registrants during the same billing month in the previous year.

Of the total 74 registrants, sixteen (16) are non-scheduled, forty-eight (48) are must-dispatch and ten (10) are priority-dispatch generating units. The total registered capacity of the resources under these categories stood at 1,399 MW.

As of the period in review, twenty (20) of these resources are still undergoing test and commissioning, thus only fifty-four (54) were monitored for their compliance to the submission of nomination of loading level and projected output.

Effective the billing month of November 2017, the MSC required the Trading Participants with non-scheduled, must-dispatch and priority dispatch generating units to provide detailed explanation on its non-submission of standing loading level or projected output for the relevant trading intervals.

For the information of the concerned Trading Participants, the MSC subsequently issued an advisory on this requirement, disseminated through WESM Info on 02 November 2017.

D. Review of Over-riding Constraints

The MSC regularly reviews the monthly monitoring report on over-riding constraints, submitted by the MAG. Said report details the results of the monitoring of over-riding constraints imposed by the System Operator on generators and the N-1 contingency

⁸ WESM Rules Clause 3.5.5.4, 3.5.5.5, 3.5.11.2, 3.5.11.3.

requirements⁹. The over-riding events were categorized as non-security limit and security limit pursuant to Section 7.6.1 of the Dispatch Protocol Manual 12.0¹⁰. Security limits include reasons due to must run units, emergency de-rating/outage of specific transmission and other types as recommended by the System Operator. Non-security limits on the other hand include reasons due to commercial testing, regulatory requirements and generating unit limitations.

During the period covered, the MSC reviewed twelve (12) monthly reports covering the billing period 26 October 2016 to 25 October 2017. The month-on-month comparison of the number of generators and number of over-riding events imposed per generator resource type is shown in Table 8 below:

Table 8 | Summary of Over-riding Events

	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Total
No. of Generators	56	67	73	66	57	60	66	53	41	49	62	52	
No. of Over-riding Events	15,835	15,428	15,514	15,814	12,569	13,865	13,481	11,933	8,435	8,343	10,018	8,868	150,103
Battery Energy Storage	612	536	128	622	338	0	0	12	3	0	0	0	2,251
Biomass/Biofuel	1,854	1,545	1,658	2,158	1,926	1,861	2,083	2,151	1,039	590	1,296	1,862	20,023
Coal	1,821	1,505	2,009	1,819	1,147	2,486	1,857	1,179	1,005	500	1,012	174	16,514
Geothermal	498	756	744	793	665	744	744	730	542	0	29	0	6,245
Hydro	764	884	966	1,156	1,236	1,523	1,421	1,543	924	1,375	1,639	1,369	14,800
Natural Gas	42	109	249	119	0	102	194	24	267	38	132	41	1,317
Oil-Based	0	0	46	129	256	544	808	125	0	418	121	113	2,560
Solar	8,816	8,653	8,331	7,531	5,899	6,605	6,374	6,169	4,655	5,422	5,789	5,309	79,553
Wind	1,428	1,440	1,383	1,487	1,102	0		0	0	0	0	0	6,840

The total number of over-riding events reached 150,103 during the twelve-month period.

Solar plants contributed the bulk of over-riding events (79,553 events) of the total impositions

⁹ The monitoring of the over-riding constraints on generators is done on a per generator trading node per trading interval. A constraint imposed on a generator trading node on a particular trading interval is considered as one **over-riding event**. The monitoring of the over-riding constraints is based on the data and information provided by MO (i.e. real time market results and MMS-input files on security limits) and SO (i.e. SO Data for Market Monitoring).

¹⁰ Beginning 24 June 2016, the System Operator adopted a new categorization scheme which categorized the over-riding events into "security limit" and "non-security limit" pursuant to the Dispatch Protocol Manual.

during the period covered. Biomass/ biofuel plants came next (20,023 events) followed by coal plants (16,514 events) and hydro plants (14,800 events).

All impositions on solar plants were on account of non-security related events due to commissioning tests. Similarly, majority of the non-security constraints on biomass/ biofuel and hydro plants were likewise on account of commissioning tests.

As of the October 2017 billing period, a total of 8,868 over-riding events were imposed on 52 generating plants (43 Luzon generating plants and 9 Visayas generating plants).

Most of the over-riding events imposed were related to the conduct of test and commissioning involving plants that have yet to start commercial operations. Aside from the conduct of test and commissioning, ancillary and performance tests were also conducted by various plants.

During the October 2017 billing period, the MSC noted that one (1) biomass, one (1) coal, two (2) hydro and sixteen (16) solar plants exceeded the prescribed 2-month period conduct of test and commissioning provided in the ERC Resolution No. 16, Series of 2014¹¹.

In view of this, the MSC sent letters to all plants that extended its conduct of testing and commissioning beyond the 2-month allowable period, copy furnished the ERC, and requested for the reason of its extension.

E. Review of ECO Investigation Reports

Pursuant to Section 6.2.1 (i) of the MSC-EMM, the MSC is tasked to review the Investigation Reports prepared by the Enforcement and Compliance Office (ECO) with respect to the following:

¹¹ A Resolution Adopting the 2014 Revised Rules for the Issuance of Certificates of Compliances (COCs) for Generation Companies, Qualified End-users and Entities with Self-Generation Facilities

- (a) Compliance by the ECO with the procedures set forth in the MSCEMM for the conduct of Investigation; and
- (b) Validity and completeness of the data and documents upon which the factual findings are based.

The MSC completed its review of the fifteen (15) ECO Investigation Reports on possible non-compliance with the MOR and RTD schedule for the various trading intervals during the billing period of December 2013 to November 2015.

As of December 2017, the MSC is in the process of reviewing a total of ten (10) ECO Investigation Reports for possible non-compliance to MOR and ten (10) ECO Investigation Reports for possible non-compliance to RTD schedule. The twenty (20) consolidated ECO Investigation Reports cover the ninety-eight (98) ECO cases during the billing period of from December 2013 to November 2015.

F. Review of Market Intervention Events

Pursuant to Section 6.2.1 (h) of the MSCEMM, the MSC is tasked to investigate an event of market intervention (MI) or market suspension and prepare the corresponding MI report or market suspension report to be submitted to the PEM Board.

The MSC continued with its review of the following:

- a. Market Operator - initiated MI event that occurred on 05 November at 0200H;
- b. System Operator - initiated MI event that occurred on 15 November 2016 at 2000-2300H;
and
- c. MI events during the period 01 August 2017 – 19 September 2017.

The MSC conducted meetings with representatives from the Market Operator and System Operator to further discuss the abovementioned MI events. As reference in its ongoing review, the MSC requested for the detailed report/clarification on the MI events and if available, the Significant Incident Report pursuant to the Philippine Grid Code 2016.

On another note, the MSC enhanced its procedure and flowcharts for the review of MI events with inputs/comments from the Market Operator and System Operator on the MI event report template. On 30 June 2017, the MSC adopted the final report template for reference in preparing the MI event reports.

Additional revisions were incorporated to provide for a more detailed reporting on the MI events. Upon the MSC's request, the Market Operator and System Operator representatives provided inputs/comments to the revised template on MI event report and proposed template on market suspension event report on 01 December 2017.

G. Review of Proposed Amendments to the WESM Rules and Market Manuals

G.1. Proposed Amendments to WESM Rules and Market Surveillance, Compliance and Enforcement Manual

On 13 January 2017, the MSC presented to the Rules Change Committee (RCC) its proposed amendments to the MSCEMM (proposed Market Surveillance Manual) and WESM Rules¹². The proposal was subsequently published in the market information website on 18 January 2017. The publication triggers the 30-day commenting period for interested parties who wish to submit their comments to the proposal.

¹² The proposed WESM Enforcement and Compliance Manual, which was jointly submitted by MSC and PEMC-ECO, was submitted to the RCC on 06 December 2016.

On the other hand, the MSC submitted to the RCC its proposed amendments to the WESM Rules and Market Surveillance, Compliance and Enforcement Manual (proposed Market Surveillance Manual) on 29 December 2016.

During its meeting in April 2017, the MSC discussed the comments from DOE and RCC as deliberated during the RCC meeting on 17 March 2017, as follows:

- a. to include in the proposal the definition of “WESM Governance Committee” and harmonize the same with the definition of “PEM Committee” under the Guidelines Governing the Constitution of the PEM Board Committees; and
- b. to revise, as necessary, all affected clauses in the WESM Rules.

In response to the comments received, the MSC revised the relevant provisions and transmitted the same to the RCC, through email, on 27 April 2017.

Upon receipt of the revised proposal from the MSC, the RCC further proposed that the MSC review the WESM Rules clauses and other Market Manuals that would be affected by the amendments, and to include a reasonable timeline for the submission of MI events reports under Section 5.3.3 (b) of the proposed Market Surveillance Manual. The MSC subsequently revised the proposal in view of the RCC’s additional comments, and transmitted the same to the RCC, through email, on 24 May 2017.

The MSC participated during the RCC meeting held on 09 June 2017, during which the RCC discussed the MSC’s revisions to its proposal, specifically on the proposed timeline for the submission of MI events reports, and the matrix of proposed amendments to the seven (7) other Market Manuals affected by the MSC’s proposal to replace “PEM Committee” with “WESM Governance Committee”. The RCC further revised and subsequently approved the MSC’s proposed amendments to the WESM Rules and the proposed Market Surveillance Manual for endorsement to the PEM Board.

In the course of finalizing the proposed amendments to the WESM Rules and proposed Market Surveillance Manual, the RCC Secretariat observed that the proposed Market Surveillance Manual was not yet aligned with the RCC-approved WESM Rules in terms of the provisions related to anti-competitive behavior. In view of this, the MSC reviewed the said manual and proposed further changes on the same for the RCC’s consideration. The MSC

also provided comments on the RCC observation, which was transmitted, through email, on 20 September 2017.

In view of the MSC's proposal to include the automatic penalty scheme in the proposed WESM Penalty Manual (See related discussion in **Section G.2**), the MSC noted to further revise the affected provisions in the proposed Market Surveillance Manual, the proposed Enforcement and Compliance Manual and the WESM Rules, as applicable.

The endorsement to the PEM Board of the proposed Market Surveillance Manual, proposed Enforcement and Compliance Manual and proposed amendments to the WESM Rules was then deferred pending the review of the proposed WESM Penalty Manual, Market Surveillance Manual, Enforcement and Compliance Manual and the WESM Rules. (See **Section II** for the activity target timeline).

G.2. Proposed WESM Penalty Manual

On 20 March 2017, the ECO submitted to the MSC its recommendations for the revision of the current WESM Financial Penalty Manual. Said recommendations are embodied in the proposed WESM Penalty Manual 2.0, which the ECO submitted pursuant to Clause 1.6.3 of the WESM Rules.

During its meeting held on 26 April 2017, the MSC reviewed the proposed WESM Penalty Manual 2.0 and agreed to request the ECO for a presentation of the same, particularly on the computation of breaches. Subsequently, the ECO presented to the MSC the proposed WESM Penalty Manual 2.0 on 24 May 2017, during which the MSC provided its inputs and recommendations.

On 13 July 2017, the ECO submitted to the MSC the revisions to the proposed WESM Penalty Manual 2.0, after incorporating the following: (a) inputs and recommendations of the MSC during its meeting on 24 May 2017; (b) changes based on the recent developments on

the proposed Dispatch Protocol Manual 13.0, as approved by the RCC on 07 July 2017; and (c) clarifications obtained by the ECO on the design of the Compliance Module of the new market management system.

During its meeting held on 19 July 2017, the MSC reviewed the ECO's revisions to the proposed WESM Penalty Manual 2.0 and agreed to conduct a stakeholder's consultations to solicit inputs and comments from various entities. On the process of approval, the MSC agreed that following the provisions of the WESM Rules on the promulgation of the said Penalty Manual, consultations with stakeholders shall be conducted. The MSC thereafter posted for comments the proposed WESM Penalty Manual 2.0 in the market information website on 15 August 2017.

Pursuant to the WESM Rules Clause 1.6.3¹³, the MSC also conducted consultation meetings on the proposed WESM Penalty Manual 2.0, with the PEMC-Transition Committee on 14 August 2017 and the RCC on 14 September 2017. Noting the discussions and comments from the RCC, the MSC further discussed the proposal particularly the features of the penalty scheme during its meeting held on 20 September 2017. It was noted that the proposed WESM Penalty Manual 2.0 had already been circulated for comments and that the consultation of the same had already started. Just the same, the MSC agreed to further review the proposed WESM Penalty Manual to consider the inclusion of an automatic penalty scheme. The MSC noted to go through the posting and consultation process again once the proposed WESM Penalty Manual 2.0 is revised and finalized.

In view of the proposal to include the automatic penalty scheme in the proposed WESM Penalty Manual 2.0, the MSC noted to also revise the affected provisions in the proposed Market Surveillance Manual, the proposed Enforcement and Compliance Manual and the WESM Rules, as applicable. It was also noted that the ECO will submit its revisions to the proposed Enforcement and Compliance Manual, including the affected provisions in the WESM Rules, based on the MSC's revisions to the proposed Penalty Manual.

¹³ WESM Rules Clause 1.6.3 *The MSC will conduct consultations with the Rules Change Committee and the PEM Board in its formulation of the penalty levels and appropriate range of penalties.*

An advisory was disseminated on 06 October 2017 through WESM Info informing all WESM Participants that further consultations on the proposed WESM Penalty Manual 2.0 has been deferred as the MSC will be further revising the proposal to take into consideration all additional amendments. (See **Section II** for the activity target timeline).

G.3. Proposed WESM Penalty Utilization Manual

The MSC likewise reviewed the proposed WESM Penalty Utilization Manual, prepared by the ECO and Mr. Alasdair MacDonald as part of the engagement of the latter to study the possible utilization of collected penalties.

The MSC finalized its comments to the proposed WESM Penalty Utilization Manual and submitted the same to ECO on 08 August 2017.

G.4. Proposed Amendments to the various WESM Manuals

The MSC reviewed the PEMC's proposed amendments to the (a) Price Determination Methodology Manual; (b) Constraint Violation Coefficient and Pricing Re-Run Manual; and (c) Market Operator Information Disclosure and Confidentiality Manual, for the implementation of enhancements to WESM design and operations, and posed no objections on the same.

On the proposed amendments to the Market Operator Information Disclosure and Confidentiality Manual, the MSC observed that the 59th snapshot data and the aggregate metered quantity are not yet categorized as public data. The MSC deemed that both data are not confidential, thus it recommended that the aggregate metered quantity per trading participant and 59th snapshot data be categorized as public information.

The MSC submitted its proposal to the RCC on 24 May 2017.

H. Other Activities

H.1. Review of MSC Internal Rules

The MSC approved its Internal Rules, as amended, which include the procedure and flowcharts for the review of MI events and review of ECO Investigation Reports. The MSC also passed the corresponding resolution approving the MSC Internal Rules 3.0 on 26 April 2017.

H.2. Review of Draft ERC Resolution Adopting Amendments to the Pre-emptive Mitigating Measure in the WESM

The MSC reviewed the draft ERC resolution adopting amendments to the pre-emptive mitigating measure in the WESM, and subsequently agreed to submit its comments on the same, as follows: (a) retain the 7-day rolling average because it contains all the days of the week such that weekdays and weekends will have the same weight in every average (though weekdays will always have a greater weight because they are five days vs. two days for weekends); and (b) the 7-day rolling average is seen to be more stable.

The MSC transmitted to the ERC its letter incorporating its comments to the draft resolution on 24 March 2017.

H.3. Conduct of Meetings with External Parties

On 12 January 2017, the MSC discussed with ERC its observations regarding the conduct of test and commissioning by several new generating plants, beyond the maximum two-month period imposed under Section 2 (iii) of the ERC Resolution No. 16, Series of 2014¹⁴.

¹⁴ ERC Resolution No.16, Series of 2014 *A Resolution Adopting the 2014 Revised Rules for the Issuance Of Certificates Of Compliance (COCs) for Generation Companies, Qualified End-Users and Entities with Self-Generation Facilities*

The MSC also discussed its recommendations for the ERC to establish specific guidelines setting the allowable timeframe for any extension depending on the type of facility¹⁵.

It was clarified that although the ERC Resolution No.16, Series of 2014 provides for the two-month duration for test and commissioning, on a case to case basis, the ERC may allow plants to extend their test and commissioning after requesting extension from the ERC. Further, the two-month prescriptive period does not apply to renewable energy plants, especially those that were entitled to the feed-in tariff.

With regard to the recommendation of the MSC in its Assessment Report on Yellow/Red Alert Issuances submitted to the ERC¹⁶, the MSC further sought the ERC's guidance in defining the parameters for identifying acts or omissions which may constitute market power abuse or anti-competitive behavior. During the meeting, it was noted that the ERC and the Philippine Competition Commission would come up with the definition of acts and omissions constituting abuse of market power and anti-competitive behavior, which the MSC would use as reference in its market monitoring and assessment.

Regarding its review of the behavior of Trading Participants in relation to its declaration of bilateral contract quantity in the WESM, the MSC noted that distribution utilities would normally have provisions regarding its monthly bilateral contract quantity allocation and bilateral contract quantity declarations in their contracts. For the MSC to better understand the contracting arrangements of Trading Participants and its counterparties and thus relate the Trading Participants behavior in the WESM in reference to its bilateral contract quantity declaration, the MSC sought further consultation and guidance with the ERC on the matter, considering that the review and approval of the contracts between the distribution utilities and Trading Participants fall under the jurisdiction of the ERC.

¹⁵ MSC Letter to ERC dated 28 November 2016.

¹⁶ MSC Letter to PEMC-Office of the President (OP) and OP Letter to ERC dated 15 August 2016.

H.4. Participation in the Plant Visit to the 10-MW Masinloc Energy Storage Facility

During its regular meeting held on 14 March 2017, the MSC met with resource persons from AES-Masinloc Power Partners Co. Ltd (AES-MPPCL) to discuss and better understand the operations of the 10-MW Masinloc Energy Storage Facility, which recently started its commissioning and testing¹⁷.

As an offshoot of the meeting, the MSC was invited by AES-MPPCL for a plant visit to the energy storage facility in Masinloc, Zambales. Representatives from the MSC and PEMC participated in the plant visit on 10 May 2017.

H.5. Participation in the Market Participants Update for 2017 and 4th Retail Market Participants' Meeting

In behalf of the MSC, Dr. Peter Lee U, participated as resource speaker during the Market Participants Update (MPU) held on 05 May 2017 at Bravo Hotel, Sibulan, Negros Oriental. During the MPU, he presented the Market Assessment Highlights for 26 September 2016 to 25 March 2017.

He also presented the Retail Market Assessment Highlights for the period 26 June 2016 to 25 July 2017, during the 4th Retail Market Participants' Meeting held on 21 July 2017 at Chardonnay by Astoria, Pasig City.

H.6. Participation in the Performance Assessment and Audit Team Task Force

Pursuant to the directive of the DOE, the MSC designated its representatives to the Performance Assessment and Audit Team (PAAT) Task Force, as follows:

¹⁷ The 10-MW Battery Energy Storage Facility was registered in the WESM on 02 July 2016 and started its WESM participation on 06 July 2017.

- a. PAAT on Power Generation Facilities – Engr. Jose Mari T. Bigornia (lead), Dr. Peter Lee U (alternate); and
- b. PAAT on Transmission Service Provider/Operator – Engr. Francis V. Mapile (lead), Atty. Doroteo B. Aguila (alternate).

As part of its functions and responsibilities as a member of the PAAT Task Force, the MSC participated during the meetings facilitated by the DOE as follows:

- a. Kick-off meeting held on 27 June 2017;
- b. Pre-workshop meeting for the formation of the PAAT Task Force held on 05 July 2017; and
- c. Workshop on the performance assessment and audit of power generation, transmission and distribution systems and facilities held on 28 July 2017 to 01 August 2017.

II. 2018 WORK PLAN

The following are the MSC activities lined-up for year 2018.

A. Carried-over Activities from Year 2017

Item	Activity	2018 Target	Deliverables
1.	Review of Proposed Penalty Manual ¹⁸	Q1 2018	Submission of the final draft of the amended Penalty Manual, to the RCC
2.	Review of MSC Proposed Market Surveillance Manual and Proposed Enforcement and Compliance Manual	Q1 2018	Submission of the amended MSC Proposed Market Surveillance Manual, to the RCC
3.	Development of Frequently Asked Questions (FAQs) on the MSC activities	Q2 2018	Publication of the FAQs in the market Information website
4.	Proposed Amendments to MO Information Disclosure and Confidentiality (IDC) Manual	Q2 2018	Submission of the final proposed amendments to the MO IDC Manual, to the RCC

¹⁸ WESM Rules Clause 1.6.3; *[proposed Market Surveillance Manual (MSM), Section 3.1.1 (h)]*

B. New Activities

Item	Activity	2018 Target	Deliverables
5.	Review of the MSC Internal Rules Issue 3.0	Q1 2018	Promulgation of the MSC resolution adopting the revised MSC Internal Rules Issue 4.0
6.	Conduct Research on ACB/Abuse of Market Power framework and concepts from other jurisdictions	Q4 2018	Submission of research paper to PEMC

C. Regular Reportorial Functions

Item	Activity	2018 Target	Deliverables
7.	Review of Various Proposed Amendments to the WESM Rules and Market Manuals ¹⁹	(Per RCC's timeline of publication for comments)	Submission of final comments and/or proposed recommendations on the proposed amendments to WESM Rules and Market Manuals to the RCC, as applicable

¹⁹ Market Surveillance, Compliance and Enforcement Market Manual (MSCEMM), Section 6.2.1 (k); [proposed MSM, Section 3.1 (g)]

Item	Activity	2018 Target	Deliverables
8.	Review of the following: a. Catalogue of Market Monitoring Data and Indices Issue 1.0 ²⁰ ; and b. Catalogue of Retail Market Monitoring Data and Indices Issue 1.0 ²¹ .	Q3 2018 Q3 2018	Finalization of the proposed amendments to the (a) Catalogue of Market Monitoring Data and Indices Issue 1.0; and (b) Catalogue of Retail Market Monitoring Data and Indices Issue 1.0, as needed
9.	Review and Approval of Market Assessment Report ²² as prepared and submitted by MAG	Monthly/ Annual	Submission of the MSC Monthly Market Monitoring (MMR) Report/ Annual Market Assessment Report to the PEM Board ²³
10.	Review and Approval of Retail Market Assessment Report ²⁴ s as prepared and submitted by MAG	Quarterly/ Annual	Submission of the MSC quarterly Retail Market Monitoring Report (RMMR)/ annual Retail Market Assessment Report to the PEM Board, DOE and ERC ²⁵
11.	Review of Monthly Monitoring Report on Over-riding Constraints ²⁶	Quarterly	Submission of the quarterly Report on the MSC Review of Monthly Monitoring of Over-riding Constraints, to the PEM Board, as applicable

²⁰ Catalogue of Market Monitoring Data and Indices (CMMDI), Section 1.3; [proposed MSM, Section 3.1 (a)]

²¹ Catalogue of Retail Market Monitoring Data and Indices (CRMMDI), Section 5.3; [proposed MSM, Section 3.1 (a)]

²² MSCEMM, Section 6.2.1 (b); [Proposed MSM, Section 3.1 (b)(i)]

²³ MSCEMM, Section 6.2.1 (c); [Proposed MSM, Section 3.1 (c)]

²⁴ CMMDI, Section 3.1.2; [proposed MSM, Section 3.1 (b)(ii)]

²⁵ CMMDI, Section 3.1.3; [proposed MSM, Section 3.1 (c)]

²⁶ MSCEMM, Section 6.2.1 (i); [proposed MSM, Section 3.1 (b)(iii)]

Item	Activity	2018 Target	Deliverables
12.	Review of Market Intervention (MI) or Market Suspension (MS) Events ²⁷	(Per timeline in the MSC Internal Rules)	Submission of the MSC Review Report of MI events (Market Intervention Report) or MS events (Market Suspension Report) to the PEM Board, as applicable ²⁸
13.	Review of the ECO Investigation Report (IR)	(Per timeline of submission of ECO IR to MSC)	Submission of the MSC Review Report of ECO IRs to PEM Board
14.	Review of MSC Quarterly Accomplishments Report	Within one (1) month after the applicable period	Publication of the Quarterly MSC Accomplishments Report in the market information website
15.	Review of MSC Annual Report	Q1 2018	Submission of the Annual MSC Report to the PEM Board

D. Compliance Activities

Item	Activity	2017 Target	Deliverables
16.	Review of Monthly Report on Generator Trading Participants' Compliance with the Must-Offer-Rule and RTD Schedule ²⁹	Monthly	Transmittal of Requests for Investigation to the PEM Board

²⁷ WESM Rules Clause 6.9.4 & 6.9.5; MSCEMM, Section 6.2.1 (h); [proposed MSM, Section 3.1.1 (f)]

²⁸ MSCEMM, Section 6.2.1 (h); [proposed MSM, Section 3.1 (f)]

²⁹ Until such time that the monitoring function is taken over by ECO as part of the changes in the WESM Enforcement and Compliance Processes

Item	Activity	2017 Target	Deliverables
17.	Review of Monthly Report on Generator Trading Participants' Compliance to the Submission of Nomination of Loading Levels and Projected Output ³⁰	Monthly	Transmittal of Requests for Investigation to the PEM Board

E. Other Activities

Item	Activity	2017 Target	Deliverables
18.	Participation in PEM Board Activities	(Per PEM Board's timeline)	Presentation of Reports to the Board Review Committee and the PEM Board, as applicable
19.	Participation in Market Participants' Update, Open House, etc.	(Per CPC timeline)	Participation as resource speaker, if required
20.	Conduct of Joint Studies with Other Governance Committees	As needed	Submission of joint report on specific study conducted to the PEM Board, as necessary
21.	Conduct/Participation in Plant Visits	As needed	Conduct/ participation in plant visits (arranged by the MSC, PEMC or Generators), as applicable

³⁰ Until such time that the monitoring function is taken over by ECO as part of the changes in the WESM Enforcement and Compliance Structure and Processes

III. MEMBERSHIP

For 2017, the members of the MSC were as follows:

1. Engr. Francis V. Mapile (Chairperson)
2. Ms. Eulinia M. Valdezco
3. Dr. Peter Lee U
4. Engr. Jose Mari T. Bigornia
5. Atty. Doroteo B. Aguila

During the PEM Board meeting in October 2017, the PEM Board approved the leave of absence from the MSC of Engr. Jose Mari T. Bigornia, effective 01 August 2017, in view of Engr. Bigornia's appointment as a member of the Transition Committee, also effective in August 2017.

IV. RESPONSIBILITIES

The responsibilities of the MSC are set out in Section 1.6.2 of the WESM Rules, to wit:

1. Monitor activities conducted by WESM Participants in the spot market;
2. Prepare periodic reports, which outline the following:
 - a. Activities of WESM Participants in the spot market;
 - b. Matters concerning the operation of the spot market.
3. Assist the PEM Board or the ECO to investigate and gather evidence of:
 - a. unusual or suspicious behavior or activities of WESM members in the spot market;
and
 - b. suspected or alleged breaches of the WESM Rules by WESM members; and
4. Propose amendments to the WESM Rules as necessary to: i) improve the efficiency and the effectiveness of the operation of the WESM; and ii) to improve or enhance the prospects for the achievement of the WESM objectives;

5. Assist the RCC in relation to its assessment of proposals to amend the WESM Rules.

In addition, the MSC is tasked under Section 6.2.1 of the MSCEMM to perform the following responsibilities:

1. Define the monitoring data and indices necessary to effectively carry out its market surveillance function;
2. Review market monitoring indices and Market Assessment Report prepared by the MAG;
3. Submit Monthly Market Surveillance Reports and Annual Reports;
4. Identify acts or omissions which constitute breaches and initiate an investigation;
5. Review the Non-Compliance Report prepared by the ECO pursuant to the review of a Non Compliance Notice and submit its review to the PEM Board;
6. Review Investigation Reports prepared by the ECO pursuant to an Investigation of an alleged Breach and submit its review to the PEM Board;
7. Monitor the design and efficiency of the WESM Rules and propose amendments thereto;
8. Investigate an event of Intervention or Market Suspension and prepare the corresponding Intervention Report or Market Suspension Report to be submitted to the PEM Board;
9. Review Over-Riding Constraints;
10. Recommend mitigation measures, in accordance with Section 12 of the MSCEMM on matters under Investigation;
11. Review of the significant variations reports.

The MSC deliberated on a number of compliance matters and monitored participants in line with its mandate to primarily monitor and assess the trading activity in the WESM to ensure market efficiency and fair competition. The MSC conducted twelve (12) meetings³¹ during the period covered.

³¹ At any time and as may be practicable, the MSC may conduct meetings more than once a month.

Submitted By:

THE MARKET SURVEILLANCE COMMITTEE


Francis V. Mapile

Chairperson


Eulinia M. Valdezco

Member


Peter Lee U

Member

Jose Mari T. Bigornia

Member


Doroteo B. Aguila

Member