



Market Surveillance Committee 2020 Annual Report

January to December 2020

MARCH 2021

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

PEMC *Go*

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I. INTRODUCTION

The Market Surveillance Committee (MSC) submits this Annual Report which outlines the accomplishments of the MSC and the activities it has undertaken for the period January to December 2020. Annex A of the Report also provides the MSC's planned activities for the year 2021.

Pursuant to its mandate under Section 1.6.2 of the WESM Rules and Section 6.2.1 of the Market Surveillance, Compliance and Enforcement Market (MSCEM) Manual, the MSC carried-out its functions and responsibilities throughout the year amidst the state of public health emergency¹ that was declared by the National Government due to the Covid-19 pandemic.

Accordingly, with the PEMC – Market Assessment Group (MAG) as its primary support unit, the MSC accomplished during the year its monitoring and analysis of trading activities and market outcomes, as well as its role in compliance and enforcement. To perform said functions, the MSC conducted a total of fourteen (14) meetings² for the year 2020, twelve (12) of which were conducted online following the community quarantine restrictions that were in-place beginning 15 March 2020. The MSC has likewise communicated through email and other platforms, to deliberate on various market issues and topics.

II. ACTIVITIES ON MARKET MONITORING AND ASSESSMENT

1. Assessment of Market Outcomes in the Wholesale Electricity Spot Market (WESM)

1.1. Review of Market Assessment Reports

Market Assessment Reports (MARs) are prepared for the purpose of monitoring and assessing the efficiency and competitiveness of the WESM under different time – scales and market conditions. The MARs provide an assessment of market behavior and the analysis of market monitoring indices, which are based on the monitoring data collected primarily from the Market Operator (MO) and the System Operator (SO).

In accordance with Section 7.3 of MSCEM Manual, the MSC submitted the following Market Assessment Reports to the PEM Board:

- a) Twelve (12) Monthly Monitoring Reports, comprised of the MSC's Monthly Accomplishment Report, and the Monthly Market Assessment Report (MMAR), covering the billing months of November 2019 to October 2020;

¹ Presidential Proclamation No. 922 s.2020, 'Declaring a State of Public Health Emergency Throughout the Philippines'

² The MSC completed a total of twelve (12) Regular Meetings and two (2) Special Meetings during the year 2020.

- b) One (1) Quarterly Market Assessment Report covering the fourth quarter of billing year 2019³;
- c) Two (2) Seasonal Market Assessment Reports, covering the Cool-Dry and Hot-Dry Seasons from 26 November 2019 to 25 February 2020, and 26 February to 25 May 2020, respectively; and
- d) Annual Market Assessment Report covering the period 26 December 2018 to 25 December 2019.

Highlights of the Monthly Market Assessment Reports were regularly presented by the MSC during monthly PEM Board Meetings.

Market Assessment Reports are likewise regularly furnished to the Department of Energy (DOE) and Energy Regulatory Commission (ERC) for information and reference, and accordingly published in the PEMC website⁴.

1.2. Review of High Market Prices in November 2019

The MSC reviewed the result of the MAG's further review and assessment of the high market prices in November 2019, when market prices reached as high as PhP40,293/MWh, PhP37,708/MWh and PhP36,538/MWh, respectively.

The MSC noted that the high market prices occurred during trading intervals without congestion, though the spread in nodal prices already went beyond the 1.2 threshold for the application of the Price Substitution Methodology (PSM). It was found out that the high market prices were attributable to the high transmission loss factor (TLF) that was incorporated to the market clearing price (MCP) during the affected intervals. The MSC then requested the Technical Committee (TC) for further Study on the issues.

During its April 2020 Meeting, having considered the imminent launch of the New Market Management System (NMMS) to replace the current MMS, the MSC agreed to revise its request for the TC to focus its review on the proposal submitted by PEMC to the ERC in 2018 on the proposed methodology in setting the threshold for PSM application for the enhanced WESM Design.

1.3. Adoption of Seasonality in Market Assessment

- ***Seasonality in the Assessment of Spot Prices***

In February 2020, the MSC resolved to adopt seasonality in its spot price monitoring, particularly in its analysis of interesting pricing events and market price triggers.

³ The MSC submitted the Quarterly Market Assessment Report to the PEM Board until billing year 2019. The Seasonal Market Assessment Report was then prepared beginning billing year 2020, consistent with the PEMC direction on seasonal market assessments.

⁴ Link: <https://www.wesm.ph/market-outcomes/market-assessment-reports>

Interesting pricing events or IPEs refer to intervals determined to have price outliers based on the relationship of the market price and supply margin⁵. The relationship between market price and supply margin is a monitoring metric used to identify an unusual market outcome that can be subject to further analysis. On the other hand, market price triggers are used to determine whether spot price movements are within acceptable levels.

The seasonality thresholds were proposed following the simulation conducted by MAG in response to the comments received from the PEM Board to consider seasonality in the assessment of market prices. The comments were received by the MSC relative to the MSC-proposed amendments to the Catalogue of Market Monitoring Data and Indices (CMMDI) Issue 1, as presented by the MSC to the Rules Change Committee (RCC) and the PEM Board in October 2019.

The MSC reviewed the simulations completed by MAG and discussed the methodology of both indices. Consequently, the MSC agreed to adopt the MAG's updated seasonality thresholds on the spot price indices and for MAG to utilize the same in its monitoring of IPEs and market price triggers.

- ***Seasonality Assessment Reports***

Further, during its Meeting in May 2020, the MSC adopted the proposed Seasonality Market Assessment Reports, to apply seasonality in the assessment of market outcomes. Thus, as agreed upon by the MSC, the Seasonal Market Assessment Reports will henceforth be prepared instead of the Quarterly Assessment Reports.

The seasonality reports shall cover the following:

- Cool Dry Season from 26 November to 25 February;
- Hot Dry Season from 26 February to 25 May; and
- Rainy Season (from 26 May to 25 November).

2. Review of Interesting Pricing Events

2.1. Review of Consolidated Report on Interesting Pricing Events for 2019

The MSC reviewed the MAG Consolidated Report on Interesting Pricing Events (IPEs) from September 2018 to December 2019.

As noted by the MSC, most of these events were mainly due to generating unit outages. For the March, April, September and December 2019 billing months, high demand likewise caused of some of the high prices. On the other hand, IPEs that

⁵ Supply margin is defined as the difference between the system effective supply and the sum of the system demand and the reserve schedules.

breached the lower threshold in January 2019 were mainly due to the low demand in the New Year.

The Consolidated IPE Report has been submitted to the DOE and ERC.

2.2. Analysis of Interesting Pricing Events during the Year 2020

Consistent with the MSC-approved seasonality thresholds for spot price indices, the MSC reviewed IPEs that were observed during the year. The upper and lower thresholds for IPEs were determined based on the level of supply margin considering seasonality, and utilizes the Generator Weighted Average Price (GWAP).

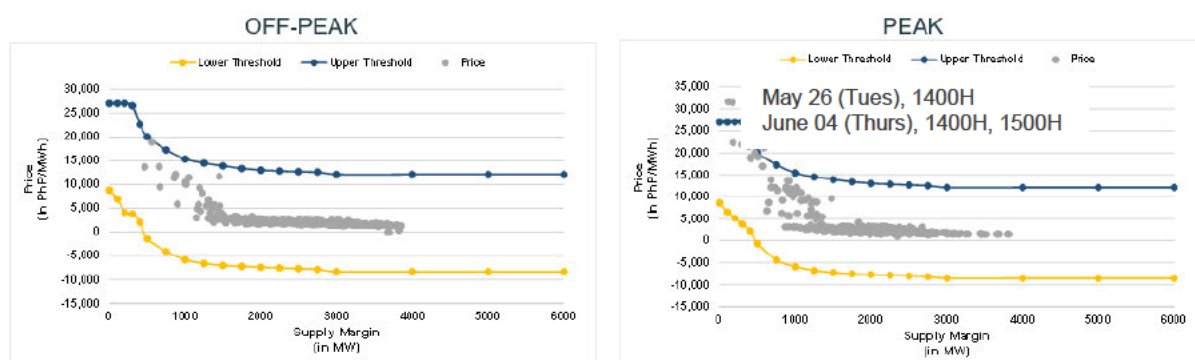


Figure 1 | Supply Margin – Price Index (Off-Peak and Peak Hours), June 2020

For the June 2020 billing month, three (3) trading intervals were found to have breached the seasonality threshold on IPEs during peak hours.

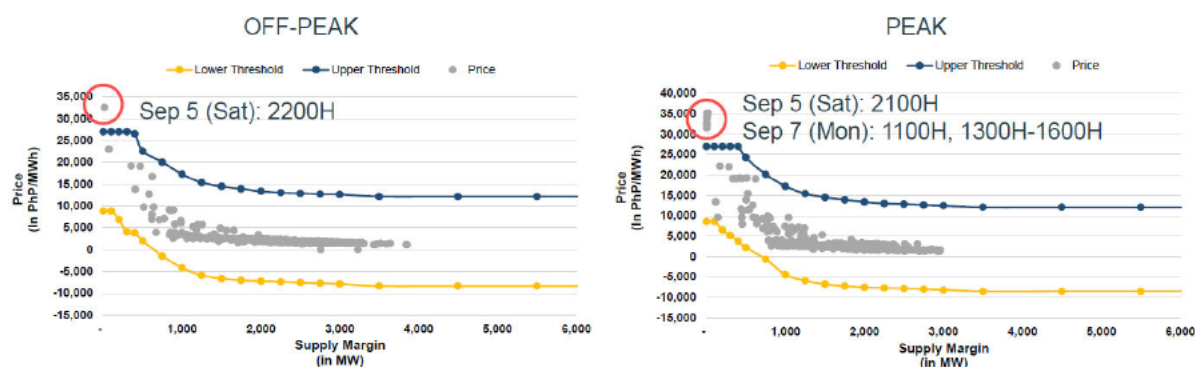


Figure 2 | Supply Margin – Price Index (Off-Peak and Peak Hours), September 2020

On the other hand, the seasonality thresholds on IPEs were breached in seven (7) trading intervals during the September 2020 billing month. It was observed that all events occurred in intervals with thin supply margin of less than twenty (20) MW.

For the corresponding intervals when the breach in the threshold occurred, the MSC noted that identified price-setters above the PhP10,000/MWh mark were also found to have exhibited bid-splitting behavior.

For the purpose of the MSC's monitoring, bid-splitting is defined as an offer strategy when a generating unit offers majority or almost its entire capacity at lower prices, while simultaneously bidding a small portion of its capacity close or equal to the market offer price cap.

3. Review of Over-Riding Constraints

3.1. Review of Monthly Monitoring Report on Over-Riding Constraints

In accordance with Section 6.2.1(i) and 11.5 of the MSC-EM Manual, the MSC monitored the over-riding constraints imposed by the National Grid Corporation of the Philippines – System Operator (NGCP-SO) on generators and the N-1 contingency requirements⁶.

For the year in review, the MSC deliberated upon thirteen (13) Monthly Monitoring Reports on Over-riding Constraints covering the billing months 25 November 2019 to 25 November 2020.

In summary, majority of the imposition of over-riding events during the period were categorized as non-security limit events, mainly due to the conduct of testing and commissioning (T&C). The month-on-month comparison of the number of generators and number of over-riding events imposed per generator resource type is shown below:

	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020
No. of Generators	31	43	37	43	33	22	25	36	29	27	38	35	37
No. of Over-riding events	6,543	7,163	6,121	5,775	4,380	5,411	5,173	5,987	6,073	5,764	5,814	6,055	5,757
<i>Battery Energy Storage</i>	0	0	0	0	0	0	0	23	54	0	41	38	38
<i>Biomass</i>	1,463	2,479	2,595	2,375	1,467	3,100	2,677	2,809	2,922	2,412	2,184	2,657	2,699
<i>Coal</i>	808	680	609	597	758	75	66	100	167	783	916	740	262
<i>Geothermal</i>	0	3	0	0	0	0	0	0	0	0	1	46	0
<i>Hydro</i>	1,556	1,226	268	333	8	0	332	750	686	741	764	739	824
<i>Natural Gas</i>	54	109	183	43	31	9	5	43	267	45	50	25	93
<i>Oil-based</i>	155	175	104	203	108	72	4	58	18	46	104	107	197
<i>Solar</i>	2,507	2,491	2,362	2,224	2,008	2,155	2,089	2,204	1,959	1,737	1,754	1,703	1,644

Table 1 | Summary of Over-riding Events – November 2019 to November 2020

⁶ 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).



Figure 3 | Over-riding Events Imposed in November 2019 to November 2020

3.2. Review of Annual Monitoring Report on Over-Riding Constraints

The MSC reviewed the result of the highlights of the Annual Report in the Monitoring of Over-Riding Constraints for year 2019.

Testing and commissioning was observed to be the main reason for the imposition of over-riding constraints across the billing months of the year, with several plants undergoing testing and commissioning, in excess of the two (2) month-allowable period, as provided for under the ERC Resolution No. 16, series of 2014.

The Annual Monitoring Report on Over-Riding Constraints was submitted for the information of the PEM Board.

3.3. Monitoring of Testing and Commissioning of Plants

The MSC has been monitoring the testing and commissioning (T&C) of plants and has observed the prolonged conduct of T&C of plants in the WESM since 2015⁷. The MSC has been deliberating on this issue as a matter arising from its monitoring and analysis of the over-riding constraints imposed on generators.

As part of its due diligence, the MSC had been sending letters of inquiries to generator-TPs observed to have gone beyond the two (2)-month allowable period, to clarify the reason for their prolonged conduct of T&C. However, beginning this year, the MSC no longer sent-out its letter of inquiry to plants on prolonged T&C. Instead, the MSC has

⁷ Prolonged Testing and Commissioning: beyond the maximum two (2)-month period allowed under the ERC Resolution No. 16, Series of 2014 on the Revised Rules for the Issuance of Certificates of Compliance for Generation Companies, Qualified End-Users and Entities with Self-Generation Facilities

focused on its regular coordination with the Independent Electricity Market Operator of the Philippines (IEMOP) on the status and progress of plants on prolonged T&C.

In March 2020, the MSC also followed-up with the IEMOP on the status of its implementation of the deregistration and suspension provisions under the WESM Registration Manual, as directed by the PEM Board in October 2019.

4. Review of Market Intervention and Market Suspension Events

Pursuant to its mandate under the WESM Rules and the MSCEM Manual to review market intervention (MI) and market suspension (MS) events, the MSC reviewed MI and MS events that were declared during the covered period and submitted its Review Reports on the SO-initiated MI events for 2019 and the MO-initiated MI events in October 2019.

4.1. Review of Market Operator-Initiated MI Events in October 2019

In April 2020, the MSC reviewed the MAG's revised draft Review Report on the Market Intervention (MI) events that were declared on 24 October 2019 from 0400H to 0500H, as declared by the IEMOP for the Luzon and Visayas regions, due to the stoppage of Market Management System (MMS).

The MSC then met with IEMOP representatives for a discussion on the MSC's conclusions and recommendations during MSC Meeting No. 2020-06 held on 14 May 2020.

The MSC Review Report was submitted for the approval of the PEM Board during its May 2020 Meeting. Furthermore, the MSC endorsed the MI incidents attributed to the failures of the current Market Management System (MMS) to the PEM Audit Committee (PAC), for inclusion in the scope of the 7th Market Operations Audit.

4.2. Review of SO – Initiated MI Events in 2019

The MSC reviewed the System Operator (SO) – Initiated Market Intervention (MI) events for CY 2019, until January 2020. However, the MSC was not furnished with a copy of the NGCP-SO's MI Reports, as initially requested by the MSC during its Meeting with the NGCP-SO in September 2019.

In July 2020, the MSC followed-up on its request for the NGCP-SO's submission of said MI Reports, as prescribed under Chapter 6 of the WESM Rules. The MSC further requested for a copy of the SO's procedure in the dispatch of plants during MI events.

The MSC received a copy of the reports in October 2020 and then proceeded with its discussion on the facts and preparation of the MSC Review Report, based on the submitted Market Intervention Reports from the NGCP-SO, as follows:

- 04 October 2019 – Emergency / Security Event in Visayas
- 25 December 2019 – Force Majeure in Visayas
- 12, 13-16 and 17 January 2020 – Force Majeure / Emergency in Luzon

The MSC then directed the MAG to meet with NGCP-SO to discuss the final MSC Review Report on the subject MIs. Correspondingly, MAG met with NGCP-SO in December 2020 to inform the SO of the review completed by the MSC on the SO-initiated MIs, and to likewise gather its comments/inputs/confirmation on the result of the said Review Report. Additional inputs that were provided by the SO during this meeting were duly considered by MAG and MSC in finalizing the Review Report.

4.3. Review of the Market Suspension Events in November 2020

The MSC deliberated upon the Market Suspension Report that was submitted by the Market Operator on 24 November 2020. The report provided information on the actions undertaken by the MO during the market suspension implemented by the ERC, which affected the Luzon grid from 12 to 13 November 2020. Said suspension was brought about by multiple tripping of major transmission lines and generators due to Typhoon Ulysses.

After due deliberations, the MSC concluded that the Market Operator observed all the required procedures during the occurrence of market suspension. As regards the SO's Market Suspension Report, the MSC wrote a letter addressed to the NGCP-SO for expediency of the submission. The same is a requirement for the MSC to proceed with its assessment report on Market Suspension as provided for under the WESM Rules.

The NGCP-SO submitted its Report to the MSC on 17 December 2020. Correspondingly, the MSC continued in drafting its Review Report, with the SO's MS Report as one of its bases and reference.

The MSC Review Report on the subject MS events were accordingly submitted for the consideration of the PEM Board.

5. MSC Position Paper on MMS Failure

The MSC deliberated upon its position regarding the issue on Market Management System (MMS) Failure during its Special Meeting No. 2020-05 held on 22 April 2020. The same was consequently presented by the MSC during the PEM Board Meeting held on 29 April 2020.

Acting upon the PEM Board directive on its presentation regarding MMS Failure, the MSC reviewed the options on the proposed amendments to the Administered Price Determination Methodology (APDM). The MSC then directed MAG to review the occurrences of market intervention and market suspension events and undertake simulations to consider its effects to the supply margin. MAG was further requested to

propose administered prices based on supply margin, and finally, to come-up with a comparison of methodologies to finalize the proposed amendments.

The MSC continued its discussion on the Proposed APDM during the MSC meetings held in June and July 2020, respectively. The MSC then presented the following proposed APDM methodology, for the PEM Board Board's consideration in its July Meeting:

- Use of Actual Market Outcomes for Transmission-related MI/MS, to reflect actual offers from the Trading Participants, and minimize the filing of Additional Compensation;
- Use of Lowess Method for each corresponding Supply Margin in determining Administered Prices for other types of MI/MS.

Finally, in August 2020, the MSC agreed to co-author the proposed amendments on the following, for submission to the Rules Change Committee (RCC):

- WESM Rules
- WESM Manual on APDM 6.0
- WESM Manual on Price Determination Methodology 2.0

6. Conduct of Study on the Economic Viability of the Generation Sector during the Covid-19 Pandemic

In a special meeting held on 22 April 2020, the MSC discussed the effects of the Covid-19 public health crisis in the WESM and the appropriate recommendations that may eventually be elevated to the PEM Board and DOE, in response to the same.

After its discussion, the MSC directed MAG and the Enforcement and Compliance Office (ECO), in coordination with the IEMOP and the NGCP, to study the prolonged and substantial reduction in power demand in the market during the Covid-19 public health crisis, and submit the results of such study and its recommendations to the MSC.

In May 2020, the MSC deliberated upon the Study as prepared by MAG and ECO following the direction of the MSC, and with focus on the concerns raised by the Philippine Independent Power Producers' Association's (PIPPA) on the Economic Viability of the Generation Sector. The Study focused on the following scenarios that were raised by the PIPPA: (a) Removal of the Must Offer Rule (MOR), (b) Setting the Minimum Stable Load (Pmin) at zero (0), and (c) Rotational Shutdown of Generators. The Study was then approved, with further inputs from the MSC and was presented to the PEM Board, and submitted for the consideration of the DOE and ERC.

In June 2020, the MSC met with PIPPA representatives, together with representatives from the NGCP-SO and IEMOP for a discussion on the result of the MSC Study as submitted to the DOE and ERC.

The MSC noted that demand has already started to increase in June 2020 and has risen to a level that is comparable to the demand recorded in the previous year. Further, prices have also started to recover along with the increasing demand trend. Given these factors, the MSC opined that the objective for the PIPPA requests on the suspension of the Must-Offer-Rule (MOR), setting of zero (0) Pmin and rotational shutdown may no longer be valid. Nevertheless, the MSC stated that the Committee will look-into the comments raised by PIPPA during the meeting.

7. Conduct of Offer Pattern Analysis during ECQ

The MSC discussed the Offer Pattern Analysis (OPA) during the period of the Enhanced Community Quarantine (ECQ), which covers the period 15-25 March 2020 during the initial ECQ implementation in the country. Said analysis emanated from the inquiry from the PEM Board regarding possible gaming by and among market participants during the lockdown. The analysis also included discussions regarding the assessment on market outcomes and the offer pattern of generating units and portfolios. The analysis on OPA made-use of the MSC-approved methodology to evaluate the change in offer behavior of generator-trading participants based on historical data.

The Offer Pattern Analysis during ECQ was presented to the PEM Board during its October 2020 meeting.

8. Conduct of Nodal Analysis on Market Participant Data

8.1. Analysis on Unusual Total Trading Amount of an Electric Cooperative

In May 2020, the MSC reviewed the MAG and IEMOP analysis on the Total Trading Amount (TTA) of an electric cooperative (EC) for the period October 2019 to March 2020. The MSC found that results for the covered period showed unusual TTA results.

The MSC findings and conclusions, including the ways forward that were initially identified by the IEMOP, were submitted by the MSC to the PEM Board during the Board Review Committee Meeting held in May, and to the PEM Board in August 2020.

The MSC convened succeeding meetings with IEMOP representatives for a discussion on the possible ways forward, where the MSC requested for the submission of a report containing the conclusions and measures undertaken by IEMOP on the matter, as well as a summary on similar cases/incidents.

The IEMOP consequently submitted its report and additional information on the case in October 2020. The transmittal includes, among others: (a) Presentation material on the unusual TTA results, (b) List of Simplified Embedded Generation Model, (c) List of Persisting Non-updating Data.

The MSC also noted the following ways forward proposed by IEMOP to address concerns on similar cases: (a) Communicate with generation companies on their

responsibility and inform them on the impact of non-updating data; (b) Proposed rules changes to ensure that real-time data is communicated accurately and reliably; (c) Propose ways to introduce real-time estimations to mitigate related issues.

8.2. Proposed Nodal Analysis on Settlement Data

The MSC reviewed the MAG's proposed conduct of nodal analysis on settlement data in June 2020. This involves the monitoring and analysis of total trading amounts (TTA) for all resources, including the ex-ante quantity (EAQ), bilateral contract quantity (BCQ) and metered quantity (MQ).

During the discussion, the MSC noted the unusual MQ data with one of the generator-trading participants, i.e., the MQ recorded for the trading participant was higher than its registered capacity. The MSC then requested MAG to come-up with an analysis of the same, in coordination with the IEMOP.

After the thorough discussion on the issue, the MSC agreed in November 2020 to refer the matter to the Technical Committee for a more comprehensive analysis on the metering configurations and relevant procedures in order to exhaust all possibilities and prevent the re-occurrence of these cases.

9. Monitoring and Review of the Grid Operating Program (GOP)

The MSC reviewed the result of the MAG's monitoring of the Grid Operating Program (GOP) Revision 1 and Revision 2 covering the first and second quarters of 2020, in June and November 2020, respectively.

The MSC looked at the differences/discrepancies between the NGCP-SO's GOP from the outage monitoring data being maintained and updated by MAG based on the NGCP-SO's Daily Operations Report (DOR).

The MSC then agreed to request clarification from the NGCP-SO on the discrepancies, and further agreed to conduct a study to determine the sensitivity and dynamics of the NGCP-SO GOP vis-à-vis actual outages.

10. Study on the Competitiveness Analysis on Reserves

The MSC continued its discussion on the Competitiveness Study on Reserves, in several meetings during the year. As deliberated upon and approved by the MSC, the Study aims to assess the competitiveness of the Regulating, Contingency, and Dispatchable Reserves in the Luzon and Visayas regions for the period 26 December 2017 to 25 December 2019, in preparation for the launching of the Reserve Market.

The MSC presented the result of the Study to the PEM Board during its November 2020 Meeting. Among others, the MSC discussed that the scheduled reserves are

unable to meet the reserve requirement in Luzon and Visayas grids during the covered period of the Study, due to few reserve providers.

The MSC also discussed that in general, the reserves are highly concentrated in very few participating groups. Thus, the MSC recommended the certification of additional reserve providers to answer the reserve deficit and to lessen the concentration of reserves. The MSC also recommended to ensure that mitigating measures are in-place prior to the commercial operation of the reserve market, to address the findings on high concentration.

11. Continuing Discussion on the Proposed Framework on ACB

The MSC continued with its deliberation of the proposed framework on Anti-Competitive Behavior (ACB). The framework will form part of the basis for the engagement of a third-party advisor on the development of indices for the monitoring of ACB in the WESM.

The MSC likewise reviewed and approved the revised Terms of Reference (TOR) on the Engagement of a Third-Party Advisor on ACB, which was then submitted to the PEMC Management.

12. Proposed Enhancements to the Catalogue of Market Monitoring Data and Indices (CMMDI)

The MSC continued with its review of the proposed enhancements to the Catalogue of Market Monitoring Data and Indices (CMMDI) Issue 1 during its December 2020 Meeting. The review takes-off from initiatives to amend the Catalogue in previous years (i.e., 2019 / 2020), which consider the enhancements to the Market Management System of having shorter dispatch intervals (from 1 hour to 5 minutes). Highlights of the proposed changes are as follows:

- New Market Indices (Spot Price Indices and Generator Offer Indices), including the proposal to include the market price triggers and the interesting pricing events (supply margin-price index) in the spot price indices of the Catalogue;
- Incorporation of changes related to the Enhance WESM Design and Operation;
- Enhancements on the current list of market monitoring data and indices.

The MSC approved the proposed enhancements to the CMMDI Issue 1, subject to the implementation of the WESM design enhancements.

13. Conduct of Meetings with the Independent Electricity Market Operator of the Philippines (IEMOP)

13.1. Discussion on the WESM and RCOA Registration Process

In its January 2021 Meeting, the MSC met with the IEMOP-Stakeholders Services Division (SSD) to discuss the following: (a) WESM Registration Procedure and Practices, and (b) RCOA Market Registration Procedure and Central Registration Body (CRB) activities. In the same meeting, the MSC requested for the MAG and IEMOP-SSD to further discuss the detailed process flows on the WESM registration and other related processes, and to identify the procedural gaps arising from these.

Correspondingly, MAG and IEMOP-SSD presented to the MSC the updates on its discussion regarding WESM registration issues in its February 2021 Meeting. The IEMOP-SSD was joined by a composite group from the IEMOP to discuss the related processes on the WESM registration procedure. The MSC discussed the various issues and gaps in procedures and agreed to the suggested ways forward in the WESM registration process. The MSC then formalized the result of the discussions through a letter addressed to the IEMOP President, outlining the issues and ways forward agreed-upon by the group, particularly those that can be done internally to address the procedural gaps that were identified.

13.2. Discussion on the Study on PIPPA Concerns

IEMOP participated in the development of a Study on the concerns raised by PIPPA regarding the economic viability of the generation sector during the Covid-19 public health crisis. Representatives from the IEMOP provided inputs to the Study and participated in the MSC Meeting with Pippa in June 2020.

13.3. Discussion on Nodal Analysis

IEMOP also joined the MSC in its May and June meetings for a discussion on the unusual trading amounts of an electric cooperative. IEMOP presented to the MSC its own findings and conclusions, and likewise discussed possible ways forward to address the issue.

14. Conduct of Meetings with the National Grid Corporation of the Philippines – System Operator (NGCP-SO)

14.1. Discussion on the Study on PIPPA Concerns

The NGCP-SO joined the series of meetings which the MSC convened to discuss the concerns raised by PIPPA on the economic viability of the generation sector during the Covid-19 pandemic. NGCP-SO representatives participated in the discussion and provided inputs/comments which were duly considered by the MSC.

14.2. Discussion on Transmission Development Projects

The MSC invited representatives from the NCGP-SO during its November 2020 meeting to be apprised with the current updates on the Transmission Development Plan (TDP), specifically as regards project/s that will address the frequent congestions in the Samboan-Amlan Line, which is the connection between the Negros and Cebu islands.

15. Assessment of the Retail and Open Access (RCOA) Market

15.1. RCOA Monitoring Reports

In accordance with Section 7.3 of the MSCEM Manual and Section 3.1 of the Catalogue of Retail Market Monitoring Data and Indices (CRMMDI), the MSC submitted to the PEM Board the following:

- Four (4) quarterly Retail Market Monitoring Reports (RMMR), covering the Fourth Quarter of 2019 to Third Quarter of 2020; and
- Annual Retail Market Monitoring Report (ARMMR), covering the period 26 December 2018 to 25 December 2019.

The Retail Market Monitoring Report contains the Retail Market Assessment Report, which discusses the outcome of monitoring indices and provides indications on how the retail market performed during the period in review and how it fared with the performance of the previous period.

During the year, the MSC regularly presented to the PEM Board the highlights of its assessment of the RCOA Market. The reports were also furnished to the DOE and ERC for information and reference, and also published in the PEMC website⁸.

15.2. Development of the MSC's RCOA Issues Paper

The MSC discussed in several meetings the vision and roadmap for the MSC Study/Issues Paper on the RCOA Market. The MSC agreed on the following objectives for the Study: (a) reflect on the challenges and accomplishments of the RCOA market; (b) assess the implementation of the RCOA market as envisioned in the EPIRA Law; (c) survey best practices in other jurisdictions; (d) submit recommendations to appropriate bodies.

The MSC then launched the following activities to solicit the comments and inputs of various stakeholders on the RCOA Market Study/Issues Paper: (a) MSC Dialogue with the Retail Electricity Suppliers Association (RESA), (b) MSC Consultation Meeting with

⁸ Link: <https://www.wesm.ph/market-outcomes/retail-market-assessment-reports>

the ERC, and (c) MSC Dialogue and conduct of online survey for Contestable Customers.

15.3. Consultation Series with RCOA Stakeholders

To engage the RCOA stakeholders and solicit their inputs on the MSC Study/Issues Paper on the RCOA Market, the MSC held a Dialogue with the officers and representatives of the Retail Electricity Suppliers Association (RESA) on 13 August 2020, the ERC Contestable Market Division on 14 August 2020, and the officers and representatives of the various Contestable Customers on 28 August 2020. PEMC Officers and DOE representatives were also present during the MSC-RESA Dialogue and the MSC-CCs Dialogue.

The Dialogues were in line with the MSC's recognition that the RESA, being the Suppliers directly involved in the RCOA Market, the RCOA Contestable Customers, and the ERC, as the market regulator, have valuable inputs which may lead to enhancements to better the experience in joining/participating in the market. Through the said Dialogues, the MSC likewise expressed its intention to work hand in hand the RESA, the Contestable Customers, and the ERC in the conduct of the Study.

The inputs received during the above dialogues/consultation series were considered in the development of the RCOA Issues Paper.

15.4. Conduct of Survey among the RCOA Contestable Customers

The MSC conducted an RCOA Survey which was participated by 46 respondents from various categories in the market. The survey looked at the following:

- Choosing of Suppliers,
- Considerations in entering into an agreement with a Supplier,
- Promotions offered by the Suppliers,
- Steps when nearing end-of-contract,
- Hindrance in joining the RCOA Market,
- Involvement in the RCOA Market,
- Monetary savings,
- Benefits in joining the market, and
- Recommendations for enhancement of the market.

The result of the survey was considered in the MSC's RCOA Issues Paper.

III. ACTIVITIES ON ENFORCEMENT AND COMPLIANCE

1. Review of Compliance Monitoring and Assessment Reports (CMAR) and Issuance of Requests for Investigation (RFIs)

Pursuant to Section 8.2.3 of the MSCEM Manual, the MSC conducted its monthly review of the Compliance Monitoring and Assessment Reports (CMARs) as submitted by the Enforcement and Compliance Office (ECO). For the year 2020, the MSC completed its review of ECO CMARs covering the billing months of November 2019 to October 2020.

The corresponding requests for investigation (RFIs) were consequently endorsed by the MSC for the appropriate action of ECO,⁹ relative to the possible non-compliances of generator-trading participants (TPs) with the Must-Offer-Rule (MOR), Nomination of Loading Levels and Projected Outputs (NOM), and Real-Time-Dispatch (RTD) schedule/instruction.

In total, the MSC submitted 84 requests for investigation, 19 of which were requests for possible non-compliance with the MOR, another five (5) on the possible non-compliance with the rule on nomination of loading levels, and the remaining 60 were requests for possible non-compliance with the RTD schedule. The number of requests for investigation corresponds to the number of ECO cases investigated by the ECO for the corresponding billing month.

The monthly number of requests for investigation submitted by the MSC to the PEM Board/ECO during the period in review is shown in the Figure below.

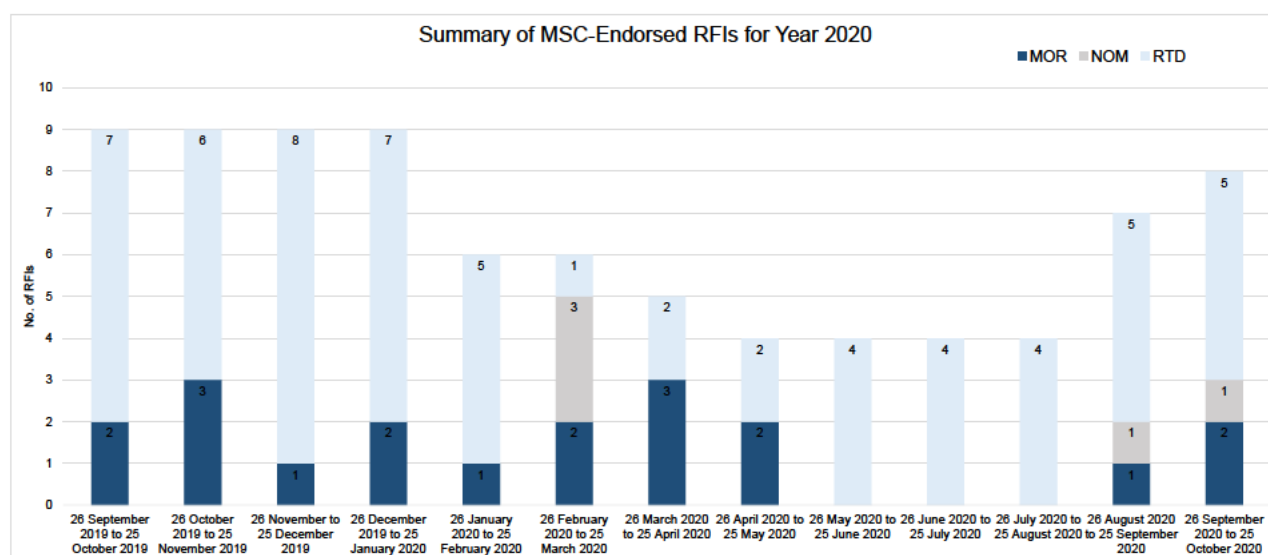


Figure 4 | Summary of Requests for Investigation (RFIs) Submitted by the MSC

⁹ Section 7.3.4 (d) of the Market Surveillance, Enforcement and Compliance Market (MSCEM) Manual, and PEM Board Resolution No. 2019-10-02

2. Review of ECO Investigation Reports

In accordance with Section 6.2.1(f) and 10.7 of the MSCEM Manual, the MSC reviewed on a monthly basis, the ECO Investigation Reports with respect to: (a) the ECO's compliance with the procedures set forth in the MSCEM for the conduct of investigation, and (b) the validity and completeness of the data and documents upon which factual findings are based.

In summary, the MSC completed its review of 63 ECO Investigation Reports during the covered period, all of which were duly-submitted and accordingly approved by the PEM Board.

3. Review of Motion for Reconsiderations

The MSC reviewed the submitted Motions for Reconsideration (MRs) by two (2) generator-TPs for its 2014 cases on non-compliance. These were taken-up by the MSC in its February and March meetings. The MSC likewise took note of the ECO activities that were conducted related to the submitted MRs.

Upon due deliberation, the MSC submitted its review of the MRs for the consideration of the PEM Board.

4. Discussion on Offers for Settlement

The MSC and ECO met representatives from generator-trading participants which requested for a conference with the MSC to discuss the details of their long-standing non-compliance cases from 2014 to 2019, and their intention to submit Offers for Settlement to possibly close said cases.

5. Review of the Proposed Criteria on Compliance Rating

The MSC discussed with the ECO the development of the criteria on the compliance rating of generator-trading participants, which will be the basis of the Guidelines for the Conferment of the WESM Compliance Awards.

The MSC studied and provided inputs on the ECO-proposed Guidelines, one of which is the MSC request for the ECO to categorize the compliance rating according to resource, i.e., coal to compete with other coal plants, etc. for the high compliance rating, to consider the difference in the characteristics of each plant type.

After its series of deliberations, the MSC approved in April 2020 the ECO-proposed Compliance Rating for Generators, subject to the ECO's submission to the MSC of a simulation of the results, to verify the profile of those which ranked the highest.

The ECO then presented to the MSC in its May 2020 Meeting the results of the compliance rating for generators, following the criteria/guidelines that were deliberated

upon and approved by the MSC. The MSC also looked at the ECO compliance rating online platform that could be accessed by the public through the PEMC website, which shows the rating and ranking of generators.

The MSC then agreed to regularly include in its meeting agenda the periodic updates from ECO on the result of its compliance rating of generator-TPs.

6. Compliance Monitoring during the Covid-19 Public Health Emergency

The MSC convened a Special Meeting on 22 April 2020 to review and respond to the DOE Memorandum dated 23 March 2020 on the subject *WESM Operations under the State of Public Health Emergency*, enjoining the MSC and the ECO to closely monitor the compliance of Trading Participants. The MSC deliberated upon the impact of Covid-19 to the WESM, and to the compliance monitoring process.

The MSC and ECO agreed to ensure the continuing discharge of its mandate during the Covid-19 public health crisis, to monitor compliance and investigate breaches of the WESM Rules, Market Manuals and other relevant rules and regulations.

Upon discussion, the MSC directed the ECO to consider, on a case-to-case basis, reasons that may be cited by a Trading Participant for non-compliance that are primarily attributable to the effects of the Covid-19 Public Health Crisis, provided, that such reasons have adversely affected the plant operations of such Trading Participant, and provided further, that compliance monitoring and evaluation shall still be undertaken by ECO in accordance with existing guidelines and procedures as set forth under the WESM Rules.

7. Discussion on the ECO Recommendation regarding the Disposition of Pending Cases

On 16 July 2020, the MSC thoroughly discussed the options submitted by the ECO regarding the disposition of backlog cases from year 2014 and agreed to adopt one of the options submitted.

In a Special Meeting called for the purpose, the MSC discussed the details of the ECO-proposed action plans. After due deliberation, the MSC agreed with the action plan presented by ECO and recommended further improvements in the implementation of the same to ensure the timely resolution of pending cases.

Further, during its August Regular Meeting, following the MSC's request, the ECO presented its proposed timeline and performance indicators in the implementation of the above action plan.

The MSC discussed the ECO proposal and took note of the internal monitoring procedure of the ECO. The MSC likewise noted that the same shall be presented

monthly to the MSC beginning October 2020, to allow the MSC to monitor the ECO's progress in the disposition of case backlogs.

IV. OTHER ACTIVITIES AND ACCOMPLISHMENTS

1. Proposed WESM Industry Code of Ethics (WICOE)

The MSC submitted to the PEM Board its proposed WESM Industry Code of Ethics (WICOE) on 24 March 2020. The WICOE is intended to prescribe general standards of behavior which the WESM participants are enjoined to follow. The final proposed WICOE which the MSC submitted to the PEM Board incorporated a penalty clause, and considered the comments that were received by the MSC from various stakeholders. The PEM Board, upon due deliberation, adopted the MSC-proposed WICOE and submitted the same for the consideration of the DOE.

Further revisions to the proposed WICOE were considered and adopted by the MSC during its Meeting on 16 July 2020. The revisions were made in support of the general comment made by the DOE as expressed thru its letter to PEMC on 15 July 2020. The MSC proposed revisions aim to: (1) to expand the scope and applicability of the Code, and (2) to apply universal change in the WICOE from "WESM members and participants" to "WESM stakeholders". The revised proposal, which was received by the PEM Board on 21 July 2020, was submitted to the DOE on 24 July 2020.

2. MSC Participation on the IEMOP Rules Change Proposal re: WESM Registration Manual

During its January 2020 Meeting, the MSC reviewed the rules change proposal submitted by IEMOP on the WESM Proposed Amendments to the WESM Manual on Registration, Suspension, and De-Registration Criteria and Procedures for General Enhancements to the Application Process of New WESM Members.

Some of the highlights of the MSC deliberation are as follows: (a) the MSC disagreed with the IEMOP's proposed *Backfeed Registration*, having considered that there is no need for plants under construction to withdraw energy directly from the grid. The MSC opined that plants under construction should connect with the host DU instead, and (b) the MSC suggested that for purposes of WESM registration, testing and commissioning should be defined and limited only to tests related to connection/synchronization to the grid.

The MSC submitted its comments to the RCC for consideration in its deliberation on the IEMOP proposal.

3. RCC Request for MSC Recommendation on the Compliance and Penalty Provisions re: Proposed Amendments to the WESM Registration Manual

The RCC requested the assistance of the MSC and the ECO with regard the compliance and penalty provisions related to the IEMOP's proposed amendment to WESM Manual on Registration, Suspension, and De-Registration Criteria and Procedures for General Enhancements to the Application Process of New WESM Members.

In response, the MSC deliberated upon the enforcement and penalty implications of the rules change proposal on the Registration Manual during its March Meeting, as presented by ECO. The MSC discussed: (a) the obligations of Trading Participants, Market Operator and System Operator under the IEMOP-proposed WESM Registration Phases, and (b) the corresponding penalty implications. These were then presented to the RCC in its March 2020 Meeting.

4. Participation in the PEMC Annual General Membership Meeting

The MSC joined the online conduct of the PEMC Annual General Membership Meeting (AGMM) held on 29 July 2020. MSC Chairman Francis V. Mapile participated as resource person, sharing with the PEMC membership the highlights of the MSC activities and accomplishments for the year 2019 on market monitoring and assessment, enforcement and compliance, and policy development.

5. Participation in the WESM Compliance Officers (WCO) Summit

The MSC participated in the preparation and actual conduct of the WESM Compliance Officers (WCO) Summit, which was held online in September 2020. The MSC proposal on the WESM Industry Code of Ethics (WICOE) featured in the Summit for better appreciation of stakeholders.

Further, MSC Chairman Francis V. Mapile gave the Closing Remarks during the WCO Summit, thanking the WESM Compliance Officers and the Enforcement Officers in taking steps to foster the compliance of their respective organizations, while also ensuring that the MSC will continue to support the efforts undertaken by PEMC in instilling the importance of compliance and effective governance.

6. Publication of MSC Quarterly Reports

The MSC regularly publishes its Quarterly Accomplishment Report to apprise stakeholders of its activities and accomplishments for the Quarter. These Reports can be downloaded in the PEMC website¹⁰.

¹⁰ <https://www.wesm.ph/market-governance/market-surveillance/msc-reports-and-work-plans>

7. Review of MSC Internal Rules

The MSC started its review of the MSC Internal Rules Issue 3, to incorporate amendments that will reflect the changes and updates as regards the MSC's conduct of regular meetings, references, terminologies, procedures and reports. The amendments were also directed to clarify some provisions and to make clerical and minor corrections.

V. MEMBERSHIP

The Market Surveillance Committee is currently composed of the following experts in the fields of electrical engineering, economics, and law:

- 1) Engr. Francis V. Mapile (Chairperson)
- 2) Dr. Peter Lee U
- 3) Atty. Doroteo B. Aguila
- 4) Prof. Fernando Martin Y. Roxas

Ms. Eulinia M. Valdezco was also a member of the MSC for the period, having rendered her expertise to the Committee until her passing-away on 05 March 2020.

VI. RESPONSIBILITIES

As set out in Section 1.6.2 of the WESM Rules, the responsibilities of the MSC are as follows:

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 MSC-EM Manual 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;
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 MI or MS event 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 MSCEM Manual on matters under Investigation;
11. Review of the significant variations reports.

VII. MSC WORK PLAN for CY 2021

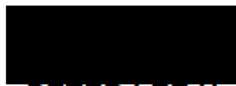
Annex A provides details of the MSC's program of activities for 2021, consistent with the PEMC Corporate Strategic Plan.

Submitted by:

THE MARKET SURVEILLANCE COMMITTEE



FRANCIS V. MAPILE
Chairperson



PETER LEE U
Member



DOROTEO B. AGUILA
Member



FERNANDO MARTIN Y. ROXAS
Member