



Market Surveillance Committee Quarterly Accomplishment Report

April to June 2022

JULY 2022

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

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I. Introduction

Pursuant to Section 1.6.2 of the WESM Rules and Section 3.1 of the Market Surveillance Manual (MSM) Issue 1¹, the Market Surveillance Committee (MSC) carried-out its mandate in the monitoring and assessment of market outcomes in the WESM and the Retail Market² with the PEMC-Market Assessment Group (MAG) as its primary support unit.

In performing its responsibilities, the MSC conducted regular monthly meetings, and frequently communicated through email and other platforms to deliberate on various market issues.

For the duration of the covered period, the MSC continued to conduct online meetings, following the National Government's implementation of quarantine measures during the COVID-19 Pandemic. Accordingly, during the 2nd quarter of 2022, the MSC conducted three (3) regular³ meetings, which were all held online.

Accomplishments of the MSC during the covered period are outlined in the succeeding sections of this Report.

II. Accomplishments

1. Activities on Market Monitoring and Assessment

1.1. Monitoring and Assessment of Market Outcomes in the WESM

Pursuant to MSM Section 3.1 (b)⁴, the MSC continued its monitoring and assessment of market outcomes, as well as the bidding behavior, of generator-trading participants (TPs).

The Market Assessment Report (MAR) is prepared for the purpose of monitoring and assessing the efficiency and competitiveness of the WESM under different timescales and market conditions. The periodic Reports include an assessment of market behavior, through the analysis of market monitoring indices, as contained in the Catalogue of Market Monitoring Data and Indices (CMMDI).

¹ Effective 23 October 2021

² Section 1.5.1, Retail Rules: *The provisions of Chapter 1 of the WESM Rules shall apply with respect to the governance of the integration of retail competition in the WESM, the operations of the Central Registration Body, and the participation and transactions in the WESM of Suppliers and Contestable Customers.*

³ MSC (Regular) Meeting No. 2022-06 held on 11 April 2022; MSC (Regular) Meeting No.2022-07 held on 16 May 2022; and MSC (Regular) Meeting No. 2022-08 held on 16 June 2022.

⁴ MSM Section 3.1(b): *The MSC shall have following responsibilities: (a) xxx; (b) prepare and submit monthly monitoring reports, quarterly retail market monitoring reports, annual reports; xxx*

1.1.1. Monthly Market Assessment Reports

During the quarter, the MSC assessed WESM results for the billing months of March to May 2022, as discussed in the Monthly Market Assessment Highlights prepared by MAG and reviewed by the MSC.

Billing Month	MSC Observation Highlights
March 2022	<p>Monthly average price rose from PhP5,946/MWh in February 2022 to PhP6,672/MWh in March 2022. The increase was mainly due to plant outages and the continuous deration of natural gas plants. The forced outages from coal power plants contributed to the causes for the thinning of supply which led the Luzon grid to be placed under Yellow alert level. Correspondingly, the MSC noted that Ilijan and San Gabriel units were derated due to the SPEX Malampaya's gas restriction during the covered period.</p> <p>In view of the upcoming May 2022 election, the MSC reviewed the historical information on the conditions of the market before, during, and after the election. It has been generally observed that the system demand was low (weekend) on the days prior the election period. Low average prices and demand on the election day, which is usually declared as holiday, was likewise observed.</p>
April 2022	<p>Similar with the previous month, Ilijan and San Gabriel units were still operating on derated manner due to the SPEX Malampaya's gas restriction during the covered period. The average WESM prices in April recorded a decrease due to lower level of demand brought about by Holidays including the Holy Week. The total outages for the period increased which was caused by hydro and oil-based power plants.</p> <p>The MSC likewise noted on the effects of Typhoon Agaton to the transmission lines which caused the unavailability of Ormoc-Maasin and Maasin-Ubay lines. In addition, there was relatively higher Secondary Price Cap (SPC) and Pricing Error Notice (PEN) impositions for April 2022 due to persisted conditions.</p>
May 2022	<p>The Ilijan and San Gabriel units were still derated due to the SPEX Malampaya's gas restriction during the subject period. The average WESM prices in May recorded a decrease due to lower level of outage and high levels of supply. The total outages for the period decreased driven by the resumption of coal and geothermal plants.</p> <p>The MSC likewise noted a significant increase in the Price Substitution Methodology imposition due to network constraint violation attributed to high level of system demand.</p>

Monthly market assessment reports are prepared upon availability of the processed and revalidated data which is currently affected by the data and procedural concerns between the Independent Electricity Market Operator of the Philippines (IEMOP) and PEMC.

1.1.2. Assessment of Over-Riding Constraints

Similar with the MAR, the monitoring of overriding constraints (OC) is likewise affected by the data and procedural concerns between IEMOP and PEMC since the launching of the Enhanced WESM Design and Operation (EWDO) on 26 June 2021 as well as the additional data concerns which led to the necessity to revalidate data before utilizing the same in the Committee reports. Nevertheless, reports are prepared as soon as the processed data are made available.

Pursuant to Market Surveillance Manual Section 3.1 (b.iii)⁵, the MSC reviewed the assessment results on the overriding constraints imposed on generator-TPs for the period 26 December 2021 to 25 May 2022. Some assessment highlights are as follows:

- All events were categorized under non-security limit, mainly related to the conduct of testing and commissioning (T&C).
- Increase in the number of impositions for the February 2022 were attributable to the lifting of the MI / market suspension (MS) events as well as the start of T&C period for several battery and biomass plants. Battery plants still had the highest number of OC impositions followed by Biomass and Solar plants.
- The decrease in the number of impositions for the March 2022 billing month was attributable with the start of commercial operation of a Battery plant and the expiration of T&C period of some Biomass plants.
- Majority of the non-security limit events were due to T&C involving plants which were provided with the approved extension to conduct T&C.

The Committee likewise discussed the updates provided by the IEMOP, upon the MSC's request, on the status of plants on T&C. The approved reports were duly published in the PEMC website for information.




1.1.3. Review of Proposed Penalty and Sanctions for the Violation / Breach during the Expired Testing and Commissioning Status of Plants

As a background, the MSC initiated the discussion on the proposed penalty framework and the proposed amendments to the 1) Registration, Suspension and De-Registration Criteria

⁵ MSM Section 3.1(b) *The MSC shall have following responsibilities: (a) xxx; (i) Review Over-Riding Constraints; xxx*

and Procedures manual, and 2) WESM Penalty Manual Issue 1.0, to incorporate the provisions of the DOE DC 2021-06-0013 on the guidelines pertaining to the conduct of T&C of plants. The said initiative was mainly to provide a strict enforcement of the guidelines to the participants to mitigate any possible non-compliance with the prescribed 2-month T&C period without cause, and non-compliance with the OMW RTD schedule as provided by the circular.

In view of the previous discussions and agreements, the MSC deliberated the details of the submitted proposed rules change in relation to the T&C Penalty Framework. Upon review, the following manuals will be affected by the said proposed rule change:

 <p>Subject of Enforcement</p> <p>Registration, Suspension and De-Registration Criteria and Procedures Manual</p> <p>Section 2.5.7.3 (g) (Guidelines for Test and Commissioning Registration)</p> <p><i>Note: The version used for this purpose is the latest version (now pending with the DOE)</i></p>	 <p>Trigger of Enforcement</p> <p>Registration, Suspension and De-Registration Criteria and Procedures Manual</p> <p>Section 2.5.7.3 (h) (Guidelines for Test and Commissioning Registration)</p> <p><i>Note: The version used for this purpose is the latest version (now pending with the DOE)</i></p>	 <p>Enforcement Action</p> <p>WESM Penalty Manual</p> <ul style="list-style-type: none"> Section 5 – Schedule of Breach and Penalties Section 4.5.2 Table 1 – Frequency of Occurrence Matrix
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The MSC has taken note that it is within the responsibility of the Rules Change Committee (RCC) to deliberate and adopt the proposed revisions to the Registration, Suspension and De-Registration Criteria and Procedures Manual. Meanwhile, the deliberation on the revisions to the Penalty Manual lies solely in the jurisdiction of the MSC.

1.1.4. Review of Market Intervention Events in March to May 2022

The MSC discussed the results of MAG's assessment on the MI events which occurred in March to May 2022 in consideration of the available information provided with the submission of reports by either the National Grid Corporation of the Philippines (NGCP)-SO and the IEMOP-MO. The summary of reason for the noted events were as follows:

Initiated By	Date	Interval/s	Region/s Affected	Classification	Reason
SO	31 March 2022	1825H – 1925H	Visayas	Emergency and Threat to System Security	Generation Deficiency
MO	20 April 2022	1655H – 1710H	Luzon, Visayas, Mindanao	Force Majeure Event	Software failure that resulted in the non-publication of market results to the market participants
MO	06 May 2022	1215H – 1340H	Luzon, Visayas, Mindanao	Force Majeure Event	Failure in publication of market results in the ORACLE database server due to issue on Network Connectivity
MO	08 May 2022	2315H	Luzon, Visayas, Mindanao	Force Majeure Event	Error in Market Participant Interface (MPI) data transfer that resulted in non-generation of RTD schedules

The Committee has taken note of MO's compliance with the procedures prescribed by the Rules during the occurrence of MI while SO's compliance for 31 March MI will be for further assessment following the lack of information provided in the submitted report. In addition, the MSC was apprised with regard a series of MI that occurred in 2022 mainly due to the errors or failures encountered by the Market Management System (MMS). Upon deliberation, the Committee agreed to invite the representatives from the IEMOP-MO, Technical Committee and the PEMC – Information Systems and Technology Department for a meeting in June 2022 to discuss on the software-related issues noted as of May 2022.

In addition, the MSC agreed that the submission of reports by the MO and SO should be within 5 days and should not be included in the 30 working days allowed by the MSM for the MSC to submit its review report.

1.1.5. Review of Generator Outage Modelling Study

As part of its activity for the year 2022, the MSC reviewed the results of the Generator Outage Modeling Study (GOMS) conducted by the MAG as one of its activities slated for the year 2022. The said study aims to identify the variables which are possibly correlated with the occurrence of forced outages (FOs) in the market. Over the years, the forced outages have gathered much monitoring interest as this type of outage drastically affects market outcomes that redounds to WESM participants, and eventually to the paying public. Highlights of the analysis are as follows:

- Specific statistical methodologies were employed to determine the effects, if any, of several variables on the occurrence of an FO, such as the timeliness of prior planned outages and the characteristics of the power plants.
- For the period covered from January 2018 to November 2021, 50 percent of all the registered generators may go into FO within a period of 83 days (about 3 months) after the completion of their respective maintenance or planned outage. This is notably a short period compared to other jurisdictions which has roughly 260 days prior to occurrence of an FO considering the same percentage of generators.
- From among the host of explanatory variables considered, the following relationships yielded the most statistically significant:
 - Contrary to expectation, a timely conduct of maintenance or planned outage posed a higher risk of occurrence of a forced outage afterwards
 - Assigning the battery generators as the baseline power plant, it is found that among all resource types, hydro and oil-based plants are the most resilient from the likelihood of an FO event.
 - On the other hand, the model provides for an interesting inverse relationship between how volatile the dispatch of a generator is and the probability of going into FO.
- Possible future improvements in the statistical model employed in the study may be considered.

The MSC then provided its comments and suggestions for consideration in the report prior to finalization. The study was duly submitted to both the DOE and ERC on 27 April 2022 for consideration and possible further discussion.

1.1.6. Discussion on the Market Trigger Reports from 14 to 27 March 2022

The MSC was informed on the summary of facts and observations on the market triggers noted for the month of March 2022. The monitoring of market triggers is pursuant to the mandate provided under the Section 3.1 of the Catalogue of Market Triggers. It can be recalled that the thresholds used for the monitoring were recently reviewed and revised by the Committee to update the price references / thresholds using the most recent data. The highlights of the analysis are as follows:

Period	No. of MTR	Hour Type	No. of Price Spikes	Highlights
14-18 March 2022	5	Peak	80	<ul style="list-style-type: none"> • Growing level of demand due to lower quarantine restrictions and increase in temperature • High level of outage • Narrow supply margin • Presence of pivotal suppliers
		Off Peak	12	
22-27 March 2022	6	Peak	51	
		Off Peak	33	

1.1.7. Updates on the Engagement of 3rd Party Consultant on the Development of Monitoring Framework and Parameters for the Anti-Competitive Behavior (ACB) in the WESM

As a backgrounder, the draft terms of reference (TOR) was presented to the Energy Regulatory Commission (ERC) during the ERC-PEMC quarterly coordination meeting held on 15 March 2022. During the said meeting, the ERC requested a copy of the draft TOR and likewise sought to be given ample time for the review of their Legal team. With this, the MSC formally transmitted the draft TOR for comments in March 2022 while the ERC comments were duly received by the MSC Secretariat in April 2022.

The MSC reviewed the received ERC comments and the corresponding proposed responses from MAG on the draft TOR for the Development of ACB Monitoring Framework and Parameters in the WESM. In general, the MSC agreed with the recommendations and proposed revisions to the TOR. However, the proposed inclusion of software installation in the scope of work was noted to be not included in the current project and shall be commenced in 2023. With this, the MSC finalized the draft TOR for submission to PEMC President for approval of the engagement, and to proceed with the procurement procedures.

With the approval to proceed with the engagement, the MSC was then apprised on the progress of the procurement of the 3rd party consultant for the MSC's project pertaining to the development of monitoring framework and parameters of ACB in the WESM.

The discussion of the updates specifically highlighted the possibility of a delay in the initial target date of completion for the said project, originally scheduled by Q4 2022, in case that the project engagement will commence later than August 2022. As an additional note, the commencement date of this activity depends on the result of the procurement process including the negotiation with the winning bidder.

1.1.8. Discussion on the Progress of the Financial Transmission Rights Study

As envisioned by the MSC and as part of the activities of the Committee for the year 2022, the MSC reviewed the progress and recent updates on the study being conducted by MAG on the viability of the Financial Transmission Rights (FTRs).

As part of the conduct of the study, MAG conducted series of coordination meetings with the representatives from the MO and the SO to seek for their comments and inputs to the initial assessment and observations as well as to request necessary data to complete the study. With the result of the coordination meetings, MAG was able to identify the additional activities to be conducted in order to complete its assessment and craft its recommendations on whether the FTR is viable in the Philippine setting or not. In view of

the additional activities to be conducted, the MSC approved the request to move the target completion date of the study to from Q2 to Q3 2022.

1.1.9. Updates on the Ways Forward on WESM Data Concerns

Following the recent updates / developments on the status of the data used in preparing the Committee assessment reports, the MSC discussed the proposed revisions to the timeline initially approved by the Committee through Resolution No. 2021-67.

The Committee has taken note that the proposed revisions arose from 1) data issues raised during the PEMC-IEMOP coordination meeting last April 2022 which affected the submitted and published reports of the Committee, and 2) other data issue identified in the earlier week of May 2022. The revised timeline on the submission of reports heavily relies on the availability of data from the SO and MO.

1.2. Monitoring and Assessment of the Retail Competition and Open Access (RCOA) Market

Pursuant to the Catalogue of Retail Market Monitoring Data and Indices (CRMMDI) Section 3.1.2⁶, the MSC monitored and assessed the performance of the Retail Market, as provided for under the Retail Market Assessment Report, which discusses the results of retail monitoring indices and provides indications on how the retail market performed during the period in review.

1.2.1. Retail Market Assessment Report for 2021

The MSC reviewed the Retail Market Assessment Report on the RCOA Market covering the billing year 26 December 2020 to 25 December 2021, as submitted by MAG (ARMAR-2021). Some highlights of the Report are as follows:

- The RCOA Market registered an additional 329 Contestable Customers (CC) for the year 2021 equivalent to a 22% increase coming from the previous year, thereby raising the total tally of registered CCs in the market to 1,837. This increase in the registration activities was largely due to the ERC's implementation of the RCOA phase III which lowered the contestability threshold level down to 500kW to 749kW starting 26 February 2021.
- The MERALCO Group remained the top entity on both measures (number of engaged CCs and total consumption) at 38%. EDC Group is a new major

⁶ CRMMDI Section 3.1.2 *The Market Surveillance Committee shall have the following responsibilities: 3.1.1 xxx; 3.1.2. Review the retail market monitoring indices and reports submitted by the Market Assessment Group. Xxx*

grouping assigned by the ERC in January 2021 recording 8% share in the no. of CC and 5% share in CC consumption by the end of 2021.

- A 5% increase in total consumption was observed in 2021 as compared to the previous year. Meanwhile, a 12% increase from the CC and 3% increase from the captive customer were noted in the consumption of the participants in comparison to the previous year.
- For the year 2021, the recorded weighted average generation price under the retail market, ranged from PhP3.60/kWh to PhP3.86/kWh or with an average rate of around PhP3.74/kWh.

The Annual Retail Market Assessment Report was approved by the MSC and submitted to the PEM Board, the DOE and the ERC and published in the PEMC website.

1.3. External Meetings and Coordination Initiatives

1.3.1. Meeting with NGCP-SO regarding Plans for Restoration/Repair of Bohol Transmission Lines

Following the inquiry received by MAG from the ERC in one of its coordination meetings, the MSC agreed to invite the representatives from NGCP-SO to attend the Committee meeting last 11 April 2022 to discuss the updates and plans for the permanent repair on the Bohol transmission system restoration which is currently connected to the grid via temporary means (Emergency Restoration System) in order to restore the connection in the island and to lift the market suspension. After the discussion, the MSC noted the information gathered from the NGCP-SO which shall be reflected in the Market Suspension Report to be submitted to the PEM Board.

1.3.2. Meeting with IEMOP-MO regarding the Implementation of Green Energy Option Program (GEOP) in the WESM

Pursuant to the MSC's mandate and function to continuously monitor activities in the WESM, and likewise undertake assessments and analyses on matters concerning the market, the Committee invited the representatives from IEMOP to provide a presentation on the overview and updates on the implementation of the Green Energy Option Program (GEOP). The presentation discussed on the fundamentals of the GEOP, the corresponding processes involved, the eligibility requirements of end-users, the switching timeline, and the current statistics of the GEOP members.

1.3.3. Meeting with PEMC's Corporate Planning and Communications Department re Orientation on Renewable Energy Market (REM)

As part of the Committee's continuing activities to be apprised on the operation of the Renewable Energy Market (REM), the MSC invited representatives from the PEMC-Corporate Planning and Communications (CPC) Department to discuss on the overview of the Philippine REM specifically on the information regarding the REM participants, composition of REM governance, processes, and the system used for the market.

The Committee was informed that the registration function of the REM lies solely with the jurisdiction of PEMC and that MSC will have no surveillance functions with respect to the REM as the responsibility lies with the RE Governance Committee (RGC).

1.3.4. Meeting with IEMOP-MO, Technical Committee (TC) and PEMC-Information Systems and Technology Department (ISTD) on the Software-related failures encountered by the MMS

As part of its review and assessment of the intervention events, the MSC invited the representatives from IEMOP, TC, and PEMC-ISTD to discuss the details of the software-related intervention events including the IEMOP's established policies and processes to avoid the recurrence of such and to mitigate the effects when it does take place. In view of the discussion, MSC will be reviewing the provisions of the Rules pertaining to MI events for possible rules change proposal.

The MSC is composed of five (5) members, namely Atty. Doroteo B. Aguila (as MSC Chairman), Engr. Arthur N. Escalante, Engr. Christian M. Orias, Engr. Ferdinand P. Villareal, and Engr. Peter L. Wallace.