



PEM Audit Committee 2021 Annual Report

January to December 2021

MARCH 2022

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

The information contained in this document is based on the information that are subject to continuous verification by the Philippine Electricity Market Corporation (PEMC). The same information is subject to change as updates come in.

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EXECUTIVE SUMMARY

With the prevailing effects of the pandemic and the subsequent remote work setup in 2021, the PEM Audit Committee (PAC) continued to uphold its mandate to conduct, coordinate and supervise the independent audits of the operations, processes and systems of the market, the Market Operator (MO) and the Central Registration Body (CRB) to reinforce the Market Participants' confidence in the transparency and adequacy of the operation of the Wholesale Electricity Spot Market (WESM). In addition to this mandate, the PAC also reviews the security arrangements and requirements of the WESM and Retail metering installations, in consultation with Metering Services Providers (MSP).

The Philippine Electricity Market Corporation (PEMC) engages the services of qualified independent persons, firms and/or consortiums, who act as the External Auditor under the supervision of the PAC, to ensure sufficient and adequate expertise.

Since the start of the pandemic, all the audits supervised by the PAC were done remotely due to the restrictions enforced that limit face-to-face conduct of audits. In 2021, the PAC supervised the activities for the following:

- 7th Market Operations Audit
- Audit of enhancement on the new Market Management System (MMS) and Central Registration and Settlement System (CRSS),
- 4th Review of Metering Installations and Arrangements (RMIA),
- Audit of Net Settlement Surplus/Net Settlement Deficit (NSS/NSD), and
- Software certification audit of Additional Compensation Tool for Must-Run Unit Reconciled Intervals (MRU Tool).

The PAC also supervised activities for the conduct of the Philippine Renewable Energy Market System (PREMS) Software Certification Audit and Vulnerability Assessment and Penetration Testing (VAPT) in accordance with the Renewable Energy Market (REM) Rules.

The PAC revisited the proposed amendments to provisions related to Audit and Performance Monitoring under the WESM Rules, Retail Rules, PEM Audit Manual, and Guidelines Governing the constitution of PEM Board Committees in accordance with the directives of the Department of Energy (DOE). They likewise continued to monitor the MO performance in accordance with the Market Operator Performance Standards (MOPS) approved by the DOE.

This Annual Report covers the activities undertaken and accomplished by the PAC for the year 2021, and presents the planned activities of the PAC for the year 2022.

1. 2021 ACCOMPLISHMENTS

1.1. Audit Projects

The PAC supervised the conduct of the following audit projects as mandated under WESM Rules Clause 1.5.2 and REM Rules Clause 6.2.1:

1.1.1. Audit of the MO/CRB Operations, Processes and Systems

a. 7th Market Operations Audit

The 7th Market Operations (MO) Audit officially began in April 2020 and was completed in August 2021. This activity was conducted by RSM Australia Pty Ltd (RSM) with support from TechSafe Australia, Market Reform and Reyes Tacandong & Co.

The audit covered market operations and transactions for the period 26 June 2016 to 25 December 2019. This included the transfer of all functions, assets and liabilities from PEMC to IEMOP as the Market Operator effective on 26 September 2018.

The audit aims to test procedures focused on compliance with the relevant Market Rules and Manuals and software and systems review, related to the specified areas. The detailed testing procedures covered the following areas:

Area 1 - Market Operations Audit

- Task 1.1 – Market Software and Systems Review
- Task 1.2 – Process and Compliance Review
- Task 1.3 – Bid to Bill Analysis

Area 2 - Market Monitoring and Assessment and Compliance of Monitoring Review

- Task 3.1 – Procedure/Process and Compliance Review of PEMC
- Task 3.2 – Software Certification Audit of PEMC systems intended for enhance WESM design

Area 3 - Market Maturity Assessment

- Task 4 – Review of Market Maturity

Documentary request provision and various audit walkthrough meetings were conducted with the Auditees from September 2020 to June 2021. RSM submitted the required reports to document the results of the audit as follows:

7th MO Audit Report	Date of Submission
First Progress Report	07 October 2020
Second Progress Report	06 November 2020

7th MO Audit Report	Date of Submission
Third Progress Report	09 December 2020
Last Progress Report	26 March 2021
Draft Audit Report	31 May 2021
Final Audit Report and Software Certificates	11 August 2021

Upon the conclusion of the audit, the Auditor identified seven (7) findings and four (4) opportunity for improvement classified according to a defined risk rating.

The Auditor also issued software certificates for the New Market Assessment System (NMAS) and Compliance Post-Evaluation and Monitoring System (CPEMS) indicating its compliance to applicable Market Rules and Manuals, and software specification.

On the Market Maturity Assessment, the Auditor observed that the Market Operator's environment and processes were assessed in the *Developing* phase. For this assessment the Auditor applied the four (4) distinct maturity ratings namely, Basic, Developing, Established and Advanced over the five main areas of an organization, Strategy and Structure, People and Leadership, Market Systems, Governance, and Development and Digital Technology.

At the developing phase, the Market Operator has made an effort to manage market operation risks. There are documented stable processes, policies and IBPs with process gaps being identified and corrected. Some attempts have been made to monitor controls. There is systematic data collection, improved system security/data integrity, however there is a risk that the current system is inadequate. There is a risk of non-compliance with the WESM Rules, Retail Rules, Market Manuals, relevant Circulars and IBPs.

The PAC submitted its Audit Report on [7th Market Operations Audit](#) to the PEM Board on 13 August 2021 and RSM presented the results of the said audit during the PEM Board meeting on 25 August 2021. The said Audit Report is published in the PEMC website for information of all Market Participants.

b. Audit of Market Operations and Market Monitoring and Assessment (8th MO Audit)

Three months after the completion of 7th MO audit, the PAC commenced with the preparatory audit activities for the conduct of 8th MO Audit, specifically audit of Market Operations and Market Monitoring and Assessment, which covers the period 26 December 2019 to 25 December 2021.

The PAC approved the Terms of Reference (TOR) for the audit and subsequently solicited comments on the draft TOR from the Auditees, the Market Operator and PEMC.

On 20 December 2021, the draft TOR was published in PEMC website to solicit comments from other interested parties. The PAC likewise requested comments from the DOE and ERC thru its letters dated 20 December 2021.

The 8th MO Audit is expected to commence in May 2022.

c. Audit of Enhancements on the new MMS and CRSS

The independent software audit of the enhancements to the new Market Management System (MMS) and the Central Registration and Settlement System (CRSS) commenced in January 2021 and completed in August 2021. These enhancements were implemented in compliance with the ERC Decision on Price Determination Methodology (PDM) application which was promulgated on 29 December 2020¹.

The audit was conducted to determine the compliance of the new MMS and CRSS enhancements with the Market Rules and Manuals and directives of the Energy Regulatory Commission (ERC) through its orders and issuances, and to review whether the development of software enhancements followed the Market Operator's (MO) ICT Change Management process and secured appropriate approval.

The audit was handled by the Intelligent Energy Systems Pty Ltd (IES), the same external auditor that conducted the audit of the CRSS and new MMS modules in 2018 and 2019, respectively, and the subsequent supplemental audits of the new MMS and CRSS in 2020. Upon completion of the audit, IES issued software certificates confirming that the enhancements were implemented correctly in accordance with ERC Decision promulgated on 29 December 2020 and relevant Market Rules and Manuals.

The PAC thereafter submitted its Audit Report to the PEM Board on 26 August 2021. The [PAC Audit Report on the Independent Software Audit of the New MMS and the CRSS](#) is published in the PEMC website for information of all Market Participants.

d. Net Settlement Surplus/Deficit (NSS/NSD) Audit

The quarterly audit of the Net Settlement Surplus/ Deficit (NSS/NSD) for the period 26 November 2019 to 25 December 2021 is handled by BDO Roxas Cruz Tagle & Co.

The audit was conducted in compliance with ERC Resolution No. 07, Series of 2019 "Adopting Amendments to the Rules for the Distribution of Net Settlement Surplus" or the 2019 NSS Rules which provides the directive to conduct the quarterly audit of the NSS/NSD under Sections 2 and 3 of Article VII (Reportorial Requirements) as follows:

¹ ERC Decision "In the Matter of the Application for the Approval of the Price Determination Methodology for the Wholesale Electricity Spot Market" as filed by PEMC and docketed as ERC Case No. 2017-042RC

- “Section 2** *In addition to the reports in Section 1 of Article VII hereof, the PEMC/MO shall comply with Item 5.2.6, Chapter V of the WESM Rules which requires, among others, the conduct of a Spot Market Audit covering such items as enumerated under Items 5.2.6.1 to 5.2.6.4 of the WESM Rules. The Audit shall also include the actual calculation of NSS or NSD and its allocation, corresponding VAT and interest amounts, as well as the actual billing and collection*
- Section 3** *Such Audit shall be conducted quarterly by a qualified third party auditor, and a Quarterly Report resulting therefrom shall be submitted to the ERC no later than ninety (90) days after the period in review”*

The covered billing months of each quarterly audit is shown below:

Audit Period	Covered Billing Months
First Quarter	26 November 2019 to 25 March 2021
Second Quarter	26 March 2021 to 25 June 2021
Third Quarter	26 June 2021 to 25 September 2021
Fourth Quarter	26 September 2021 to 25 December 2021

The audit for the first quarter commenced on 13 April 2021 while the main deliverables were submitted as follows:

Deliverables	Date of Submission
Inception Report	14 April 2021
Revised Inception Report	21 June 2021
Preliminary Audit Report	28 July 2021

It may be noted that IEMOP prioritized the processing of daily and monthly settlement runs and addressing various issues encountered for the first billing months of the enhanced WESM design and operations in June 2021 (overlapping with the audit activities). Thus, there were delays in IEMOP’s provision of requested data and responses to queries of BDO Roxas Cruz Tagle & Co. which consequently resulted to the extended audit timeline.

The table below shows the latest PAC-approved timeline as of 22 November 2021.

Covered Billing Months	Latest PAC-approved Timeline
26 November 2019 to 25 March 2021	14 April – 17 December 2021
26 March 2021 to 25 June 2021	20 December 2021 – 4 February 2022
26 June 2021 to 25 September 2021	9 February - 25 March 2022

26 September 2021 to 25 December 2021	8 April – 27 May 2022
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The first quarter audit of the NSS/NSD is still in progress with four (4) out of 6 (six) tasks already completed as of December 2021.

Task/Activity	Status
1. Obtain an Understanding of the Rules and Methodology Surrounding NSS/NSD	Done
2. Perform an IT General Controls (ITGC) Review of the NSS/NSD Tool	95%
3. Perform an Understanding and Walkthrough of the Processes Surrounding the NSS/NSD	Done
4a. Perform recalculation of NSS/NSD and its allocation	Done
4b. Perform recalculation of VAT	Done
4c. Inspect copy of preliminary and final statements and settlements	45%
5. Perform variance analysis of NSS/NSD allocation based on 2019 NSS Rules and 2018 NSS/NSD Rules for certain months	Done
6. Inspect copy of reports mandated by 2019 NSS rules	Done

e. Audit of Additional Compensation Tool for MRU Reconciled Intervals

The Additional Compensation Tool for Must-Run Unit Reconciled Intervals (MRU Tool) will be used by the Market Operator for the calculation of additional compensation of generators which were reclassified from “Not MRU” to “MRU”. Accordingly, this MRU Tool is audited by Reyes Tacandong & Co to assess its compliance with the Market Rules and Manuals, and relevant ERC issuances, and specifications.

The audit activities commenced on 12 October 2021 while the Inception Report was submitted by Reyes Tacandong & Co. on 05 November 2021. There was a slight delay in the conduct of the remote audit due to the key audit team members’ connectivity concerns brought about by Typhoon Odette in December 2021.

The audit is expected to be completed by February 2022.

1.1.2. 4th Review of Metering Installations and Arrangements

The 4th Review of Metering Installations and Arrangements (RMIA) is also being handled by the RSM Australia Pty Ltd (RSM) with support from TechSafe Australia, Market Reform and Reyes Tacandong & Co. The Review covers the period 26 June 2016 to 25 December 2019 and involves the following tasks:

- Task 2.1 Procedures/Process and Compliance Review

- Task 2.2 Review of Systems Used by Metering Service Providers
- Task 2.3 Review of Metering Installations (On-site Inspection)

The conduct of 4th RMIA was initially expected to commence in July 2021. However, it was further deferred to January 2022 due to the prevailing international and domestic travel restrictions in Australia and Philippines brought about by the COVID-19 pandemic. Accordingly, advisories were posted on 31 March 2021 and 10 June 2021 in the PEMC website regarding the new target commencement dates for the conduct of 4th RMIA.

The PAC continuously explored possible arrangements to commence the 4th RMIA. In October 2021, the PAC conducted a survey regarding the health and safety protocols being enforced in the sample metering site facilities for the onsite inspection. By the end of 2021, the PAC received responses from 25 out of 47 MSPs or 393 of the 514 (76%) sample metering sites. Most of the metering site facilities observe the minimum health protocol (facemask, faceshield, social distancing, etc.) and require negative RT-PCR test taken within 72 hours prior to the visit. The results of the survey will aid RSM as well as the PAC in preparing necessary arrangements and will give enough lead time for the ocular inspection scheduled in January 2022.

In December 2021, the PAC considered RSM's proposal to remotely conduct Task 2.1 and Task 2.2. To gauge the MSPs capability to accommodate the remote audit, the PAC wrote to the MSPs to confirm the same on 21 December 2021.

The PAC likewise explored the possibility to extend the covered period in review of 4th RMIA to December 2021 to keep the review and results relevant.

1.1.3. PREMS Software Certification Audit and VAPT

The independent software certification audit and Vulnerability Assessment and Penetration Test (VAPT) of the Philippine Renewable Energy Market System (PREMS) commenced in January 2021 and was completed in October 2021. This audit is in compliance with the requirement under Clause 6.2.2 of the Renewable Energy (RE) Market Rules or REM Rules which provides that the REM software shall be certified to have correctly implemented the intent of the REM Rules.

The software certification audit of the PREMS was conducted to review and assess the compliance of the system with relevant laws, issuances, and Market Rules and Manuals, and provide recommendations for improvement of the system. Meanwhile, the VAPT was conducted to ensure security of the system against vulnerabilities and threats to avoid accidental and unlawful data loss, alteration of data and intentional/unintentional disclosure of confidential information.

The software certification audit and VAPT was handled by the Reyes Tacandong & Co. in partnership with Pointwest Technologies Corporation. Upon completion of the audit project, Reyes Tacandong & Co issued the software certificates confirming that the PREMS was implemented correctly in accordance with the REM Rules.

The PAC thereafter submitted its Audit Report to the PEM Board on 20 December 2021. The audit results were presented to the following:

- REM Governance Committee – 23 November 2021
- PEM Board – 24 November 2021
- DOE RPS Composite Team – 31 January 2022

The [PAC Audit Report on the PREMS Software Certification Audit and VAPT](#) is published in the PEMC website for information of all Market Participants.

1.2. Auditee Action Plan Monitoring

The PAC continuously monitored the updates on the development and implementation of Auditee action plans to address the audit recommendations of the completed audits, including updates on the audits in progress during the period.

These updates are incorporated in the Audit Assessment Report which provides the list of market audits supervised by the PAC and the stage of each audit, summarized description of the audit scope, main findings and recommendations, assessment, and reviews finalized during the period in review.

In accordance with its responsibility under the PEM Audit Manual, the PAC submitted to the PEM Board the following Audit Assessment Reports (AAR):

- PAC AAR for Q1 2021 – 30 April 2021
- PAC AAR for Q2 2021 – 30 July 2021
- PAC AAR for Q3 2021 – 31 October 2021

1.3. MO Performance Monitoring

In accordance with the WESM Rules and Market Operator Performance Standards (MOPS) approved by the DOE, the PAC reviewed and approved three (3) quarterly status reports and the annual report on the results of the MO performance monitoring in 2021. The PAC presented the said reports during the regular meetings of the PEM Board, for approval, as shown in the table below.

Monitoring Period	Covered Period	PAC Approval	Presentation to PEM Board
4Q 2020	26 September – 25 December 2020	10 February 2021	24 February 2021
4Q 2020 - 1Q 2021	26 September 2020 – 25 March 2021	12 May 2021	26 May 2021
4Q 2020 - 2Q 2021	26 September 2020 – 25 June 2021	11 August 2021	25 August 2021
Annual 2021	26 September 2020 – 25 September 2021	01 December 2021	15 December 2021

To align the MOPS with the Enhanced WESM Design Operations (EWDO), the PEM Board endorsed to DOE on 01 December 2020 the proposed MO performance metrics under the EWDO. The proposed MO performance metrics were still based on the 2015 MOPS but reflected operational changes under EWDO. This proposed set of metrics was provisionally adopted on 26 June 2021 subject to the official approval of the MOPS Issue 2.0 by the DOE.

The annual report provided the results of the monitoring and assessment of the performance of the MO for the period 26 September 2020 to 25 September 2021 (4Q 2020 - 3Q 2021). The report, however, was divided in two sections, as follows:

- MO Performance Report from 26 September 2020 to 25 June 2021 (4Q 2020 - 2Q 2021) based on the 2015 DOE-approved MOPS, and
- MO Performance Report from 26 June 2021 to 25 September 2021 (3Q 2021) based on the proposed MO Performance Metrics under EWDO

The over-all performance of the MO for the period is Very Satisfactory for both sections. The Quarterly and Annual MO Performance Reports were submitted to the DOE. The [Annual Report](#) is published in the PEMC website.

1.4. Rules Change Proposals

The PAC has proposed several amendments to provisions related to Audit and Performance Monitoring under the WESM Rules, Retail Rules, PEM Audit Manual, and Guidelines Governing the constitution of the PEM Board Committees. The proposal was approved by the PEM Board thru PEM Resolution 2019-10-10 dated 23 April 2019 and was subsequently received by DOE on 14 May 2019.

On a letter dated 21 April 2021, the DOE remanded the PEM Board-approved proposed amendments related to Audit and Performance monitoring due to the need to:

1. Harmonize the term “independent auditor” with WESM Rules Clauses 1.4.6 (a); 1.5.3; and 5.2.6.4 with PEM Audit Market Manual Section 4.1;
2. Review of the responsibilities of the PEM Audit Committee and other WESM Governance Committees in relation to DOE Department Circular DC2020-10-0021 entitled “Adopting Further Amendments to the WESM Rules (Provisions for the Implementation of the Independent Market Operator);
3. Identify the necessary frequency of conduct of various audits in the WESM; and
4. Revisit the proposed changes in the conduct of Central Registration (CRB) Audit considering its cost-effectiveness if included in the scope for Market Operations Audit

The PAC reviewed the remanded proposals and provided response, revisions, and further proposals to comply with the comments made by the DOE as follows:

1. Proposed retaining the original intent of the relevant provisions of the WESM Rules, Retail Rules, PEM Audit Manual, and Guidelines Governing the Constitution of the PEM Board Committees. The PAC further proposed that the option to engage auditors should not be limited to Independent Auditors. The PAC may engage the services of PEMC’s Internal Audit Department (IAD).
2. Stated that DC2020-10-0021 just reflected the renaming of PEM Auditor to PEM Audit Committee. Accordingly, the change from PEM Auditor to PEM Audit Committee was already reflected in the WESM Rules as of 09 November 2020.
3. Proposed to conduct periodic audits considering the results of past audits that indicate that the Market Operator has demonstrated an acceptable level of maturity in its compliance with the WESM rules and related standards. After the first three (3) audits of a particular system or process, the PAC may consider reducing the frequency of the periodic audits based on the Market Operator’s compliance maturity level. The PAC deemed a system or process to be mature when it has consistently exhibit no or minimal audit findings for the past three (3) audits and whose impact do not pose significant operational, legal, or market risks.
4. Stated that the audit of the CRB is included in the MO Audit since currently, the CRB is part of the function of the Market Operator. The CRB is identified as a separate entity under the Retail Rules, thus, the PAC proposed retaining the separate provision pertaining to the audit of CRB in the PEM Audit Manual.

These proposals were presented to the Rules Change Committee (RCC) on 18 June 2021 and was endorsed to the PEM Board on 25 August 2021. On the proposal of having an option to engage the services of PEMC IAD in the conduct of audits, the Board proposed to develop first the guidelines that specifies clearly when the PAC may engage an independent auditor or IAD in conducting an audit. They noted that approving the proposal without these guidelines might bring vagueness in the provision which might result to another amendment of the provisions.

To comply with the directive of the PEM Board, the PAC proposed additional provisions in the WESM Rules and PEM Audit Manual to provide clarity in engaging the services of PEMC IAD in the conduct of audits. The PAC also proposed that the guideline can be similar to the MSC's Catalogue of Market Monitoring and Data Indices (CMMDI) whereby it will be owned and promulgated by the PAC, for RCC and PEM Board's comments only, and will be published for the information of the participants.

The PAC presented the additional provisions, proposed general guidelines, and proposed decision flowchart to the RCC on 17 September 2021 and was endorsed to the PEM Board on 29 September 2021. The PEM Board approved the proposals and were subsequently endorsed to the DOE thru the PEM Board Resolution 2021-41-01 on 29 November 2021. The proposals are currently under DOE's review and approval.

1.5. Meetings and Participation to WESM Events

Regular meetings of the PAC are held every second Wednesday of the month, 9:00 AM onwards, via MS Teams, and may be rescheduled as necessary. The PAC may also call for a special meeting at any time as may be practicable, especially in the events of urgent request for an audit/review or finalization of audit/review findings and recommendations.

The PAC was able to conduct all regular meetings for 2021 in accordance to the agreed upon schedule with all the committee members present in the meetings. The PAC also conducted a special meeting on 09 September 2021 to discuss the PEM Board directive on remanded proposals on audit and performance monitoring and to discuss the updates on the bidding of auditor for the MRU Tool.

The PAC also participated in the following WESM Events:

- Annual General Membership Meeting (AGMM) – 21 July 2021;
- Market Participants' Update – 26 November 2021; and
- WESM Governance Training – 02 December 2021.

2. 2022 COMMITTEE WORK PLAN

The table below provides details of the PAC's program of activities for CY 2022 consistent with the PEMC's Corporate Strategic Plan 2022-2024 which was approved by the PEM Board on 27 January 2022.

PEM AUDIT COMMITTEE WORK PLAN FOR CY 2022						
Legend						
		Target date of completion/conduct				
		Recurring/regular activity				
ACTIVITIES		OUTPUT	2022			
			Q1	Q2	Q3	Q4
POWER						
1	Publish updated and accurate reports and information in PEMC website	Published PAC Audit Reports in accordance with timelines				
2	Participate in WESM events	Attendance to WESM events, as requested or scheduled				
EFFICIENCY						
3	Review Market Operator Performance Reports	PEM Board-approved Quarterly and Annual Performance Reports, as scheduled				
4	Review recommendations for the enhancements of performance metrics for Market Operator <i>Note: Timeline subject to PEMC MOPS-TWG submission/consultation</i>	Inputs to recommendations, as necessary				
5	Review recommendations for the enhancements of performance metrics for MSP <i>Note: Timeline subject to PEMC submission/consultation</i>	Inputs to recommendations, as necessary				
6	Conduct 4th Review of Metering Installations and Arrangements (RMIA) <i>Note: Timeline subject to the agreement on the remote audit of metering sites and availability of local audit partner of the auditor</i>	Submission of PAC Audit Reports and Software Certificates to the Board by				
7	Conduct 8th Market Operations (MO) Audit	Submission of PAC Audit Reports and Software Certificates to the Board by Q4 2022				
8	Monitor compliance of the Auditees to their action plans on audit findings and recommendations, and provide inputs/comments to the action plans, as necessary	Submission of PAC Quarterly Audit Assessment Report to the Board, as scheduled				
9	Conduct of Special Audits:					
9.1.1	Audit of NSS/NSD for Dec 2019 - Dec 2021	Submission of PAC Audit Reports to the Board, as scheduled Submission of External Auditor's Audit Reports to ERC, as scheduled				
9.1.2	Audit of NSS/NSD for Jan 2022 - Sep 2022 <i>Note: Timeline subject to completion of item 9.1.1</i>	Submission of PAC Audit Reports to the Board, as scheduled Submission of External Auditor's Audit Reports to ERC, as scheduled				
9.2	Audit of the Additional Compensation Tool for Must-Run Unit Reconciled Intervals (MRU Tool)	Submission of PAC Audit Reports to the Board by Q1 2022				
9.3	Software Certification Audit of Market System Enhancements <i>Note: Timeline subject to confirmation of IEMOP of readiness for audit of enhancements</i>	Submission of Audit Reports and Software Certificates to the Board				
9.4	Submit Proposed Amendments to the Market Rules and Manuals, as necessary	Submission of proposals to the Rules Change Committee, as necessary				
MARKET						
10	None					
COMPETITION						
11	None					
GOVERNANCE						
12	PAC Annual Report for 2021 and 2022 Work Plan	Submission of PAC 2021 Annual Report and 2022 Work Plan to the Board by Q1 2022, and publication of the same in PEMC website				
13	Revise PAC Internal Rules (subject to promulgation of changes to PEM Audit Manual) <i>Note: Timeline subject to DOE promulgation of the updated PEM Audit Manual</i>	Revised PAC internal rules				
14	WGC Support Performance Evaluation Survey	Submission of quarterly WGC Support Evaluation Survey				
15	Regular conduct of PAC Meetings (every 2nd Wednesday of the month)	Participation during PAC Meetings				

3. MEMBERSHIP

The PAC activities from January to October 2021 were supervised by the former PAC members, namely Prof. Felixberto U. Bustos, Jr. (Chairperson), Mr. Eduardo Alejandro O. Santos, and Mr. Christian M. Orias. Their expertise and many years of dedication, loyalty, and service to PEMC and the WESM as part of the Committee are unparalleled and will always be an important part of the continued success and development of PEMC and the WESM.

After serving for three (3) consecutive terms, the previous PAC members were replaced by the new PAC members composed of the following members:

Chairperson	:	Atty. Maila Lourdes G. de Castro
Members	:	Mr. Francisco Leodegario R. Castro, Jr. Mr. Rossano C. Luga

All the new members were appointed in the PEM Audit Committee (PAC) on 01 November 2021, with Atty. De Castro designated as the PAC Chairperson.

Atty. De Castro and Mr. Castro previously served in the Rules Change Committee (RCC) as independent members since 01 September 2011 to 31 October 2021. While in the RCC, Atty. De Castro was appointed as its chairperson from 28 April 2015 to 31 October 2021.

As its primary support unit, the Market Assessment Group (MAG) provides both technical as well as administrative support to the PAC in performing its functions and obligations under the WESM Rules and applicable WESM Manuals.

4. RESPONSIBILITIES

Pursuant to WESM Rules Clause 1.5.2, the responsibilities of the PEM Auditor² are as follows:

- a. Conduct annual audits of the Market Operator and the settlement system and any other procedures, persons, systems or other matters relevant to the spot market;
- b. Test and check any new items or versions of software provided by the Market Operator for use by WESM members;

² Pursuant to the Guidelines Governing the Constitution of PEM Committees, the PEM Auditor was already changed to constitute as PEM Audit Committee (PAC). The WESM Rules, PEM Audit Market Manual Issue 2.0 and Retail Market Manual are currently being revised in harmony with the existing guidelines.

- c. Review any procedures and practices which are covered by the WESM Rules at the direction of the PEM Board;
- d. Recommend changes to the WESM Rules where the PEM Auditor detects deficiencies as a consequence of an audit, review, test, check or other form of review; and
- e. Publish on the market information website the results of any findings and recommendations under WESM Rules 1.5.1.

The PEM Auditor's main responsibility is summarized in the PEM Audit Market Manual Section 3.1, which states that it has to conduct, on his own or through an appointment of auditor, and to coordinate and supervise effective and independent audits of the operation of the spot market and of the Market Operator, in order to reinforce Trading Participants' confidence in the transparency and adequacy of the operation of the WESM.

Moreover, Section 11.2.2 of the same manual provides that the PEM Auditor shall review the security arrangements and requirements of metering installations.

The monitoring of the MO's performance is in accordance with Clause 1.3.2 of the WESM Rules and Clause 1.4.2 of the Retail Rules and the Market Operator Performance Standards (MOPS) that was approved by the DOE on 06 October 2015. Currently, the PAC provides oversight and approval of the MOP Monitoring results prior to endorsement to the DOE.

Submitted By:

THE PEM AUDIT COMMITTEE

(signed)

ATTY. MAILA LOURDES G. DE CASTRO
Chairperson

(signed)

FRANCISCO LEODEGARIO R. CASTRO, JR.
Member

(signed)

ROSSANO C. LUGA
Member