



PEM Audit Committee 2020 Annual Report

January 2020 to December 2020

MARCH 2020

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



TABLE OF CONTENTS

1. 2020 ACCOMPLISHMENTS	2
1.1. NMMS and CRSS Software Audit	2
1.2. NSS/NSD Tool and CRSS-NSS Module Software Audit	4
1.3. AMS Software Audit	5
1.4. Audit Action Plan Monitoring	6
1.5. 7 th MO Audit and 4 th RMIA	6
1.6. MO Performance Monitoring	10
1.7. MO Performance Standards for Enhanced WESM Design	11
2. 2021 COMMITTEE WORK PLAN	12
3. MEMBERSHIP	13
4. RESPONSIBILITIES	13

EXECUTIVE SUMMARY

The year 2020 was deeply impacted by the COVID-19 pandemic which damaged the world economy with serious consequences affecting corporations, communities, and individuals. Within the context of physical threat, social and physical distancing, as well as public alarm brought about by the pandemic, a lot of corporations had to operate on a work-from-home setup.

In WESM governance viewpoint, the pandemic may have derailed the planned activities set for 2020 but despite the challenges faced, the PEM Audit Committee (PAC) was able 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 WESM. In addition to this mandate, the PAC also reviews the security arrangements and requirement of the WESM and Retail metering installations, in consultation with Metering Service Providers (MSP).

For the independent audits and metering review, 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.

In 2020, the PAC supervised the audit of the New Market Management System (NMMS) and Central Registration and Settlement System (CRSS), and related tools, systems, and applications, the Tools/Systems for Net Settlement Surplus/Net Settlement Deficit (NSS/NSD) calculations and allocations based on the revised NSS Rules, and the enhancements to the Accounts Management System (AMS) of the Independent Market Operator of the Philippines (IEMOP). All audits were conducted remotely starting the implementation of the enhanced community lockdown in March 2020.

Presently, the PAC is supervising the ongoing joint 7th MO Audit and 4th RMIA being conducted remotely by the external auditor RSM Australia Pty Ltd.

The PAC likewise continued to monitor the MO performance in accordance with the Market Operator Performance Standards (MOPS) approved by the Department of Energy (DOE) and provided recommendations in the development of the new MO Performance Metrics for the enhanced WESM design and operations.

This Annual Report covers the activities undertaken and accomplished by the PAC for the year 2020, and presents the planned activities of the PAC for the year 2021.

1. 2020 ACCOMPLISHMENTS

1.1. NMMS and CRSS Software Audit

The PAC continued to supervise the audit of the NMMS and CRSS including enhancements and fixes, and related tools, systems, and applications.

The audits were conducted to validate consistency with the Market Rules and Manuals, particularly the Price Determination Methodology (PDM) Manual, for the enhanced WESM design and operations, and other relevant issuances of the DOE and ERC. These audits were handled by the Intelligent Energy System Pty Ltd (IES), the external auditor commissioned by the PAC.

1.1.1. NMMS Modules Audit

The original scope of the NMMS audit focused on its eight (8) modules. The audit for the original scope was done per module and completed in stages considering the availability of the relevant modules for audit and the iterative process of addressing audit findings and retesting.

As of November 2019, final audit reports and software certificates have already been issued to the seven (7) NMMS modules: C1 – Market Dispatch Optimization Model (MDOM), C2 – Market Projections, C3 – Market Participant Interface, C4 – Compliance Monitoring, C5 – Post Market Run Calculations, C6 – Load Forecasting and C8 – Market Operations Archiving Repository.

To date, the audit of the remaining module, C7 – Financial Transmission Rights, has not commenced in the absence of appropriate policy framework. Also, the audit of the critical NMMS modules and additional enhancements and fixes to the NMMS and CRSS, covered in two (2) supplemental audits, were prioritized in line with the commercial operation of the enhanced WESM design.

1.1.2. First and Second Supplemental Audit

It may be noted that the first CRSS audit¹ completed in January 2018 only covered five (5) critical modules and associated interim tools, and that IEMOP subsequently implemented the enhancements to comply with relevant DOE issuance. The IEMOP likewise implemented enhancements and fixes that affected the previously audited and certified NMMS modules. The PAC reviewed the changes made to the NMMS and CRSS to address the concern raised under the Market Readiness Assessment activity that the patches, workarounds and tweaks introduced into the market systems may invalidate the NMMS and CRSS certification.

The PAC decided during its meetings on 08 and 19 August 2019 to conduct pre-certification audit of the enhancements to ensure the accuracy and compliance of the scheduling, pricing, and settlement calculations in systems.

This first supplemental audit focused on the review of the NMMS enhancements and fixes, CRSS modules and enhancements, and Software/Tools/Applications that are relevant to generation scheduling, dispatch, price calculation or settlement. Said audit was completed in September 2020.

A second supplemental audit was undertaken to comply with the directives of the ERC during the hearing held 06 December 2019, covering the following:

1. Reassessment of Day Ahead Projection (DAP) and Week Ahead Projections (WAP) nodal load forecasts for Luzon and Visayas using 3-months' worth of data (26 October 2019 to 25 January 2020)
2. Assessment of RTD, HAP, DAP, and WAP nodal load forecasts for Mindanao

After the conclusion of the first and second supplemental audits, IES issued audit reports and software certificates indicating the compliance of the system enhancements/fixes/modules, and Software/Tools/Applications with the Market Rules and Manuals, and other relevant issuances of the DOE and ERC for the enhanced WESM design and operations.

The audit reports and software certificates issued by IES for the second supplemental audit were submitted to the ERC on 27 February 2020 (for Luzon and Visayas forecast

¹ First CRSS Audit was reported in PAC Audit Summary Report on the Independent Software Audit of the CRSS (September 2018)

reassessment) and 17 June 2021 (for Mindanao forecast assessment) as part of the compliance to the ERC directive.

The PAC submitted its [Audit Report on the NMMS and CRSS Audit](#) to the PEM Board on 16 October 2020. The said Audit Report, which provides an executive summary of the results of the said audits and the software certification, is published in the PEMC website for information of all Market Participants.

1.1.3. PDM-related Enhancements Audit

On 29 December 2020, the ERC promulgated its 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.

The Decision required action plans to implement the approved PDM including the enhancements in the NMMS and CRSS and conduct of software certification audit for the enhancements.

The audit of the PDM-related enhancements to the NMMS and CRSS was negotiated with IES, the external auditor that previously conducted the NMSS and CRSS audit. The PAC is currently supervising the said audit which is expected to be completed by March 2021.

1.2. NSS/NSD Tool and CRSS-NSS Module Software Audit

The PAC supervised the software audit for the enhancements to the Net Settlement Surplus (NSS)/ Net Settlement Deficit (NSD) Tool for the 1-hour market and CRSS-NSS Module for the 5-minute market as part of the first and second supplemental audit contracts with IES.

The audit was conducted in compliance to the ERC Resolution No. 01, Series of 2018 or 2018 NSS Rules and Resolution No. 07, Series of 2019 or 2019 NSS Rules, which provides the mechanism for the distribution and flow back of the NSS/NSD.

The purpose of the audit of NSS Tool for 1-hour market (Phase 1) was to confirm that the calculations resulting from the NSS Tool are compliant with the 2018 NSS Rules and that the updates and modifications to the NSS Tool are implemented correctly.

Meanwhile, the audit of NSS Tool for 1-hour market (Phase 2) and CRSS-NSS module for 5-minute market aims to verify the accuracy of the calculation of NSS/NSD and its allocation in accordance with the 2019 NSS Rules.

After the conclusion of the audit, IES issued software certificates indicating the compliance of the enhancements with respect to the ERC Resolutions.

The PAC submitted its [Audit Report on the NSS/NSD tool for the 1-hour market and CRSS-NSS module for the 5-minute market](#) to the PEM Board on 16 October 2020. The said Audit Report is published in the PEMC website for information of all Market Participants.

1.3. AMS Software Audit

The PAC also supervised the software certification audit of the enhancements to the accounts management system (AMS) of the IEMOP in October to November 2020.

It may be recalled that in 2018, the AMS was audited by R.G. Manabat & Co., KPMG in the Philippines under the supervision of the PAC, to validate the accuracy of results and its conformance with the Market Rules and Manuals. After the conclusion of the audit in July 2018, KPMG issued a software certificate indicating the compliance of the AMS components with respect to the Market Rules and Manuals.

Following the assumption of IEMOP as Market Operator in September 2018, modifications to the AMS were implemented due to changes to external processes (e.g. updates to the NSS implementation) that interface with the AMS. The IEMOP also implemented modification to the AMS to include a facility to allow partial or full refund of prudential security deposits.

As a result of these enhancements, the AMS was re-audited to identify the compliance of AMS to applicable Market Rules and Manuals and relevant ERC issuances. This activity was likewise handled by the KPMG. Upon the conclusion of the audit, KPMG endorsed to the PAC the software certificate on the compliance of the AMS enhancements with respect to the applicable Market Rules and Manuals, relevant ERC issuances, and software specification.

The PAC thereafter submitted its Audit Report on the AMS Enhancements Audit to the PEM Board on 24 November 2020 and presented the results of the said audit during the PEM Board meeting on 16 December 2020. The [PAC Audit Report on the AMS Enhancements Audit](#) is published in the PEMC website for information of all Market Participants.

1.4. Audit Action Plan Monitoring

In accordance with its responsibility under the PEM Audit Manual, the PAC submitted to the PEM Board on 21 December 2021, its Audit Assessment Report for the period January to November 2020.

The Audit Assessment Report provides the list of market audits supervised by the PAC and the stage of each audit. It also provides the summarized description of the audit scope, main findings and recommendations, assessment, and reviews finalized during the period in review.

The report likewise provides update on the implementation of audit recommendation and committed action plans, which the PAC will continuously monitor as required under the PEM Audit Manual.

1.5. 7th Market Operations Audit and 4th Review of Metering Installations and Arrangements

The PAC is presently supervising the conduct of the joint 7th Market Operations (MO) Audit and 4th Review of Metering Installations and Arrangements (RMIA) covering the period 26 June 2016 to 25 December 2019. The RSM Australia Pty Ltd (RSM) with support from TechSafe Australia, Market Reform and Reyes Tacandong was commissioned for this activity.

1.5.1. Audit Preparatory Activities

With the assistance of the Audit-Technical Working (TWG), composed of representatives from the Technical Committee and PEMC Departments, the PAC carried on with the preparatory activities for the selection of the Third-Party Auditor as follows:

Activity	Schedule
Release of Request for Proposal (RFP) to Shortlisted Eligible Bidders	07 January 2020
Pre-bid Conference on RFP issues/Technical Conference	20 January 2020
Bid Submission /Receipt of Proposals	06 February 2020
First Bid Envelope Opening (Technical Proposal)	07 February 2020

Activity	Schedule
Evaluation of Technical Proposal	10-12 February 2020
PAC approval of Technical Evaluation Result	12 February 2020
Second Bid Envelope Opening (Financial Proposal) and Financial Evaluation	13 February 2020
PAC approval of Technical and Financial Evaluation Result	14 February 2020
Post Qualification	19 February 2020
Presentation to PEM Board on the Result of Bidding Process	26 February 2020
Communication with the Bidders on the Result of the Bidding Process	02 March 2020
Negotiation with the Highest Rated Responsive Bidder	20 and 24 March 2020
Issuance of Notice of Award	27 March 2020
Contract Signing and Execution	28 March to 27 April 2020
Posting of Performance Security	01 May 2020
Notice to Participants on the Commencement of Audit	04 May 2020
Issuance of Notice to Proceed	11 May 2020

1.5.2. Pre-Inception Report Discussion

Upon issuance of Notice to Proceed, a kickoff meeting between RSM and PAC was held on 15 May 2020 which also marked the official commencement of the joint market audit and metering review. The pre-inception activities, consultation meetings with the Auditees², were held on the following dates via videoconference:

Date	Auditee
21 May 2020	MAG and ECO for PEMC systems (MAS and CPEMS) intended for enhanced WESM design
27 May 2020	PEMC for MOPS Validation
28 May 2020	IEMOP as the MO for WESM Operations
29 May 2020	NGCP as the WESM MSP

² PEMC as the MO/CRB for WESM operations and RCOA for the period 26 June 2016 to 25 September 2018; IEMOP as the MO/CRB for WESM operations and RCOA for the period 26 September 2018 to 25 December 2019; and PEMC for market monitoring and assessment, compliance monitoring and Market Operator performance monitoring; and MSPs located in Visayas and Luzon.

Date	Auditee
02 June 2020	Meralco as the largest Retail MSP for Luzon
03 June 2020	VECO as the largest Retail MSP for Visayas
10 June 2020	AEC- smaller size/ with 5-minute capability and with FIT embedded connection

1.5.3. Inception Report Submission

The draft Inception Report for the joint 7th MO Audit and 4th RMIA was submitted on 15 June 2020 and was presented by RSM to PAC and PEMC on 19 June 2020. The parties discussed the work arrangements relating to inception activities in consideration of the impact of COVID-19 pandemic quarantine guidelines to both Philippines and Australia.

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 MO Audit will ensure Auditees' compliance with the relevant market Rules and Procedures, or software and systems review, in relation to the specified 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

Due to the uncertainty around the COVID-19 pandemic and related quarantine and travel restrictions, RSM updated the draft Inception Reports particularly the changes in schedule and remote audit arrangement implications in accordance with the PAC and PEMC Management directives. The following are the notable changes in the updated Inception Report:

- RSM shall undertake the MO Audit remotely during the second half of calendar year 2020 from August to October

- All tasks for the RMIA will be conducted on site and over four main site visits to each of the 47 MSPs during the first half of calendar year 2021, from January to April (provided international and domestic travel restrictions are lifted in both Australia and Philippines).
- All required meetings will be held through videoconference via Microsoft Teams where sharing screens may be necessary.
- Remote audit implications, including COVID-19 protocols for RMIA site inspection, have been included in the Inception Report's detailed risk assessments.

To consult the Auditees, the updated draft Inception Reports were circulated for review and comments, and presented to the Auditees. The activities that were undertaken are as follows:

Activity	Date
PAC clearance on the distribution to parties to be audited of updated Inception Report for their review and comments	17 July 2020
Commenting period (for IEMOP and NGCPMSP) on the draft Inception report	31 July 2020
Presentation of Draft Inception Report to IEMOP	24 July 2020
Presentation of Draft Inception Report to NGCPMSP	27 July 2020
General presentation to other Retail MSPS	28 July 2020
Receipt of All Comments	07 August 2020
Incorporation of Comments in the Inception Report	13 August 2020)

The revised 7th MO Audit Inception Report was submitted by RSM on 10 August 2020 incorporating the Auditees' comments and was presented to and approved by the PAC on 14 August 2020.

Regarding the 4th RMIA Inception Report, RSM provided on 25 August 2020 the revised 4th RMIA Inception Report including the comments that require discussion and confirmation from the PEMC. Then on 05 November 2020, RSM submitted the final version of the report and corresponding checklists. The same was then reviewed by and presented to PAC on 11 November 2020. The PAC subsequently accepted the 4th RMIA Inception Report on 27 November 2020 which stipulated that the fieldwork for metering review will commence in January 2021 subject to COVID-19 travel related restrictions.

1.5.4. 7th Market Operations Audit Proper

Upon PAC's acceptance of the 7th MO Audit Inception Report, the fieldwork has officially begun. Documentary request provision and various audit walkthrough meetings were conducted with the Auditees from September to December 2020. At the same time, RSM also submitted monthly Progress Reports on the following dates:

7th MO Audit Progress Report	Date
First	07 October 2020
Second	06 November 2020
Third	09 December 2020

1.6. 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 2020. 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 2019	26 September – 25 December 2019	14 February 2020	26 February 2020
4Q 2019 - 1Q 2020	26 September 2019 – 25 March 2020	22 May 2020	27 May 2020
4Q 2019 - 2Q 2020	26 September 2019 – 25 June 2020	14 August 2020	26 August 2020
Annual 2020	26 September 2019 – 25 September 2020	11 November 2020	25 November 2020

The over-all performance of the MO for the period 26 September 2019 to 25 September 2020 (4Q 2019 – 3Q 2020) is Very Satisfactory. The Quarterly and Annual MO Performance Reports were submitted to the DOE. The [Annual Report](#) is published in the PEMC website.

1.7. MO Performance Standards for Enhanced WESM Design

The PAC provided recommendations in the development of a new set of performance metrics aimed at monitoring and assessing the performance of the MO under the enhanced WESM operations.

The PAC recommended the principle of a Balanced Scorecard in identifying the key performance measures of the Market Operator. The Balanced Scorecard provides a holistic view of the over-all performance of an organization as this focuses not only on operational performance but also on other major aspects of an organization. The identified strategic measures with the greatest impact to market operations and stakeholders as shown in the table below.

Perspective	Performance Measure
Stakeholder	Stakeholder Satisfaction on Over-all MO Performance
	Stakeholder Satisfaction on Response to and Resolution of Queries, Data Requests and Complaints
Internal Business	Final Settlement Accuracy
	Real-Time Dispatch (RTD) Forecast Accuracy
Innovation	NMMS MPI Availability
	CRSS UI Availability
	Market Intervention Attributable to MO
Financial	Collection Efficiency
	Budget Utilization

Following a series of consultation meetings with IEMOP, the PAC endorsed to the PEM Board on 20 August 2020, its recommendations on the proposed Market Operator performance metrics under the enhanced WESM design and operations.

Upon the direction of the PEM Board, further discussions among the PAC, PEMC and IEMOP ensued to come up with a set of performance metrics agreeable to all parties. Accordingly, the parties agreed to adopt the DOE-approved 2015 performance measures, with proposed minor revisions to align with the functionalities of the enhanced WESM design and operations. The agreement and recommendations were premised primarily on the fact that the systems for the enhanced WESM design are relatively new. Thus, sufficient period to gather actual data on systems and operations' performance was deemed appropriate.

The parties also concurred with the conduct of review during the first two years of implementation of the proposed MO performance metrics. The PEM Board approved the proposed MO performance metrics on 25 November 2020 and was subsequently endorsed to DOE on 02 December 2020.

2. 2021 COMMITTEE WORK PLAN

The table below provides details of the PEM Audit Committee's program of activities as updated for 2020 consistent with the PEMC's Corporate Strategic Plan which was approved by the PEM Board on 31 December 2020.

Legend							
		Target date of completion/conduct					
		Recurring/regular activity					
ACTIVITIES		OUTPUT		2021			
				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 PEMC recommendations for the enhancements of the Market Operator performance standards	Inputs to PEMC recommendations, as necessary					
4	Review Market Operator performance reports	PEM Board-approved Quarterly and Annual Performance Reports, as scheduled					
5	Review PEMC recommendations for the enhancements of performance metrics for MSP	Inputs to PEMC recommendations, as necessary					
6	Conduct Market Operations audit and Review of metering installations and arrangements (Joint)	Submission of PAC Audit Reports and Software Certificates to the Board by 4Q 2021					
7	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					
8	Conduct of Special Audits:						
8.1	Software Certification Audit of Enhancements to NMMS and CRSS (PDM)	Submission of Audit Reports and Software Certificates to the Board by Q1 2021					
8.2	Audit of NSS	Submission of PAC Audit Reports to the Board, as scheduled Submission of External Auditor's Audit Reports to ERC, as scheduled					
8.3	PREMS Software Certification Audit and VAPT	Submission of PAC Audit Reports and Software Certificates to the Board by Q2 2021					
8.4	Submit Proposed Amendments to the Market Rules and Manuals, as necessary	Submission of proposals to the Rules Change Committee					
MARKET							
9	None						
COMPETITION							
10	None						
GOVERNANCE							
11	PAC Annual Report for 2020 and 2021 Work Plan	Submission of PAC 2020 Annual Report and 2021 Work Plan to the Board by Q1 2021, and publication of the same in PEMC website					
12	Review PEMC Corporate and Departmental Strategic Plan for CY 2022	Inputs to Corporate and Departmental Strategic Plan for CY 2022, as necessary/scheduled					
13	Regular conduct of PAC Meetings (every 2nd Wednesday of the month)	Participation during PAC Meetings					

3. MEMBERSHIP

The PEM Audit Committee is currently composed of the following experts in the fields of risk and financial management, information technology, and information systems:

Chairperson	:	Prof. Felixberto U. Bustos, Jr.
Members	:	Mr. Eduardo Alejandro O. Santos Engr. Christian M. Orias

Prof. Bustos was appointed as member of the PEM Audit Committee on 27 April 2007 and was designated as the Chairperson. He was then re-appointed as PAC Chairperson on 30 August 2018. Mr. Santos and Engr. Orias have been appointed to the PAC as members since September 2011 and were re-appointed as PAC members on 30 August 2018.

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 Auditor³ 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;
- c. Review any procedures and practices which are covered by the WESM Rules at the direction of the PEM Board;

³ 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.

- 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 1.3.2.3 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)

Felixberto U. Bustos, Jr.
Chairperson

(signed)

Eduardo Alejandro O. Santos
Member

(signed)

Christian M. Orias
Member