

**Report on the Independent Software Audit of the
Accounts Management System (AMS)**

PEM Audit Committee

September 2018

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FOREWORD

The PEM Audit Committee provides this report detailing in summary the results of the recently-concluded independent audit of the Accounts Management System (AMS). An evaluation of the in-house developed AMS was initiated to provide assurance to WESM Participants on the accuracy and validity of the components of the said system and compliance to all relevant rules on the Settlement Process and Prudential Requirements. This activity was conducted by KPMG R.G. Manabat & Co., the external auditor commissioned by the PAC. After the conclusion of the audit, KPMG issued a software certificate indicating the compliance of the AMS Components with respect to the WESM Rules on the Settlement Process and Prudential Requirement and internal business processes.

The PAC wishes to express its appreciation and gratitude to the PEMC management as well as the auditees, PEMC – Finance and PEMC - Information Security and Technology Department for the cooperation and support they extended to the auditor for the successful completion of this audit project.

For the PEM Audit Committee,

(signed)

Felixberto U. Bustos, Jr.
Chairperson / PEM Auditor

(signed)

Eduardo Alejandro O. Santos
Member

(signed)

Christian M. Orias
Member

I. ABOUT THIS REPORT

This report provides an executive summary of the results of the recently concluded Software Audit of the Accounts Management System (AMS) conducted by KPMG R.G. Manabat & Co. in supervision by the PEM Audit Committee (PAC).

II. EXECUTIVE SUMMARY

KPMG R.G. Manabat & Co. was engaged by the Philippine Electricity Market Corporation (PEMC) to undertake the audit project entitled, "Independent Software Audit of PEMC's Accounts Management System (AMS)".

The wholesale electricity spot market was established through Republic Act No. 9136 also known as the Electric Power Industry Reform Act of 2001 (EPIRA). Said law paved the way for the restructuring of the Philippine electricity industry through various reform measures, one of which was the establishment of WESM. PEMC as WESM's Market Operator, is responsible in administering the dispatch schedule of all facilities, monitoring of the daily trading activities up to overseeing the billing and settlement procedures.

This year, the Philippine Electricity Market Corporation (PEMC) embarked on the development of a software system called the AMS, to facilitate an automated collection and payment system for the wholesale and retail markets. The objective of this project is to undertake an independent audit of the AMS components to validate / test the accuracy of results and conformance with WESM Rules on the Settlement Process and Prudential Requirement and internal business processes.

The audit consisted of nine (9) components. The nine components are as follows:

A. Audit Components:

- 1. CRSS Interface.** To determine the accuracy of WESM Bill exported from CRSS database.
- 2. Masterfile.** To determine if the information contained in the masterfile are reflected properly in the documents and reports generated by AMS.
- 3. WESM Bill Processing.** To determine the accuracy of the WESM Bill generated versus the flat file uploaded in the system and process the WESM Bill based on the participants mapping.
- 4. Collection.** To determine if the collection entered is posted to the specific account of the participant. Likewise, determine if the collection/drawn prudential were tagged properly to the outstanding WESM Bills.

- 5. Payment.** To check if the collection was applied to the recipients in accordance with defined allocation parameters.
- a. Collection allocation per billing period (Non-FIT, FIT and SPA).
 - b. Pay the Accounts Payable (AP) Market Fees from PEMC BPI Bank Account.
 - c. Offsetting from Share in AP – Energy (Non-FIT) the outstanding market fees including Default Interest computation as applicable.
 - d. Offsetting from Share in AP – Energy (FIT) the outstanding market fees including Default Interest computation as applicable.
 - e. Offsetting from Share in AP – Energy (Non-FIT) the Outstanding Energy Balances including Default Interest computation using First-In First-Out (FIFO) method excluding identified special cases (Special Payment Agreement and Regulated Price balances).
 - f. Offsetting from Share in AP – Energy (FIT) the Outstanding Energy Balances including Default Interest computation using First-In First-Out (FIFO) method.
 - g. Offsetting from Share in AP – VAT on Energy (Non-FIT) the Outstanding VAT on Energy Balances using First In First Out (FIFO) method excluding identified special cases (Zero-Rated Participants, Regulated Price, Withholding VAT and Other Scenarios).
 - h. Offsetting from Share in AP – Energy (Non-FIT) the Outstanding VAT on Energy Balances using First In First Out (FIFO) method for Generators Only.
 - i. Deduct Financial Penalties, as applicable.
 - j. Replenish Prudential Security Deposit.
 - k. Process Deferred Payment.
- 6. Reports.** To check if the results of the above processes are accurately reflected in the summary or individual reports of the WESM Member and the related journal entries. Enumerated below are the AMS Reports checked by the auditor:
- ✓ BIR Access to Records
 - ✓ Checks
 - ✓ Collection Summary
 - ✓ Daily Cash Collection Summary
 - ✓ Debit/Credit Memo
 - ✓ Default Notice
 - ✓ Deferred Payment
 - ✓ EFT
 - ✓ Fund Transfer Form
 - ✓ General Ledger
 - Cash in Bank Prudential
 - Cash in Bank Settlement
 - Interest Payable Prudential
 - Interest Payable Settlement
 - ✓ Journal Voucher
 - ✓ MAP and EWT Certificates

Independent Software Audit of PEMC's Accounts Management System (AMS)

- ✓ Official Receipt
 - ✓ Payment Details
 - ✓ Prudential
 - ✓ Request for Payment
 - ✓ Settlement Notice
 - ✓ Statement of Account
 - ✓ Subsidiary Ledger
 - Accounts Receivable
 - Accounts Payable
 - Prudential Per Participant
 - ✓ Summary of Outstanding Balances
 - ✓ Summary for Accounting Books
 - ✓ WESM Bills
 - ✓ WESM Bills Summary
- 7. Special Payment Agreement.** To determine the accuracy of the application of collection from the participants to the recipients based on the agreed contract between the defaulting participant and the generators and the defined allocation procedures.
- 8. Withholding Tax Adjustment.** To determine the accuracy of the adjustment in withholding tax and the related reports.
- 9. Prudential Requirement Management.** To determine the accuracy of processing the Prudential Replenishment, Prudential Interest Build-up and Transfer of Interest to Prudential

B. CONCLUSION

The AMS software components aforementioned above were found to be compliant with the applicable WESM Rules on the Settlement Process and Prudential Requirement and internal business processes as described in the final audit report. In view of this, KPMG R.G. Manabat & Co. has accordingly issued a software certification attesting to the AMS' compliance to all the requirements for the AMS. (Appendix A)



Philippine Electricity Market Corporation

AMS Software Certificate

July 30, 2018

Software Certificate



AMS SOFTWARE CERTIFICATE

Philippine Electricity Market Corporation

18th Floor, Robinsons Equitable Tower

ADB Avenue, Ortigas Center

1600 Pasig City, Philippines

This is to certify that based on the Agreed-Upon Procedures performed on the components listed below, all of the preliminary findings on Account Management System (AMS) have been addressed, which demonstrated compliance with the Wholesale Electricity Spot Market (WESM) rules and internal business process. Listed below were the components tested:

a. CRSS Interface

WESM Bill matched and reflected the details from the CRSS database.

b. Masterfile

Documents and reports generated from AMS properly reflected the data from the Masterfile.

c. WESM Bill Processing

WESM Bill matched and reflected the details from the flat file uploaded in the system and per participants mapping.

d. Collection

Collection entered was posted appropriately to the specific account of participant. The collection / drawn prudential were tagged properly to the outstanding WESM Bills.

e. Payment

Collection was applied to the recipients in accordance with defined allocation parameters.

f. Reports

Results of the CRSS interface, WESM bill processing, collection, and payment processes mentioned above were accurately reflected in the summary or individual reports of the WESM Member and the related journal entries. List of in-scope reports are as follows:



- BIR Access to Records
- Checks
- Collection Summary
- Daily Cash Collection Summary
- Debit/Credit Memo
- Default Notice
- Deferred Payment
- EFT
- Fund Transfer Form
- General Ledger for:
 - Cash in Bank Prudential
 - Cash in Bank Settlement
 - Interest Payable Prudential
 - Interest Payable Settlement
- Journal Voucher
- MAP and EWT Certificate
- Official Receipt
- Payment Details
- Prudential
- Request for Payment
- Settlement Notice
- Statement of Account
- Subsidiary Ledger for:
 - Accounts Receivable
 - Accounts Payable
 - Prudential Per Participant
- Summary of Outstanding Balance
- Summary of Accounting Books
- WESM Bills
- WESM Bills Summary

g. Special Payment Agreement

Collection from the participants were properly applied to the recipients based on the agreed contract between the defaulting participants and the generators and the defined allocation procedures.

h. Withholding Tax Adjustment

Adjustments in withholding tax and related reports were appropriate and accurate.

i. Prudential Requirement Management

Processing of the Prudential Replenishment, Prudential Interest Build-up, and Transfer of Interest to Prudential are accurate.

Please refer to the accompanying Report of Factual Findings for more information

R.G. Manabat & Co.


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30 July 2018

Makati City, Philippines