



# **Report on the Audit of Net Settlement Surplus/Deficit**

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**26 December 2021 to 25 December 2023**

**JUNE 2025**

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

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## FOREWORD

As part of its continuing compliance with Article VII, Section 2 of the Energy Regulatory Commission (ERC) Resolution No. 07 Series of 2019 (“2019 NSS Rules”), the Philippine Electricity Market Corporation (PEMC) engaged the Landicho Abela and Company (LACO) to undertake the Audit of Net Settlement Surplus/Deficit (NSS/NSD) for the period 26 December 2021 to 25 December 2023 under the supervision of the PEM Audit Committee (PAC).

The objective of the audit is to assess the compliance of the Independent Electricity Market Operator (IEMOP) with the Market Rules and Manuals, and directives of the ERC through its communications, orders, and issuances. The audit also identified relevant controls (or lack thereof) and verify the effectiveness of identified controls to prevent, detect and/or correct errors on NSS/NSD.

The NSS/NSD audit was split into two (2) audit periods as follows:

Audit Period	Covered Billing Months	Audit Project Timeline (start and end dates)
CY 2022	26 December 2021 to 25 December 2023	August 2024 to 15 May 2025
CY 2023	26 December 2023 to 25 December 2024	August 2024 to 30 May 2025

The kickoff meeting was conducted on 02 May 2024 and the closing meeting was held on 10 June 2025.

After the conclusion of the audit, LACO submitted reports indicating the results as follows:

- Reportorial Requirement – regulatory reportorial requirements were complied with
- Recalculation of NSS/NSD and its Allocations, Corresponding VAT and Interest Amounts, and Billing and Collection – no exceptions were noted between the results of LACO and IEMOP calculations
- Validation of Billing and Collection - there were observations noted but no instances of non-compliance

The PAC wishes to convey its appreciation and gratitude to the management of PEMC and IEMOP for their continuous cooperation and support which were invaluable in ensuring the successful completion of the audit.

For the PEM Audit Committee,



**FRANCISCO LEODEGARIO R. CASTRO, JR.**  
Chairperson



**CONCEPCION I. TANGLAO**  
Member



**ROSSANO C. LUGA**  
Member

## 1.0 ABOUT THIS REPORT

This Report is prepared in accordance with Section 3.3.2 of the PEM Audit Manual. It contains the objectives, scope, and audit approach for the conduct of the NSS/NSD Audit for the period 26 December 2021 to 25 December 2023 as well as the findings and recommendations identified during the audit.

For this audit, the Independent Auditor conducted/performed analysis per quarter but prepared two (2) separate audit reports covering the audit periods CY 2022 and CY 2023, instead of issuing quarterly reports.

## 2.0 AUDIT HIGHLIGHTS

### 2.1 INTRODUCTION

Net Settlement Surplus (NSS) or Net Settlement Deficit (NSD) is the surplus or deficit remaining after all market transactions have been accounted for. In other words, NSS arises when the total collection from paying Trading Participants exceeds the total remittance to receiving Trading Participants.

Section 3.13.12 of the WESM Rules provides that such settlement surplus is either required to be flowed back to the market participants or may be used by the Market Operator (MO) to establish and support the market for financial transmission rights subject to the approval of the PEM Board. The WESM Rules further states that the calculation and flow back mechanism of NSS/ NSD shall be in accordance with the ERC's issuances.

On 23 October 2019, the ERC issued Resolution No. 07, Series of 2019 Adopting Amendments to the Rules for the Distribution of NSS ("2019 NSS Rules"), which became effective on 25 November 2019. Under Article VII of the 2019 NSS Rules, PEMC/ MO is directed to comply with the provisions of the WESM Rules on the conduct of Spot Market Audit which includes the actual calculation of NSS or NSD and its allocation, corresponding VAT and interest amounts, as well as the actual billing and collection. Further, the 2019 NSS Rules provides that the audit be conducted quarterly by a qualified third-party auditor.

The first NSS/ NSD Audit, covering the period 26 November 2019 to 25 December 2021 and completed on 20 November 2023, as well as the NSS/NSD Audit covering the period 26 December 2021 to 25 December 2023, were conducted separately from the Market Operations Audit, in line with the recommendations formally submitted to the Commission on 31 January 2021.

On 09 December 2024, PEMC requested ERC's approval to include the NSS/NSD Audit covering the period 26 December 2023 to 25 December 2024 in the 9<sup>th</sup> Market Operations Audit to streamline the audit process. In response, the ERC clarified in its letter dated 14 January 2025 that the 2019 NSS Rules do not require the NSS/NSD Audit to be conducted separately. Consequently, subsequent NSS/NSD audits will be included in the Market Operations Audit for better efficiency.

## 2.2 AUDIT SCOPE AND OBJECTIVES

This report covers the audit of NSS/NSD for the period 26 December 2021 to 25 December 2023.

The objective of this audit is to assess the compliance of IEMOP with the Market Rules and Manuals, and directives of the ERC through its communications, orders, and issuances. The audit also identified relevant controls (or lack thereof) and verify the effectiveness of identified controls to prevent, detect and/or correct errors on NSS/NSD.

## 2.3 AUDIT METHODOLOGY

The Independent Auditor performed the following general procedures (“GP”) specifically tailored to meet the objectives indicated in the Terms of Reference, in accordance with the Methodology and Philippine Standards on Related Services 4400, *Engagement to Perform Agreed-Upon Procedures Regarding Financial Information*:

- GP1** Obtain an understanding of relevant laws and manuals.
- GP2** Obtain an understanding of NSS/NSD Tool.
- GP3** Obtain an understanding/ perform walkthrough of the processes related to NSS/ NSD.
- GP4** Recalculate NSS/NSD and its allocation.
- GP5** Assess any inconsistency and non-compliance.
- GP6** Report assessment and findings.

In performing GP4, the Independent Auditor selected “n” trading participants per billing month per quarter to validate consistency of values in the monthly NSS vis-à-vis the NSS transaction allocations in the WESM bills. The sample size ‘n’ is based on the following criteria:

- a. The maximum sample size is 10 per billing month
- b. Amount of NSS/NSD allocation per participant (“n” samples were taken from the highest, median and lowest range based on NSS/NSD allocation to ensure that the sample size includes a diverse range of data points)
- c. Category of trading participant with NSS/NSD allocation, i.e., Customer or Generator

For the covered period, 240 samples were selected.

Shown in the next page are the Compliance and Risk Ratings used by the Independent Auditor for the noted observations.

TABLE 1: COMPLIANCE RATING

Rating		Description
Level 1	<b>1</b>	Evidence of non-compliance with testing criteria. These should be addressed as a matter of high priority.
Level 2	<b>2</b>	Issues which could possibly result in non-compliance with audit criteria, but where no evidence of actual non-compliance was found. However, there is considered to be insufficient formal evidence of controls in place or being actioned in relation to these issues. These should generally be addressed within one to two months.
Level 3	<b>3</b>	Housekeeping matters and opportunities for improving internal controls and procedures relating to electricity market operations. These should be addressed within 3-6 months.

TABLE 2: RISK RATING

		SEVERITY OF IMPACT				
		Insignificant	Minor	Moderate	Major	Catastrophic
PROBABILITY OF OCCURRENCE	Certain	Low	Medium	High	Extreme	Extreme
	Likely	Low	Medium	High	High	Extreme
	Possible	Low	Medium	Medium	High	High
	Unlikely	Low	Low	Medium	Medium	Medium
	Improbably	Low	Low	Low	Low	Low

### Risk Ratings (Cont.)

The ratings have been tailored to reflect the impact on the WESM as follows:

Rating		Description
<b>Extreme</b>		Issues which may have a catastrophic impact on WESM and/or RCOA operations if they are not addressed immediately and require executive action with regular reporting at Board level.
<b>High</b>		Issues which may have a major impact on WESM and/or RCOA operations if they are not addressed as a matter of priority. These issues require senior management attention with regular monitoring and reporting at executive and Board meetings.
<b>Medium</b>		Issues which may have a moderate impact on WESM and/or RCOA operations if they are not addressed within a reasonable timeframe. These issues require management attention with regular ongoing monitoring.
<b>Low</b>		Issues which may have a minor impact on WESM and/or RCOA operations if they are not addressed in the future. These issues are the responsibility of management with regular monitoring and reporting at staff meetings.
<b>Efficiency/ Opportunity</b>		Housekeeping matters and opportunities for improving internal controls and procedures and efficiency relating to WESM and RCOA operations.

The table below refers to the likelihood classification guidelines:

Likelihood	Annual Probability	Frequency of Event	Qualitative Description
<b>Certain</b>	> 70%	3 in 4-year event	Will occur in most circumstances; statistical record of several occurrences
<b>Likely</b>	41% to 70%	1 in 2-year event	Can be expected to occur in most circumstances; statistical record of some occurrence.
<b>Possible</b>	21% to 40%	1 in 3-year event	May occur but not expected in most circumstances; statistical record of at least one occurrence.
<b>Unlikely</b>	1% to 20%	1 in 10-year event	Conceivable but unlikely to occur in any given year; no history of occurrence.
<b>Improbably</b>	< 1%	1 in 100-year event	Will only occur in exceptional circumstances; no history of occurrence.

### Risk Ratings (Cont.)

The table below refers to the consequence classification guidelines:

Severity of Impact/ Consequence	Financial Impact	Reputational Impact	Security Impact	Safety Impact	Infrastructure and Environment
<b>Catastrophic</b>	Very Significant; 2.5% of participant/ Sector turnover	Significant long-term damage to stakeholder confidence; high loss of public confidence.	Will result in violation of power system security standards or other technical standards. Security of confidential information & systems at high risk.	Fatality or permanent injury or widespread impact on public safety.	Permanent long-term affect or irreversible damage caused.
<b>Major</b>	Significant; 1% of participant/ sector turnover	Significant short-term damage to stakeholder confidence; some loss of public confidence	Could result in violation of power system security / technical standards; Security of confidential information & systems at risk.	Serious injury requiring hospitalisation > 5 days or localised impact on public safety	Significant affect, difficult to reverse the impact
<b>Moderate</b>	0.1% of participant/ Sector turnover	Some damage to stakeholder confidence	Under some situations could result in violation of power system security / technical standards. Security of systems / information could be jeopardised in some cases.	Injury requiring < 5 days of hospitalisation or medical treatment	Measurable effect, easily reversible

**Risk Ratings (Cont.)**

Severity of Impact/ Consequence	Financial Impact	Reputational Impact	Security Impact	Safety Impact	Infrastructure and Environment
<b>Minor</b>	Small	Manageable reduction in stakeholder confidence	Unlikely to lead to violation of power system security / technical standards. Unlikely to jeopardise the security of information/systems.	Medical treatment only	Measurable effect, no reverse actions required
<b>Insignificant</b>	Very small	No lasting effects	Does not lead to violation power system security or technical standards; will not result in leakage of confidential information.	First aid	No measurable affect

**3.0 AUDIT FINDINGS AND CONCLUSION****3.1 Reportorial Requirements**

In accordance with Article VII of 2019 NSS Rules, the Independent Auditor validated that the 2022 and 2023 Monthly NSS Reports (MNRs) and the Annual NSS Report (ANRs) were submitted and published in accordance with the regulatory reportorial requirements.

The 2022 and 2023 MNRs were submitted on or before 25<sup>th</sup> of the following month, while the ANRs for both years were submitted on or before May 30<sup>th</sup> of the following year. The MNRs were also published on the market information website, and the ANRs were published on or before May 30<sup>th</sup> of the following year.

### 3.2 Recalculation of NSS/NSD and its Allocations, Corresponding Value-added Tax (VAT) and Interest Amounts, and Billing and Collection

#### **Recalculation of NSS/NSD and its Allocation**

The Independent Auditor performed recalculations of NSS/NSD based on 2019 NSS Rules and compared the results to the schedule of NSS/NSD from the Central Registration and Settlement System (CRSS)-NSS Module.

Based on the Independent Auditor's recalculation, no exceptions were noted on the following and the minimal differences were only due to rounding off:

- Recalculation of Total NSS/NSD
- Recalculation of disaggregation of Total NSS/NSD into line loss and congestion charge

Relatedly, the Independent Auditor also noted the IEMOP's clarification that inputs required for NSS/NSD calculation in the CRSS are automatically fed into the system from other market systems, except for metered quantities or the Gross Energy Settlement Quantity (GESQ) from Metering Services Providers. These market systems including the CRSS have been certified by an Independent Auditor and are governed by the appropriate regulations.

#### **Recalculation of VAT**

The Independent Auditor recalculated the VAT of sampled accounts and compared them to the Final Settlement Data & Transaction Summary. The 12% VAT on VATable sales and no VAT on Non-VATable sales were applied. Based on the recalculation of VAT, no exceptions were found, and the minimal differences were only due to rounding off.

#### **Recalculation of Interest Amounts**

The Independent Auditor noted the IEMOP's explanation that the NSS/NSD calculations and allocation under the 2019 NSS Rules end with the issuance of the WESM bill. Hence, the calculation of interest applies only to defaulting participants which is performed post-NSS calculations and as such, may already be out of scope. The interest imposed covers any overdue trading amount payable by a participant under the WESM Rules which is imposed the Default Interest Rate defined in the WESM Rules. Since the NSS/NSD allocation is automatically deducted from the trading amounts and this is performed in the billing process, so that the billed amount is already net of NSS/NSD, it is no longer part of any overdue energy trading amount.

Based on the results of interest recalculation on overdue trading amounts that have delayed payments, the Independent Auditor noted variances but these are due to the following:

- ERC Directive dated 22 December 2021 on the relaxation of electric bill collection for two (2) months due to Typhoon Odette;

- In accordance with Bangko Sentral ng Pilipinas (BSP) Advisory No. BPU-2022-068 and Philippine Clearing House Corporation (PCHC) Memo Circular No. 3722, clearing operations were suspended due to typhoon Karding, thus 26 September 2022 was considered a Non-Working Day for purposes of the WESM settlement process; and
- The BSP and PCHC suspended all local clearing and settlements for 24 February 2023 in light with the issued Proclamation No.167 by the Office of the President, declaring 24 February 2023 (Friday) as Special Non-Working Holiday. Hence, the due date for January 2023 billing period was moved on 28 February 2023.

### **Validation of Billing and Collection**

The Independent Auditor verified whether billed amounts in the final billing were settled in full based on bank statements provided by IEMOP.

The following observations were noted based on sampled accounts.

#### ***a. Delays in collections of billed amounts, resulting in incomplete or delayed remittances to sellers***

Out of the 288 final billing statements reviewed, 285 remained partially paid, with the following aggregated outstanding balance still to be remitted to sellers:

Audit Period	Aggregate Outstanding Balance
CY 2022	Php392.39M (consisting Php244.85M energy amount and Php147.54M VAT)
CY 2023	Php517.89M (consisting Php306.09M energy amount and Php211.80M VAT)

Amounts were as of their respective settlement dates (i.e., the 26th of the month after the billing period or the next working day if a holiday or weekend). The aging of these outstanding balances has already exceeded 365 days as of 28 February 2025 and 31 March 2025 for the 2022 and 2023 final billing statements reviewed, respectively.

The IEMOP clarified that these unremitted amounts were due to under collections from other buyers. Pursuant to Clause 3.14.7 of the WESM Rules, IEMOP can only remit cleared funds that have been successfully collected. This is also provided in the WESM Manual on Billing and Settlement, Section 5.3.2 which states: “The MO shall pay to each WESM Member in cleared funds the settlement amount (if any) stated to be payable in that WESM member's final statement on the following Working Day after the MO is to be paid under Section 5.3.1 (re: Payment by WESM Member)”.

If there are subsequent collections from buyers, IEMOP allocates these payments through its Accounts Management System (AMS), which was designed to automate the WESM collection and allocation process.

**Risk Rating:**

Under-remittances or delayed remittances can create financial strain for sellers, leading to cash flow issues and operational instability. As a result, some sellers may be unable to fulfill their obligations, such as maintaining consistent supply or covering operational costs, which could ultimately compromise the reliability of the electricity market.

**Compliance Rating:**

No instances of non-compliance were noted. However, the internal controls should be further improved related to monitoring of unremitted amounts to mitigate risks.

**Auditor's Recommendation:**

Ensure timely collection of buyer payments to facilitate prompt remittance to sellers as mandated by the WESM Manual. IEMOP management should assess collectability of these amounts from the buyers. On the other hand, PEMC and IEMOP Management should address the concern of growing uncollected amounts year on year (if any).

**IEMOP's Management Responses:**

The outstanding balance pertains to the uncollected energy amount and VAT from the buyers. The amounts that will be collected after the due date will be remitted to the sellers, together with the corresponding interest, once IEMOP receives payments from the relevant trading participants. Through the Accounts Management System, the accounts of the participants are constantly monitored based on their total outstanding receivables and payables, and such monitoring is used to track the outstanding balances to/from trading participants.

Further and in accordance with the timelines set in the WESM Rules and the Billing and Settlement Manual, IEMOP issues margin call and default notices to notify the trading participants of their outstanding balances. IEMOP also provides a monthly report to the National Electrification Administration (NEA) and Department of Energy (DOE) to inform them of the list of Electric Cooperatives with outstanding obligations in the WESM. IEMOP also follows-up with the trading participants with outstanding obligations through telephone calls and/or meetings.

For the VAT component on the other hand, VAT collections from the buyers in the WESM are remitted to the sellers. The uncollected VAT receivables are due to: (1) the timing

differences in collection considering that the buyers remit only their collected VAT from end-users usually on the 10<sup>th</sup> day of the following month; (2) 5% withholding VAT deduction by government customers; and/or (3) uncollected VAT receivables from end-users of said buyers, which include unpaid accounts and zero-rated end-users.

As of May 2025, based on the sampled trading participants, the uncollected energy and uncollected VAT from the buyers are as follows:

Audit Period	Uncollected Energy Amount	Uncollected VAT
CY 2022	Php11,081.92	Php17.30M
CY 2023	Php2.03M	Php13.42M

**Action Plan:**

IEMOP will continue to implement proper actions in accordance with the WESM Rules and the Billing and Settlement Manual, i.e., issuing margin calls and default notices to concerned trading participants, providing monthly reports to NEA and DOE and following up with the Trading Participants with outstanding obligations through telephone calls and/or meetings.

**Target Date of Implementation:** N/A (Continuing)

**b. Billed amounts not yet collected in full from buyers and no default notice issued**

Out of 337 final billing statements reviewed, 17 remained partially collected, with aggregate outstanding balance still due from buyers:

Audit Period	Aggregate Outstanding Balance
CY 2022	Php79.32M
CY 2023	Php18.54M

Amounts were as of their respective settlement dates (i.e., the 25th of the month after the billing period or the next working day if a holiday or weekend). The aging (from settlement due date) of these outstanding balances has already exceeded 365 days as of 28 February 2025 and 31 March 2025 for the 2022 and 2023 final billing statements reviewed, respectively.

According to IEMOP, these uncollected amounts are related to VAT.

**Risk Rating:**



Delayed collection causes delayed remittance to sellers, impacting cash flow, settlement schedules, and overall market stability.

**Compliance Rating:****3**

No instances of non-compliance were noted.

**Auditor's Recommendation:**

Ensure timely collection of buyer payments as mandated by the WESM Manual. IEMOP management should assess collectability of these amounts from the buyers. On the other hand, PEMC and IEMOP Management should address the concern of growing uncollected amounts year on year (if any).

**IEMOP's Management Responses :**

The outstanding receivables pertain to the VAT amount not yet collected by the Trading Participants from consumers. The unpaid VAT amounts are due to: (1) the timing differences in collection considering that the buyers remit their collected VAT from end-users usually on the 10th day of the following month; (2) 5% withholding VAT deduction by government customers; and/or (3) uncollected VAT receivables from end-users of said buyers, which include unpaid accounts and zero-rated end-users.

As of May 2025, there are no outstanding VAT receivables for the 2022 sampled trading participants. For the 2023 sampled trading participants, the outstanding VAT receivable amounts to Php17.03M.

Further, the unpaid VAT amounts are not subject to default provisions of the WESM Rules and Market Manuals. This is because based on Bureau of Internal Revenue RMC No. 71-2012, Distribution Utilities/Electric Cooperatives are only required to remit the VAT actually collected from end-users.

**Action Plan:** N/A

**Target Date of Implementation:** N/A