Annual Market Operator Performance Report

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26 September 2021 to 25 September 2022

NOVEMBER 2022

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

Executive Summary

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 20 June 2022.

The Independent Market Operator of the Philippines (IEMOP) assumed the market operations functions of the WESM on 26 September 2018 pursuant to the Operating Agreement entered into between the Philippine Electricity Market Corporation (PEMC) and IEMOP on 19 September 2019.

Further, the IEMOP was designated as the Central Registration Body (CRB) for the implementation of the Retail Competition and Open Access (RCOA) pursuant to Department Circular No. 2019-07-0011 issued by the Department of Energy (DOE) dated 29 July 2019. This Circular amended the provisions of Department Circular No. 2022-07-0029, which designated PEMC as the CRB.

This annual report provides the results of the monitoring and assessment of the performance of IEMOP, hereinafter alternatively referred to as the Market Operator (MO), for the period 26 September 2021 to 25 September 2022 (4Q 2021 - 3Q 2022).

The over-all performance of the MO for the period is Very Satisfactory. Provided in the table are performance ratings for the individual measures, summarized as follows: (i) 27 measures with Excellent rating, and (ii) three (5) measures with Very Satisfactory rating.

Philippine Electricity Market Corporation

MO Performance under EWDO for 26 September 2021 to 25 September 2022 (4Q 2021 – 3Q 2022)

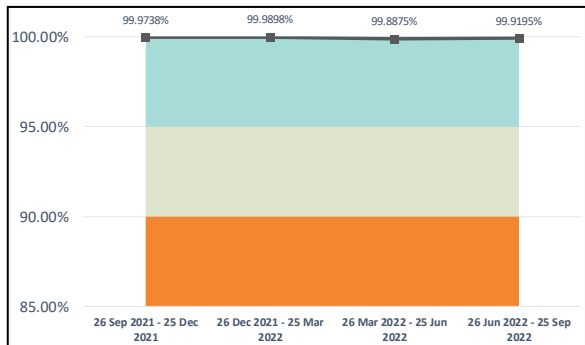| Category	Measure	Weight (%)	Satisfactory Target	Satisfactory Range	Annual Rating for 2022 (26 Sep 2021 to 25 Sep 2022)			Weighted Score
				Satisfactory Range	Actual		Score	Weighted Score
A. IT Systems								
MMS-MPI	Availability	12	99.80%	99.80% ≤x<99.87%	100%	5	Excellent	0.60
Market Information Website	Availability	3	99.50%	99.50% ≤x<99.67%	100%	5	Excellent	0.15
CRSS-UI	Availability	5	99.50%	99.50% ≤x<99.67%	99.9342%	5	Excellent	0.25
B. Market Reports and Data Publications								
	Availability	5	95%	90.00%≤%<95.00%	100%	5	Excellent	0.25
	Timeliness	10	95%	90.00%≤%<95.00%	99.9195%	4	Very Satisfactory	0.40
C. Forecast Accuracy								
RTD Forecast - MAPE	Accuracy (L)	3.75	0.95%	0.9241%≤x≤0.9759%	0.5016%	5	Excellent	0.19
	Accuracy (V)	3.75	1.20%	1.1676%≤x≤1.2324%	0.7615%	5	Excellent	0.19
RTD Forecast - FAR	Accuracy (L)	3.75	97.20%	97.65%≥%≥96.75%	99.9187%	5	Excellent	0.19
	Accuracy (V)	3.75	93.00%	94.33%≥%≥91.67%	98.9691%	5	Excellent	0.19
HAP Forecast - MAPE	Accuracy (L)	2	0.95%	0.9241%≤x≤0.9759%	0.6895%	4	Very Satisfactory	0.08
	Accuracy (V)	2	1.20%	1.1676%≤x≤1.2324%	1.0406%	4	Very Satisfactory	0.08
DAP Forecast - MAPE	Accuracy (L)	2	1.60%	1.45%≤x≤2.32%	1.2318%	4	Very Satisfactory	0.08
	Accuracy (V)	2	2.20%	2.41%≤x≤3.08%	1.5975%	5	Excellent	0.10
D. Dispatch Scheduling and Pricing								
RTD Workflow	Successful Run	2.5	99.75%	99.75% ≤x<99.83%	100%	5	Excellent	0.13
Pricing Errors and Market Re-runs	Timeliness (Prelim)	2	98.50%	98.50% ≤x<99.00%	100%	5	Excellent	0.10
	Timeliness (Final)	2.5	99.50%	99.50% ≤x<99.67%	100%	5	Excellent	0.13
Market Intervention Attributable to MO	Duration	10	≤168	168 ≥ x > 112	57	4	Very Satisfactory	0.40
E. Billing, Settlements and Accounts Management								
Preliminary and Final Settlement Statements	Timeliness	2	98%	98.00% ≤x<98.67%	99.7917%	5	Excellent	0.10
Preliminary Settlement Calculations	Accuracy	2	95%	95.00% ≤x<96.67%	99.9763%	5	Excellent	0.10
Final Settlement Calculations	Accuracy	3	99%	99.00%≤x<99.33%	100%	5	Excellent	0.15
	Frequency	2	≤6	6≥x>4	0	5	Excellent	0.10
Meter Data Error Detection	Timeliness	2	98%	98.00% ≤x<98.67%	99.7440%	5	Excellent	0.10
Monetary Transactions	Efficiency	1	0 amount late	0 amount late	0	5	Excellent	0.05
	Timeliness	1	0 days late	0 days late	0	5	Excellent	0.05
Margin Call	Timeliness	1	95%	95.00% ≤x<96.67%	100%	5	Excellent	0.05
Default Notice	Timeliness	1	0 days late	0 days late	0	5	Excellent	0.05
F. Registration and Customer Relations								
Registration	Timeliness	2	95%	90.00% ≤x<95.00%	100%	5	Excellent	0.10
Customer Switching	Timeliness	1	95%	90.00% ≤x<95.00%	100%	5	Excellent	0.05
Participant Training	Timeliness	2	95%	90.00% ≤x<95.00%	100%	5	Excellent	0.10
	Feedback	1	90%	90.00% ≤x<93.33%	98.0500%	5	Excellent	0.05
Participant Queries and Data Requests	Timeliness	2	95%	95.00% ≤x<96.67%	100%	5	Excellent	0.10
Participant/ Customer Complaints	Timeliness	2	95%	90.00% ≤x<95.00%	100%	5	Excellent	0.10
Total Weighted Score							Very Satisfactory	**4.74**
Over-all Score								**4**

Contents

Annual Market Operator Performance for 2022
(26 September 2021 to 25 September 2022)

Measure	Brief Description	Weight	Target	Performance	Highlights
IT Systems (20%)					
Market Management Systems-Market Participant Interface (MMS-MPI) Availability	Ratio of time that the MMS is functional or accessible to Users through the Market Participant Interface (MPI) to the total time it is required and expected to function or be accessible.	12%	99.80%		• 100% availability *Note: Excluded 11.12 hours downtime (See Appendix A) as provided in the MOPS document list of exclusions under this metric.*
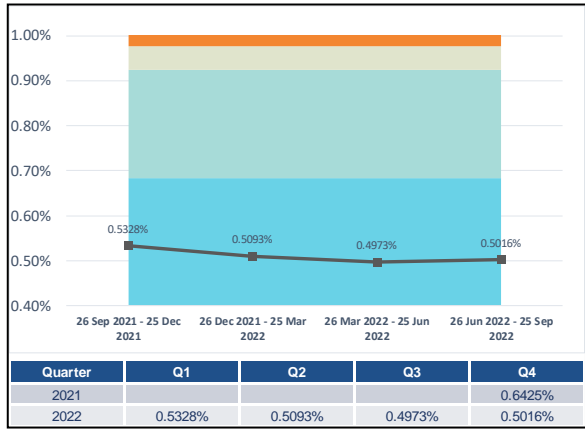
Measure	Brief Description	Weight	Target	Performance	Highlights
Market Information Website Availability	Ratio of time that the PW is functional or accessible to Users to the total time it is required and expected to function or be accessible.	3%	99.50%		• 100% availability *Note: Excluded 11.12 hours downtime (See Appendix A) as provided in the MOPS document list of exclusions under this metric.*
Central Registration and Settlement System – User Interface (CRSS-UI)	Ratio of time that the CRSS is functional or accessible to Users through the User Interface (UI) to the total intervals it is required and expected to function or be accessible.	5%	99.50%		• 99.9342% availability • Considered 5.77 hours as valid downtime *Note: Excluded 11.12 hours downtime (See Appendix A) as provided in the MOPS document list of exclusions under this metric.*

For the Market Information Website Availability chart:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%

For the CRSS-UI chart:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	99.9120%	99.9342%
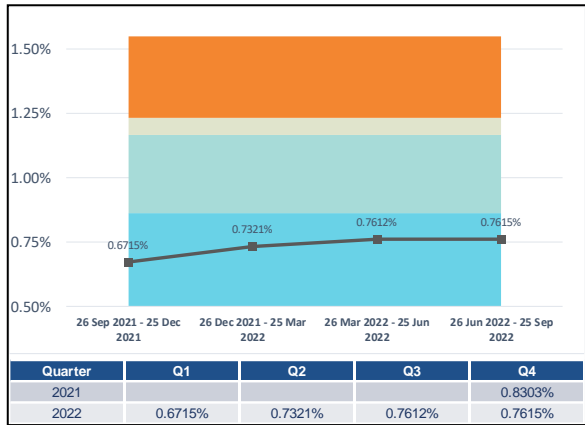
Measure	Brief Description	Weight	Target	Performance	Highlights
Market Reports and Data Publication (15%)					
Availability	Average of the measured publications' availability percentages, which are the ratio of the actual number of published reports/data to the total expected number.	5%	95%		• 100% availability • The finalized list of publications under EWDO was implemented starting January 2022. • 27 of 36 publications rated 100% (See Appendix B for details) • The table below lists nine (9) publications which were not rated or not applicable to be rated for availability during the covered period:

Chart data:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%

Periods: 26 Sep 2021 - 25 Dec 2021 (100.0000%), 26 Dec 2021 - 25 Mar 2022 (100.0000%), 26 Mar 2022 - 25 Jun 2022 (100.0000%), 26 Jun 2022 - 25 Sep 2022 (100.0000%)
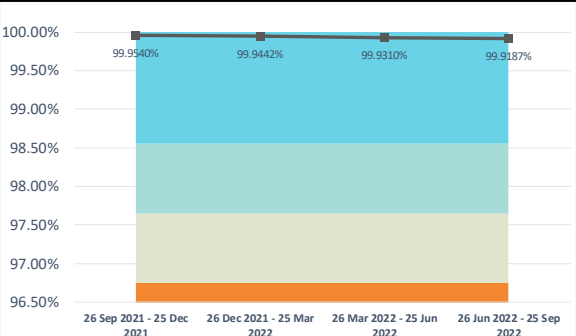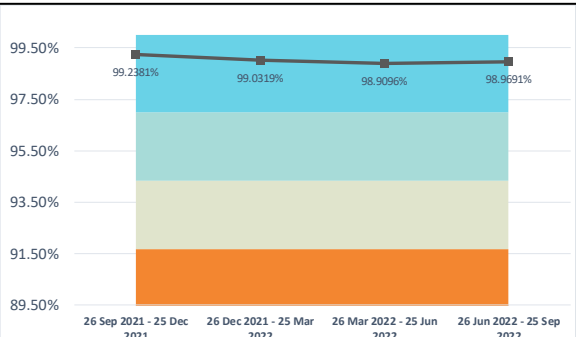
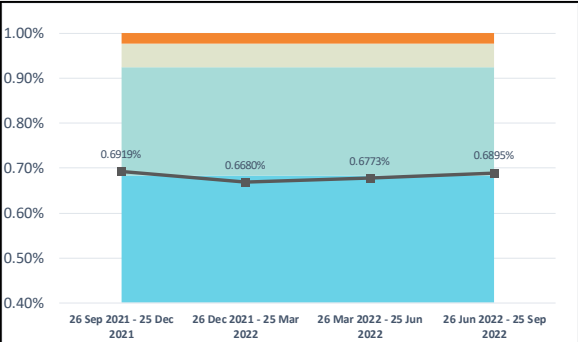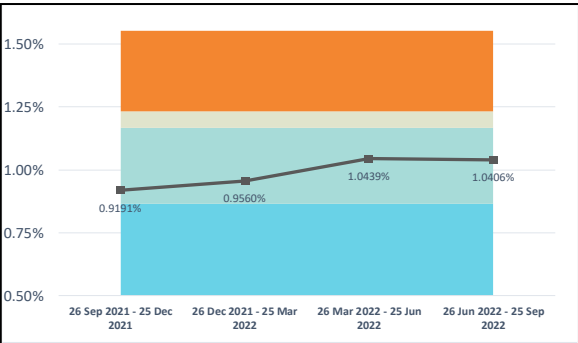| Measure	Brief Description	Weight	Target	Performance	Highlights	
					Required Publication	**Reasons**
					Notice of Deregistered WESM Participants	No deregistered participant
					Hourly Total Registered Pmin of All Scheduled Generating Units	not rated due to zero Pmin applied in EWDO
					Rental Information	FTR-related publication. To be rated upon implementation of FTR
					Registration Fees	discontinued under EWDO
					Nodal Demand Forecasts for RTD, DAP, HAP, and WAP and Reserve Requirement	Already covered in other publications
					Overriding Constraints	
					Dispatch Instruction Report by the System Operator	
					Other system data that will be published includes the following: •Total energy dispatched •Total dispatchable load •Total system losses •Locational marginal prices	
					Registry List of Contestable Customers	

Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness	Average of the measured publications' timeliness percentages, which are the ratio of the actual number of timely published reports/data to the total expected number.	10%	95%		• 99.9195% timeliness • 11 of 36 publications rated 100% (See Appendix B for details) • The table below lists 16 publications which were not rated or not applicable to be rated for timeliness for the covered period:

Chart data:

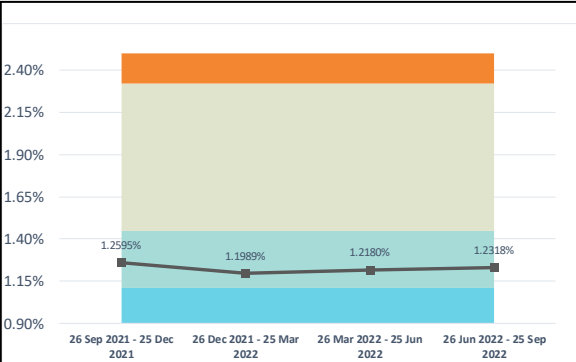| Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	99.9738%	99.9898%	99.8875%	99.9195%

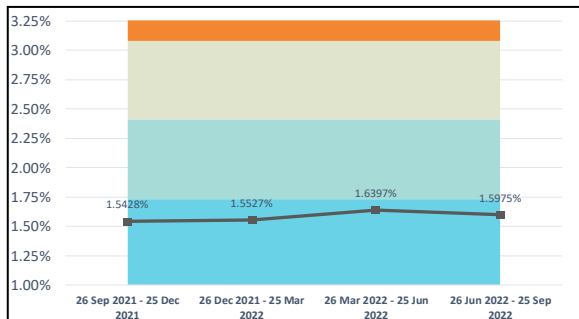| Required Publication	Reasons
Notice of Deregistered WESM Participants	No deregistered participant
Hourly Total Registered Pmin of All Scheduled Generating Units	not rated due to zero Pmin applied in EWDO
Nodal Demand Forecasts for RTD, DAP, HAP, and WAP and Reserve Requirement	Already covered in other publications
Overriding Constraints	
Dispatch Instruction Report by the System Operator	
Other system data that will be published includes the following: •Total energy dispatched •Total dispatchable load •Total system losses •Locational marginal prices	
Rental Information	Not rated for Timeliness
Settlement information to enable a WESM Participant to recreate or independently verify its settlements.	
Registration Fees	
Register of WESM Applicants	
Registry List of Contestable Customers	
Suspension Notice	
Registration Notices: • Notice of Cessation • Confirmation of Re-registration • Notice of Approval of Registration • Notice of Approval of Reconnection	
Contracting Parameters from Suppliers, Local Suppliers and Suppliers of Last Resort	

Measure	Brief Description	Weight	Target	Performance	Highlights	
					• Form for Customer Information for Registration of Contestable Customers • Documents and Information for Registration of Contestable Customers • Documents and information for Registration of Contestable Customers as Direct WESM Member • Documents and Information for Registration of Metering Services Providers • Documents and information for Registration of Suppliers Customer information and the corresponding service fees	

Forecast Accuracy (23%)

Measure	Brief Description	Weight	Target	Performance	Highlights
Real Time Dispatch (RTD) Forecast Mean Absolute Percentage Error (MAPE) for Luzon	Measures how far the RTD forecasted demand is from the actual demand in Luzon. The closer the rating is to 0%, the higher the MAPE rating.	3.75%	0.95%		• 0.5016% MAPE • Considered 104,534 out of 105,120 intervals, with highest absolute forecast error of 12.1458%, in the computation of this measure • Excluded 586 intervals in the calculations due to the following reasons as provided in the MOPS:

Chart data:

Quarter	Q1	Q2	Q3	Q4
2021				0.6425%
2022	0.5328%	0.5093%	0.4973%	0.5016%

Reason for Exclusion	No. of Trading Intervals
Market Intervention	219
Generator Tripping	144
Line Tripping	25
Load Dropping	46
Rain	35
Real-Time Data Issue	117
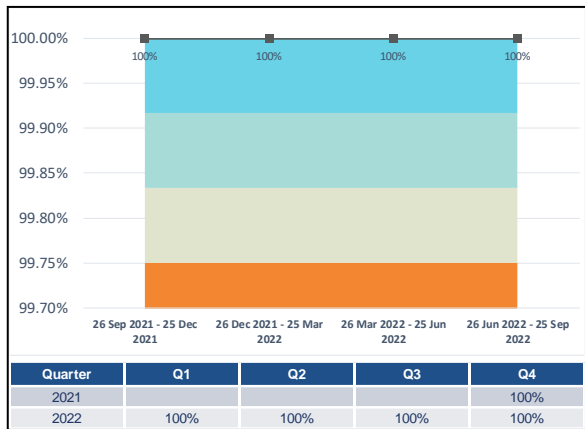
Measure	Brief Description	Weight	Target	Performance	Highlights
RTD Forecast MAPE for Visayas	Measures how far the RTD forecasted demand is from the actual demand in Visayas. The closer the rating is to 0%, the higher the MAPE rating.	3.75%	1.20%		• 0.7615% MAPE • Considered 94,288 out of 105,120 intervals, with maximum absolute forecast error of 14.3010%, in the calculation of this measure • Excluded 10,832 intervals in the calculations due to the following reasons as provided in the MOPS:

Performance chart data:

Quarter	Q1	Q2	Q3	Q4
2021				0.8303%
2022	0.6715%	0.7321%	0.7612%	0.7615%

Reason for Exclusion	No. of Trading Intervals
Market Suspension	9,104
Market Intervention	593
Generator Tripping	152
Line Tripping	15
Load Tripping	141
Load Dropping	671
Rain	10
Real-Time Data Issue	146
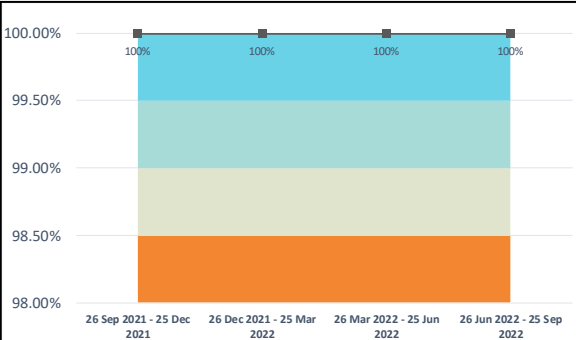
Measure	Brief Description	Weight	Target	Performance	Highlights
RTD Forecast Accuracy Rating (FAR) for Luzon	The percent of intervals with forecast error that is within the MAPE tolerance level of ± 3% in Luzon.	3.75%	97.20%		• 99.9187% forecast accuracy rating • Considered 104,449 out of the 104,534 valid intervals, with forecast error within the +/-3% tolerance level, in the computation • Excluded same intervals as enumerated in the RTD Forecast MAPE for Luzon measure
RTD Forecast Accuracy Rating (FAR) for Visayas	The percent of intervals with forecast error that is within the MAPE tolerance level of ± 3% in Visayas.	3.75%	93.00%		• 98.9691% forecast accuracy rating • Considered 93,316 out of the 94,288 valid intervals, with forecast error within the +/-3% tolerance level, in the calculation • Excluded same intervals as enumerated in the RTD Forecast MAPE for Visayas measure

Luzon chart data:

Quarter	Q1	Q2	Q3	Q4
2021				99.5033%
2022	99.9540%	99.9442%	99.9310%	99.9187%

Visayas chart data:

Quarter	Q1	Q2	Q3	Q4
2021				97.3895%
2022	99.2381%	99.0319%	98.9096%	98.9691%
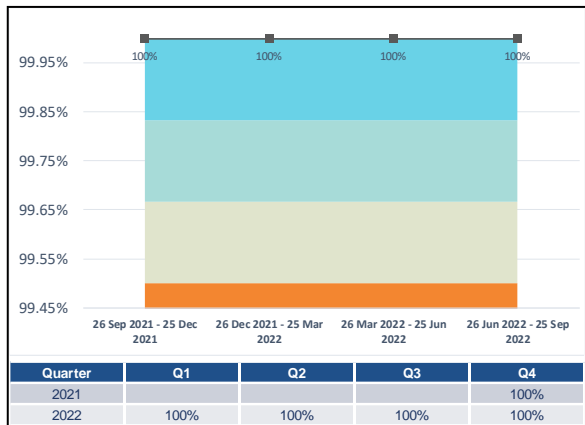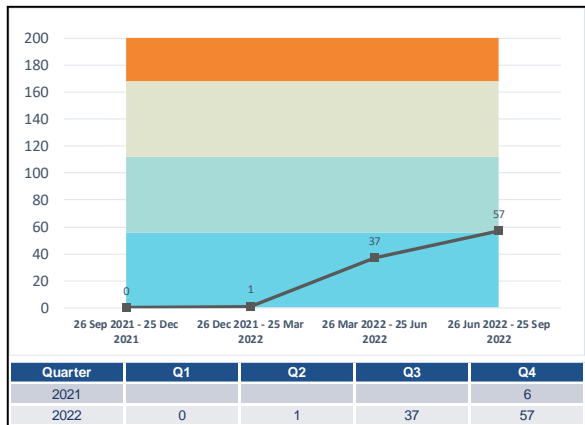
Measure	Brief Description	Weight	Target	Performance	Highlights
Hour Ahead Projection (HAP) Forecast MAPE for Luzon	Measures how far the HAP forecasted demand is from the actual demand in Luzon. The closer the rating is to 0%, the higher the MAPE rating.	2%	0.95%		• 0.6895% MAPE • Considered 1,253,433 out of 1,261,440 intervals, with highest absolute forecast error of 25.1769% in the computation of this measure • Excluded 8,007 intervals in the calculations due to the following reasons as provided in the MOPS:
HAP Forecast MAPE for Visayas	Measures how far the HAP forecasted demand is from the actual demand in Visayas. The closer the rating is to 0%, the higher the MAPE rating.	2%	1.20%		• 1.0406% MAPE • Considered 1,130,650 out of 1,261,440 intervals, with maximum absolute forecast error of 44.4544%, in the calculation of this measure • Excluded 130,790 intervals in the calculations due to the following reasons as provided in the MOPS:

HAP Forecast MAPE for Luzon – Performance chart data

Quarter	Q1	Q2	Q3	Q4
2021				1.0940%
2022	0.6919%	0.6680%	0.6773%	0.6895%

HAP Forecast MAPE for Luzon – Reason for Exclusion

Reason for Exclusion	No. of Trading Intervals
Market Intervention	1,976
Generator Tripping	1,728
Line Tripping	300
Load Dropping	535
Rain	420
Real-Time Data Issue	1,404
Missing	1,644

HAP Forecast MAPE for Visayas – Performance chart data

Quarter	Q1	Q2	Q3	Q4
2021				1.0940%
2022	0.9191%	0.9560%	1.0439%	1.0406%

HAP Forecast MAPE for Visayas – Reason for Exclusion

Reason for Exclusion	No. of Trading Intervals
Market Suspension	108,792
Market Intervention	6,674
Generator Tripping	1,824
Line Tripping	180
Load Tripping	1,692
Load Dropping	8,052

Measure	Brief Description	Weight	Target	Performance	Highlights

					Rain	180
					Real-Time Data Issue	1,752
					Missing	1,644

| Day Ahead Projection (DAP) Forecast MAPE for Luzon | Measures how far the DAP forecasted demand is from the actual demand in Luzon.

The closer the rating is to 0%, the higher the MAPE rating. | 2% | 1.60% | | • 1.2318% MAPE
• Considered 34,682 out of 35,040 intervals, with maximum absolute forecast error of 18.9711%, in the computation
• Excluded 358 intervals in the calculation due to the following reasons as provided in the MOPS: |

Reason for Exclusion	No. of Trading Intervals
Market Intervention	121
Generator Tripping	104
Line Tripping	20
Load Dropping	29
Rain	24
Real-Time Data Issue	48
Missing	12

Chart data:

Quarter	Q1	Q2	Q3	Q4
2021				1.7244%
2022	1.2595%	1.1989%	1.2180%	1.2318%

Chart values: 26 Sep 2021 - 25 Dec 2021: 1.2595%; 26 Dec 2021 - 25 Mar 2022: 1.1989%; 26 Mar 2022 - 25 Jun 2022: 1.2180%; 26 Jun 2022 - 25 Sep 2022: 1.2318%

Measure	Brief Description	Weight	Target	Performance	Highlights
DAP Forecast MAPE for Visayas	Measures how far the DAP forecasted demand is from the actual demand in Visayas. The closer the rating is to 0%, the higher the MAPE rating.	2%	2.20%		• 1.5975% MAPE • Considered 31,010 out of 35,040 intervals, with maximum absolute forecast error of 71.2450%, in the calculation of this measure • Excluded 4,030 intervals in the computation due to the following reasons as provided in the MOPS:

Quarter	Q1	Q2	Q3	Q4
2021				1.7198%
2022	1.5428%	1.5527%	1.6397%	1.5975%

Reason for Exclusion	No. of Trading Intervals
Market Suspension	3,040
Market Intervention	254
Generator Tripping	104
Line Tripping	12
Load Tripping	52
Load Dropping	436
Rain	8
Real-Time Data Issue	112
Missing	12

Dispatch Scheduling and Pricing (17%)

Measure	Brief Description	Weight	Target	Performance	Highlights
RTD (ex-ante) Workflow Successful Run	Percent of RTD market runs with available schedules and completed within the timetable	2.50%	99.75%		• 100% RTD successful runs • Considered 105,044 out of 105,044 RTD runs in the computation of this measure, which excluded 57 intervals under market intervention attributable to the MO
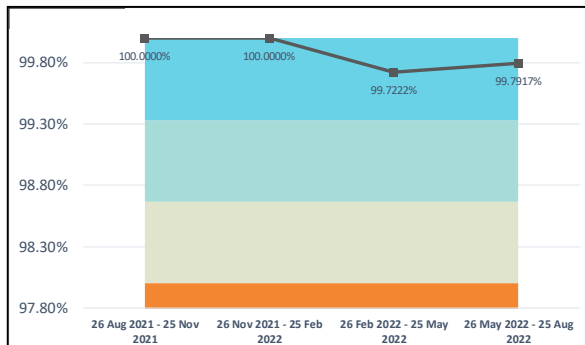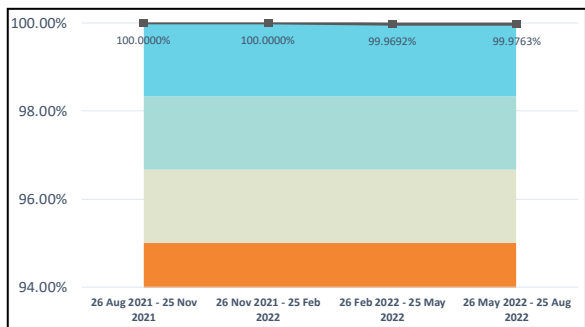
Performance chart data:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%

Measure	Brief Description	Weight	Target	Performance	Highlights
Pricing Errors and Market Re-runs Timeliness (Prior Prelim Statement)	Completion of the validation of intervals that have been tagged with pricing errors and the timely completion of market re-runs prior the preliminary settlement run.	2.00%	98.50%		• 100% timely completion of validation and submission of market prices for settlements • Only intervals with manual market re-run were considered in the calculation as summarized in the table below

Chart data:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%

Highlights table:

Region	RTD-PEN
Luzon	3,152
Visayas	3,256
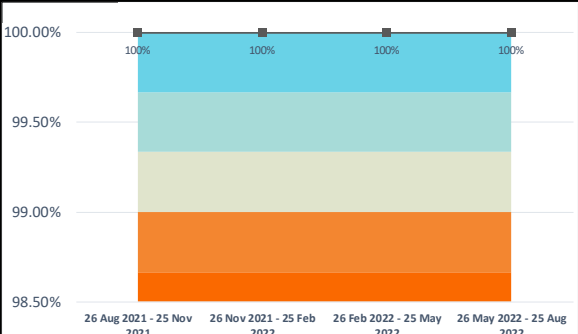
Measure	Brief Description	Weight	Target	Performance	Highlights
Pricing Errors and Market Re-runs Timeliness (Prior Final Statement)	Completion of the validation of intervals that have been tagged with pricing errors and the timely completion of market re-runs prior the final settlement run.	2.5%	99.50%	 **Quarter / Q1 / Q2 / Q3 / Q4** 2021: Q4 100% 2022: Q1 100%, Q2 100%, Q3 100%, Q4 100%	• 100% timely completion of validation and submission of market prices for settlements • Only intervals with manual market re-run were considered in the calculation as summarized in the table below **Region / RTD-PEN** Luzon / 3,151 Visayas / 3,258
Duration of Market Intervention Attributable to MO	Number of trading intervals with Market Intervention that was caused by MO, such as intervention due to software error.	10.00%	≤ 168	 **Quarter / Q1 / Q2 / Q3 / Q4** 2021: Q4 6 2022: Q1 0, Q2 1, Q3 37, Q4 57	• 57 market interventions attributable to the MO **Date / Reason** 20 February 2022 0800H (1 trading interval) / Market Intervention due to due to error in database resulting to non-publishing of market results 20 April 2022 1555H – 1710H (4 trading intervals) / MO initiated Market Intervention due to error in publication of market results 06 May 2022 1215H – 1340H (18 trading intervals) / MO initiated Market Intervention due to error in publication of market results. 08 May 2022 2315H (1 trading interval) / MO initiated Market Intervention due to error in Market Participants
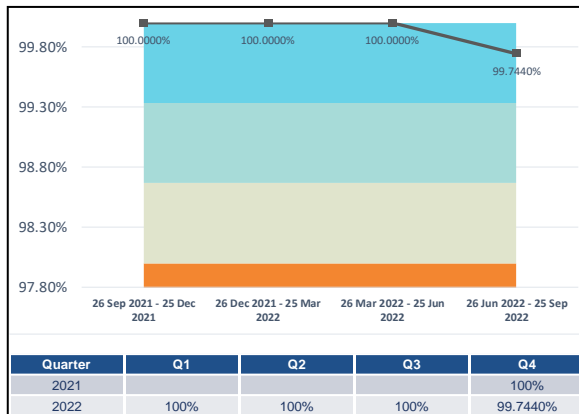
Measure	Brief Description	Weight	Target	Performance	Highlights	
						Interface (MPI) data transfer.
					09 June 2022 2325H (1 trading interval)	MO initiated Market Intervention due to MPI transfer failure.
					17 June 2022 1035H – 1110H (8 trading intervals)	MO initiated Market Intervention due to Market Systems switch over as part of Business Continuity Management System (BCMS) drill.
					18 June 2022 1310H – 1325H (4 trading intervals)	MO initiated Market Intervention due to problem on synchronization of MMS databases.
					30 June 2022 2215H (1 trading interval)	MO-initiated Market Intervention due to workflow error.
					02 July 2022 0025H (1 trading interval)	MO-initiated Market Intervention due to erroneous market results.
					23 July 2022 2200H – 2205H (2 trading intervals)	MO initiated Market Intervention due to a non-responsive MMS database.
					24 August 2022 (1635H – 1645H) (3 trading intervals)	MO-initiated Market Intervention due to the inaccessibility of market results through MPI.
					06 September 2022 1915H (1 trading interval)	MO-initiated Market Intervention due to erroneous results caused by incomplete offers transferred to RTD.
					09 September 2022 0700H (1 trading interval)	MO-initiated Market Intervention due to erroneous results caused by incomplete offers transferred to RTD.

Measure	Brief Description	Weight	Target	Performance	Highlights
					20 September 2022 1000H – 1015H (4 trading intervals): MO-initiated Market Intervention due to error in data transfer of load forecast.
					20 September 2022 1400H – 1425H (6 trading intervals): MO-initiated Market Intervention due to Market Systems Switch-Over from Emergency Back Up Site to its Main Operations Site.
					20 September 2022 1745H (1 trading interval): MO-initiated Market Intervention due to RTD workflow error.

- The Market Interventions (MI) for 16 December 2021, intervals 2215H-2345H (19 intervals) were excluded as MO-attributable since the MI was declared due to the MMS power flow divergence that was brought about by the effects of the weather disturbance Typhoon Odette to the power system, especially in the accuracy of real-time readings of the grid.

- The Market Interventions (MI) for 13 August 2022, intervals 0050H-1240H (143 intervals) were excluded as MO-attributable since the MI was caused by inaccessibility of the MMS due to the unavailability of communication links (burnt fiber cables) caused by the short circuiting of the distribution utility wires of VECO.
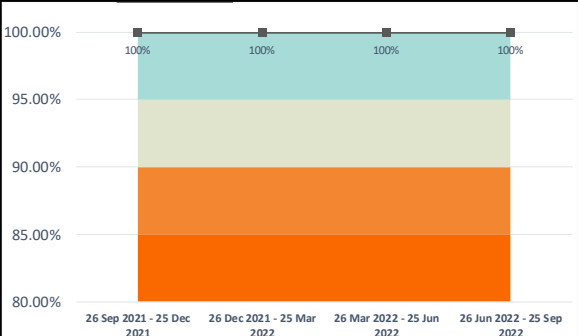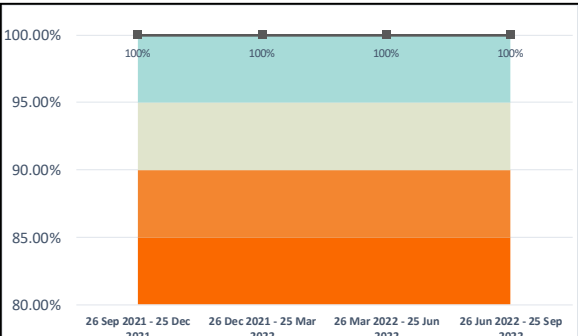
Measure	Brief Description	Weight	Target	Performance	Highlights
					• Other market intervention / market suspension declared in 9,329 trading intervals in Visayas due to the following reasons:

MI/MS Description	No. of Trading Intervals
Market Intervention – SO initiated effective 0950H – 1100H due to blackout in Bohol (02 October 2021)	19
Market Intervention – SO initiated effective 1630H – 1710H due to blackout in Bohol (02 October 2021)	13
Market Intervention – SO initiated effective 0600H – 2050H due to multiple Line Tripping in PANAY and NEGROS (05 October 2021)	183
Market Suspension – ERC declared due to typhoon Odette (16 - 25 December 2021)	2,644
Market Suspension – ERC declared due to typhoon Odette (26 December 2021 to 17 January 2022)	6,460
Market Intervention – SO initiated effective 1815H – 1900H to ease the overloading of Samboan-Amlan 138kV L2 (23 September 2022)	10

Billing, Settlements, and Accounts Management (15%)
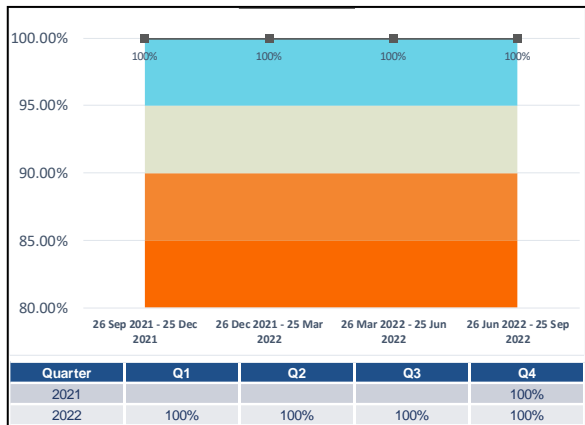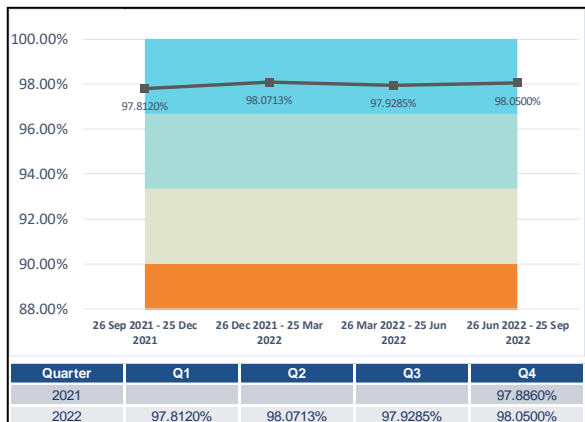
Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness Preliminary and Final Settlement Statements	Percent of timely issuance of both Preliminary Settlement statements within seven (7) business days after the end of each billing period, and Final Settlement statements not later than eighteen (18) business days after the end of each billing period.	2.00%	98%		• 99.7917% timely issuance of settlement statements.
Accuracy of Preliminary Settlement Calculations	Compares the difference between preliminary and the final settlement calculations.	2.00%	95%		• 99.9763% accuracy of Preliminary Settlement Calculations • The score for Q3 2022 was updated from 100% to 99.9692% to reflect the impact of the price changes in the 190th billing month. The updated score was computed using ETA and excluding participants with significant MQ changes more than 1 MW. ETA was used to exclude impact of MQ change in change in TTA resulting to NSS.

Performance chart 1 (Timeliness):
- 26 Aug 2021 - 25 Nov 2021: 100.0000%
- 26 Nov 2021 - 25 Feb 2022: 100.0000%
- 26 Feb 2022 - 25 May 2022: 99.7222%
- 26 May 2022 - 25 Aug 2022: 99.7917%

Quarter	Q1	Q2	Q3	Q4
2021				99.1667%
2022	100%	100%	99.7222%	99.7917%

Performance chart 2 (Accuracy):
- 26 Aug 2021 - 25 Nov 2021: 100.0000%
- 26 Nov 2021 - 25 Feb 2022: 100.0000%
- 26 Feb 2022 - 25 May 2022: 99.9692%
- 26 May 2022 - 25 Aug 2022: 99.9763%

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	99.9692%	99.9763%
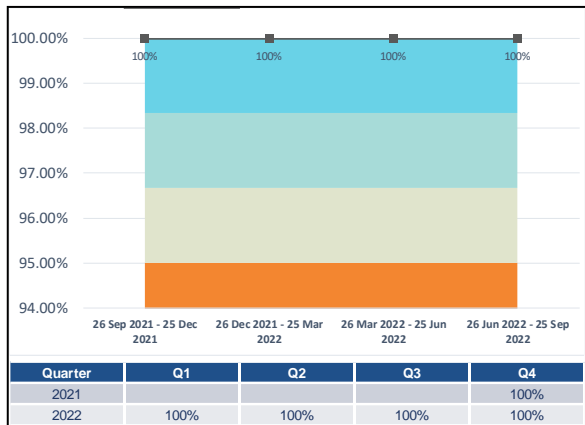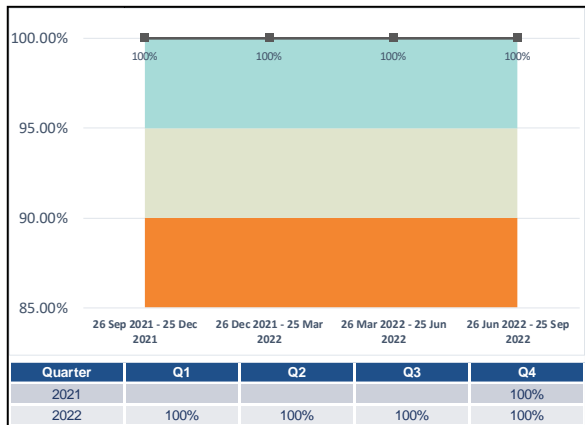
Measure	Brief Description	Weight	Target	Performance	Highlights
Accuracy of Final Settlement Calculations	Compares the difference between the original and last adjusted total trading amounts in the final settlement calculations.	3.00%	99%		• 100% accuracy of Final Settlement Calculations
Frequency of Adjustments to Final Settlement Statements	Number of adjustments to the Final Settlement Statements.	2.00%	6		• No adjustments in Final Statements for September 2021 to August 2022 billing months

Accuracy of Final Settlement Calculations — performance chart:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%

Frequency of Adjustments to Final Settlement Statements — performance chart:

Quarter	Q1	Q2	Q3	Q4
2021				0
2022	0	0	0	0

Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness of Meter Data Error Detection	Percent of timely issuance of Meter Trouble Reports (MTRs)	2.00%	98%		• 99.7440% timeliness in issuance of MTRs • Total number of late MTR issued 3,612
Efficiency of Monetary Transactions	Measures the amount of late monetary remittances. This is an all or nothing measure, which means even 1 peso of late remittance would mean a Poor rating.	1.00%	0 late		• No late monetary transactions • On time remittance to sellers of PhP171.299B WESM payments received by the MO
Timeliness of Monetary Transactions	All monetary transactions must be remitted to WESM members within the next working day from receipt of payments. This is an all or nothing measure, which	1.00%	0 late		

Performance chart detail:

Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	99.7440%

Measure	Brief Description	Weight	Target	Performance	Highlights
	means even 1 day late remittance would mean a Poor rating.				
Timeliness of Margin Call	Measures the timeliness of the MO's issuance of margin calls upon determination that the actual exposure to any WESM member exceeds the WESM member's trading limit.	1.00%	95%		• 100% timely issuance of margin calls • Issued 622 margin calls on time
Timeliness of Default Notice	Measures the timeliness of the MO's issuance of default notice upon non-payment of a WESM member within the month.	1.00%	0 late		• No late issuance of default notices • Issued 631 default notices on time
Registration and Customer Relations (10%)					

Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness of Registration Application Processing	Percent of registration applications processed within 15 working days from the submission of complete requirements	2.00%	95%		• 100% timely processing of registration applications • Processed 123 registration applications (25 WESM applications and 98 RCOA applications)
Timeliness of Customer Switching Requests Processing	Percent of customer switching requests processed on time	1.00%	95%		• 100% timely processing of customer switching requests • Processed 353 customer switching requests

Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness of the Conduct of Participant Trainings	Percent of participant trainings conducted as per schedule	2.00%	95%	 | Quarter	Q1	Q2	Q3	Q4
2021				100%
2022	100%	100%	100%	100%		• Conducted 18 participant trainings on time ○ three (3) Advanced WESM Training on Trading Operations, Governance, and Compliance ○ two (2) Advanced WESM Training on Pricing and Settlement ○ four (4) RCOA Training ○ nine (9) Basic WESM Training
Feedback on Participant Trainings	Average of the participant feedback score on trainings, as gathered from survey forms	1.00%	90%	 | Quarter	Q1	Q2	Q3	Q4
2021				97.8860%
2022	97.8120%	98.0713%	97.9285%	98.0500%		• An average feedback of 98.0500% on the participant trainings

Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness of addressing Participant Queries and Data Requests	Percent of queries and requests that were addressed as per schedule	2.00%	95%	 **Quarter / Q1 / Q2 / Q3 / Q4** 2021 / / / / 100% 2022 / 100% / 100% / 100% / 100%	• 100% rating in addressing participants' data requests and queries • Addressed 716 participants' data requests and queries within the required timeline ○ TOD responded to 682 data requests and queries ○ CSC processed 35 data request and query with payment
Timeliness of resolving Participant/ Customer Complaints	Percent of valid complaints that were resolved as per schedule	2.00%	95%	 **Quarter / Q1 / Q2 / Q3 / Q4** 2021 / / / / 100% 2022 / 100% / 100% / 100% / 100%	• Resolved 100% (57 out of 57) valid complaint received during the monitoring period

Overall Rating (26 September 2021 – 25 September 2022) — **4.74 – Very Satisfactory**

Appendix A. IT System Downtimes

For the period 26 September 2021 to 25 September 2022

System	Date	Time of Incident	Time Resolved	Downtime (in Hours)	Reason/Remarks	Included? (Yes/No)
CRSS-UI	06/21/2022	15:41:00	21:27:00	5.77	CRSS Application Issue. CRSS Application Fixed by Exist	Yes
MMS-MPI Public Website CRSS-UI	08/13/2022	00:49:00	11:56:00	11.12	Fiber Break of the data communication line of ETPI and Globe Telecoms providers caused by burnt VECO pole due to electrical short circuit along Banilad Road, Talamban Cebu City (Related to the 13 August 2022 MI)	No

Appendix B. Publication of Market Reports and Data

For the period 26 September 2021 to 25 September 2022

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
1. Significant Variations Report	WESM Rules 1.3.1.4 and Manual - Guidelines on Significant Variations In and Between Trading Intervals Section 3.1.4 and 3.1.5	(Daily SVR) Public website (Monthly Summary) Public website	100%	5	100%	5
2. Monthly summary reports on the amount of NSS or NSD distributed to each Trading Participant	WESM Rule 3.13.12.3, Price Determination Methodology Section 9.6.1.a, ERC/DOE Directive (ERC Resolution No. 07 Series of 2019), and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	Public website	100%	5	100%	5
3. Review of underlying factors giving rise to any Net Settlement Surplus	WESM Rules 3.13.12.3 b and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	Public website	100%	5	100%	5
4. Market Network Model / Market Trading Nodes / MNM Bus-Oriented Single Line Diagram	WESM Rules 3.2.1, 3.2.2.5, 3.5.3.10, 3.11.1.1, Manual – Market Network Model Section 5.5.1 and 5.5.2, MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	MPI Public website	100%	5	100%	5
5. Week-Ahead Projections (WAP) Results	WESM Rules 3.7.1.1, 3.7.4.7 & 3.7.5.1, Dispatch Protocol, and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	MPI Public Website	100%	5	99.8356%	4
6. Day-Ahead Projection (DAP) Results	WESM Rules 3.7.1.1, 3.7.4.7 & 3.7.5.1, Dispatch Protocol, and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	MPI Public Website	100%	5	99.8549%	4

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
7. Hour-Ahead Projection (HAP) Results	WESM Rules 3.7.1.1, 3.7.4.7 & 3.7.5.1, Dispatch Protocol, and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	MPI Public Website	100%	5	99.9556%	4
8. Real-Time Dispatch (RTD) Results	WESM Rules 3.10.4, 3.10.6, 3.11.1.1, 3.11.1.3 and 4.4.1, Dispatch Protocol, MO Information Disclosure and Confidentiality Manual – Market Information Catalogue, WESM Manual on Constraint Violation Coefficients and Pricing Re-runs	MPI Public Website	100%	5	99.9261%	4
9. Generation Offers and Demand Bids	MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	Public Website	100%	5	99.6347%	4
10. All non-zero constraint violation variables	WESM Rules 3.11.1.1, Manual – Constraint Violation Coefficients (CVC) Sections 4.3.5, MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	Public Website	100%	5	99.7260%	4
11. Hourly Total Registered Pmin of All Scheduled Generating Units	Dispatch Protocol (DP) - Bids and Offers	not rated due to zero Pmin applied in EWDO	Not rated	Not rated	Not rated	Not rated
12. Nodal Demand Forecasts for RTD, DAP, HAP, and WAP and Reserve Requirement	WESM Rules 3.11.1.1 Dispatch Protocol - Demand Forecasting, and MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	rated under nos. 5, 6, 7, and 8	Not rated	Not rated	Not rated	Not rated
13. SO Post Dispatch Reports	Dispatch Protocol - Post Dispatch Report	Public website	100%	5	100%	5
14. WESM Merit Order Table (WMOT)	Dispatch Protocol 10.7.2	Public website	100%	5	100%	5

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
15. New Metering Installation of the MSP / Metering Masterfile	Manual - Metering Standards and Procedures	Public website	100%	5	100%	5
16. Summary of the pricing error notices issued for that trading day	WESM Rules 3.11.1.1, Manual – Constraint Violation Coefficients (CVC) Sections 6.4.1, Manual – Criteria for Guidelines for the Issuance of Pricing Error Notices and Conduct of Market Re-run in Clause 9.4, MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	(MPCR) Public website (DIPCEF) Public website	100%	5	100%	5
17. Complete list of the pricing errors that occurred during the billing period and results of the manual pricing re-run, including the resulting market prices.	WESM Manual on Constraint Violation Coefficients and Pricing Re-runs	IEMOP website / Public	100%	5	100%	5
18. Rental Information	WESM Rule 3.12.2	FTR-related publication. To be rated upon FTR implementation	Not rated	Not rated	Not rated	Not rated
19. Overriding Constraints	WESM Rules 3.5.13.1	Rated under no. 13	Not rated	Not rated	Not rated	Not rated
20. Over-riding Constraints, Contingency Limits and outage schedules	Dispatch Protocol 7.11, MO Information Disclosure and Confidentiality Manual – Market Information Catalogue, and Transmission System Information provided by the System Operator to the Market Operator	Public Website	100%	5	99.7260%	4
21. Real-Time System Condition or System Operator Advisory on Transmission System conditions		Public website	100%	5	99.7260%	4
22. Dispatch Instruction Report by the System Operator		Rated under no. 13	Not rated	Not rated	Not rated	Not rated

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
23. Energy and Reserve Prices	MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	(AP) Public website (LWAP/GWAP) Public website (MP) Public website (STLPRICE) Public website	100%	5	99.8120%	4
24. Settlement information to enable a WESM Participant to recreate or independently verify its settlements.	WESM Rules 3.11.1.1	CRSS	100%	5	Not rated	Not rated
25. Unpaid settlement amounts as of month-end, specific WESM member that failed to pay settlement amounts as of month-end	MO Information Disclosure and Confidentiality Manual – Market Information Catalogue	Public website (Publication to start for January 2022 billing month)	100%	5	100%	5
26. Other system data that will be published includes the following: • Total energy dispatched • Total dispatchable load • Total system losses • Locational marginal prices	Dispatch Protocol 9.7.3	Rated under no. 8	Not rated	Not rated	Not rated	Not rated
27. Registration Fees	WESM Rules 2.9.2 & 2.5.1	discontinued under EWDO	Not rated	Not rated	Not rated	Not rated
28. Register of Market Participants	WESM Rule 1.3.1.1 (f), WESM Rules 5.2.3 (a), (c) and (d), WESM Rule 2.5.7, MO	(WESM Participants)	100%	5	100%	5

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
	Information Disclosure and Confidentiality Manual – Market Information Catalogue, Manual - Registration, Suspension and De-registration Criteria and Procedures Sections 2.11.1.1, 2.11.1.4, 5.2.3.2, 5.7.3.4	Public website (Retail Market Participants) Public website				
29. Register of all Applicants	WESM Rules 2.5.7, WESM Rules 5.2.3 (a) and (b), Du Manual - Registration Suspension and De-registration Criteria and Procedures 2.11.1.1 , 2.11.1.2 and 2.11.1.3	(WESM Applicants) Public website (Retail Market Applicants) Public website	100%	5	Not rated	Not rated
30. Registry List of Contestable Customers	Disclosure and Confidentiality of Contestable Customer Information Sec 6.1	IEMOP website / Public	Not rated	Not rated	Not rated	Not rated
31. Suspension Notice	WESM Rules 3.15.8.1 and 3.15.8.6, Manual – Billing and Settlement Sections, 8.1.1(b), 8.1.1(e), 8.1.2(b) and Appendix I, Manual - Registration, Suspension and De-registration Criteria and Procedures Sections 2.11.1.5, 4.3.1.1 and 4.5.2	Public website Newspaper	100%	5	Not rated	Not rated
32. Notice of De-registration/De-registration Notice	WESM Rules 4.7.5, 3.15.8.6 (b), Manual - Registration, Suspension and De-registration Criteria and Procedures Sections 2.11.1.4 and 5.4.2.4, Manual - Billing and Settlement Section 8.1.1(e)	Public website	n/a	n/a	n/a	n/a
33. Registration Notices	WESM Rules Clause 2.6.3, Manual - Registration, Suspension and De-registration Criteria and Procedures Section 5.2.3.1, 5.7.3.4	Public website	100%	5	Not rated	Not rated
34. Contracting Parameters from Suppliers, Local Suppliers and Suppliers of Last Resort	Retail Manual - Registration Criteria and Procedures Section II.2.2.3	Public website	100%	5	Not rated	Not rated

Publication	Rules/Manual References	Location / Remarks	4Q 2021 – 3Q 2022			
			Availability		Timeliness	
			Score	Rating	Score	Rating
35. Retail Registration Forms and Templates Form for Customer Information for Registration of Contestable Customers • Documents and Information for Registration of Contestable Customers • Documents and information for Registration of Contestable Customers as Direct WESM Member • Documents and Information for Registration of Metering Services Providers Retail Registration Forms and Templates • Documents and information for Registration of Suppliers	Retail Rules Clause 2.3.1.2, Retail Manual - Registration Criteria and Procedures Sections II.2.2.1 II.3.2.1, II.3.3.1, II.3.3.2, II.4.2.2 and II.5.2	Public website	100%	5	Not rated	Not rated
36. Customer information and the corresponding service fees	Retail Rules Clause 2.3.2	Public website	100%	5	Not rated	Not rated