

Annual Market Operator Performance Report

26 September 2020 to 25 September 2021

DECEMBER 2021

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

Executive Summary

The monitoring of the Market Operator performance is in accordance with Clause 1.3.2 of the WESM Rules and Clause 1.4.2 of the Retail Rules and the Market Operator Performance Standards (MOPS) that was approved by the DOE on 06 October 2015.

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. 2012-02-0002, which designated PEMC as the CRB.

The PEM Board endorsed to DOE on 01 December 2020 the proposed MO performance metrics under the Enhanced WESM Design Operations (EWDO). The proposed MO performance metrics were still based on the 2015 MOPS but reflected operational changes under EWDO.

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 2020 to 25 September 2021 (4Q 2020 - 3Q 2021). This report, however, will be divided in two sections, as follows:

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

The over-all performance of the MO for the period is Very Satisfactory for both sections. Provided in the tables are performance ratings for the individual measures, summarized as follows:

- MO Performance from 26 September 2020 to 25 June 2021 – 25 measures with Excellent rating, and five (5) measures with Very Satisfactory rating.
- MO Performance from 26 June 2021 to 25 September 2021 - 28 measures with Excellent rating, three (3) measures with Very Satisfactory rating, and one (1) measure with Satisfactory rating.

**MO Performance Report from 26 September 2020 to 25 June 2021
(4Q 2020 - 2Q 2021)**

Category	Measure	Weight (%)	Satisfactory Range	Rating (26 Sep 2020 to 25 Jun 2021)		
				Actual	Score	
A. IT Systems						
Market Management Systems	Availability	15	99.80% ≤ x < 99.87%	99.9512%	5	Excellent
WESM Website	Availability	5	99.50% ≤ x < 99.67%	99.9247%	5	Excellent
B. Market Reports and Data Publications						
	Availability	5	90% ≤ x < 95%	99.9627%	4	Very Satisfactory
	Timeliness	10	90% ≤ x < 95%	99.8223%	4	Very Satisfactory
C. Forecast Accuracy						
RTD Forecast - MAPE	Accuracy (L)	3.75	0.92% ≤ x ≤ 0.98%	0.7374%	4	Very Satisfactory
	Accuracy (V)	3.75	1.17% ≤ x ≤ 1.23%	0.8889%	4	Very Satisfactory
RTD Forecast - FAR	Accuracy (L)	3.75	97.65% ≥ x ≥ 96.75%	99.0006%	5	Excellent
	Accuracy (V)	3.75	94.33% ≥ x ≥ 91.67%	97.2930%	5	Excellent
DAP Forecast - MAPE	Accuracy (L)	2.5	1.45% < x < 2.32%	1.2200%	4	Very Satisfactory
	Accuracy (V)	2.5	2.41% < x < 3.08%	1.4852%	5	Excellent
D. Dispatch Scheduling and Pricing						
RTD Workflow	Successful Run	2.5	99.75% ≤ x < 99.83%	100%	5	Excellent
RTX Workflow	Successful Run	2.5	99.75% ≤ x < 99.83%	99.9847%	5	Excellent
Pricing Errors and Market Re-runs	Timeliness (Prelim)	2	98.50% < x < 99.00%	100%	5	Excellent
	Timeliness (Final)	3	99.50% ≤ x < 99.67%	100%	5	Excellent
Market Intervention Attributable to MO	Duration	10	14 ≥ x > 9	4	5	Excellent
E. Billing, Settlements and Accounts Management						
Preliminary and Final Settlement Statements	Timeliness	2	98% ≤ x < 98.67%	100%	5	Excellent
Preliminary Settlement Calculations	Accuracy	2	95% ≤ x < 96.67%	98.6093%	5	Excellent
Final Settlement Calculations	Accuracy	3	99% ≤ x < 99.33%	100%	5	Excellent
	Frequency	2	6 ≥ x > 4	0	5	Excellent
Meter Data Error Detection	Timeliness	2	98% ≤ x < 98.67%	100%	5	Excellent
Monetary Transactions	Efficiency	1	0 amount late	0	5	Excellent
	Timeliness	1	0 days late	0	5	Excellent
Margin Call	Timeliness	1	95% ≤ x < 96.67%	100%	5	Excellent
Default Notice	Timeliness	1	0 days late	0	5	Excellent
F. Registration and Customer Relations						
Registration	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
Customer Switching	Timeliness	1	90% ≤ x < 95%	100%	5	Excellent
Participant Training	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
	Feedback	1	90% ≤ x < 93.33%	97.7553%	5	Excellent
Participant Queries and Data Requests	Timeliness	2	95% ≤ x < 96.67%	100%	5	Excellent
Participant/ Customer Complaints	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
Total Weighted Score				4.75		Very Satisfactory
Over-all Score for 26 September 2020 to 25 June 2021 (4Q 2020 – 2Q 2021)				4		

MO Performance Report under EWDO for 26 June 2021 to 25 September 2021 (3Q 2021)

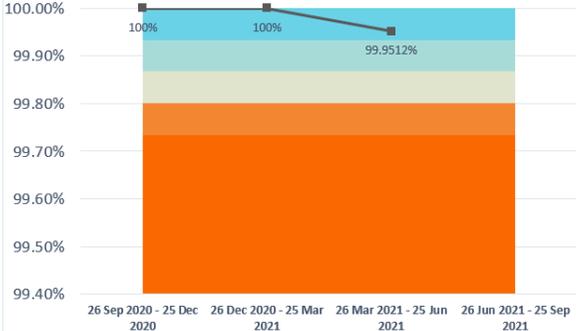
Category	Measure	Weight (%)	Satisfactory Range	Rating (26 Jun 2021 to 25 Sep 2021)		
				Actual	Score	
A. IT Systems						
Market Management Systems	Availability	12	99.80%≤x<99.87%	100%	5	Excellent
WESM Website	Availability	3	99.50%≤x<99.67%	100%	5	Excellent
CRSS-UI	Availability	5	99.50%≤x<99.67%	100%	5	Excellent
B. Market Reports and Data Publications						
	Availability	5	90% ≤ x < 95%	100%	5	Excellent
	Timeliness	10	90% ≤ x < 95%	100%	5	Excellent
C. Forecast Accuracy						
RTD Forecast - MAPE	Accuracy (L)	3.75	0.92%≤ x ≤0.98%	0.6425%	5	Excellent
	Accuracy (V)	3.75	1.17%≤ x ≤1.23%	0.8303%	5	Excellent
RTD Forecast - FAR	Accuracy (L)	3.75	97.65%>=x>=96.75%	99.5033%	5	Excellent
	Accuracy (V)	3.75	94.33%>=x>=91.67%	97.3895%	5	Excellent
HAP Forecast - MAPE	Accuracy (L)	2	0.92%≤ x ≤0.98%	0.9048%	4	Very Satisfactory
	Accuracy (V)	2	1.17%≤ x ≤1.23%	1.0940%	4	Very Satisfactory
DAP Forecast - MAPE	Accuracy (L)	2	1.45%< x <2.32%	1.7244%	3	Satisfactory
	Accuracy (V)	2	2.41%< x <3.08%	1.7198%	5	Excellent
D. Dispatch Scheduling and Pricing						
RTD Workflow	Successful Run	2.5	99.75%≤x<99.83%	100%	5	Excellent
Pricing Errors and Market Re-runs	Timeliness (Prelim)	2	98.50% <x<99.00%	100%	5	Excellent
	Timeliness (Final)	2.5	99.50%≤x<99.67%	100%	5	Excellent
Market Intervention Attributable to MO	Duration	10	168>=x>112	6	5	Excellent
E. Billing, Settlements and Accounts Management						
Preliminary and Final Settlement Statements	Timeliness	2	98%≤x<98.67%	99.1667%	4	Very Satisfactory
Preliminary Settlement Calculations	Accuracy	2	95%≤x<96.67%	100%	5	Excellent
Final Settlement Calculations	Accuracy	3	99%≤x<99.33%	100%	5	Excellent
	Frequency	2	6 ≥ x > 4	0	5	Excellent
Meter Data Error Detection	Timeliness	2	98%≤x<98.67%	100%	5	Excellent
Monetary Transactions	Efficiency	1	0 amount late	0	5	Excellent
	Timeliness	1	0 days late	0	5	Excellent
Margin Call	Timeliness	1	95%≤x<96.67%	100%	5	Excellent
Default Notice	Timeliness	1	0 days late	0	5	Excellent
F. Registration and Customer Relations						
Registration	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
Customer Switching	Timeliness	1	90% ≤ x < 95%	100%	5	Excellent
Participant Training	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
	Feedback	1	90%≤x<93.33%	97.8860%	5	Excellent
Participant Queries and Data Requests	Timeliness	2	95%≤x<96.67%	100%	5	Excellent
Participant/ Customer Complaints	Timeliness	2	90% ≤ x < 95%	100%	5	Excellent
Total Weighted Score				4.90		Very Satisfactory
Over-all Score for 26 June 2021 to 25 September 2021 (3Q 2021)				4		

Contents

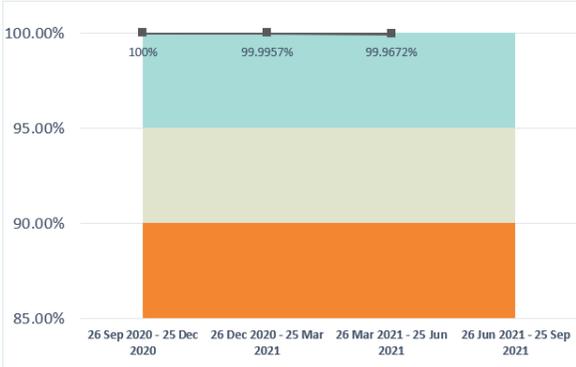
I. Market Operator Performance from 26 September 2020 to 25 June 2021	
IT Systems	
Availability of Market Management Systems	1
Availability of WESM Website	2
Market Reports and Data Publication	
Availability	3
Timeliness	4
Forecast Accuracy	
RTD Forecast - MAPE	5
RTD Forecast - FAR	7
DAP Forecast - MAPE	9
Dispatch Scheduling and Pricing	
RTD and RTX Workflow Successful Runs	10
Timeliness of Pricing Errors and Market Re-runs	12
Duration of Market Intervention Attributable to MO	14
Billing, Settlements and Accounts Management	
Timeliness of Preliminary and Final Settlement Statements	15
Accuracy of Preliminary Settlement Calculations	16
Accuracy of Final Settlement Calculations	17
Timeliness of Meter Data Error Detection	18
Efficiency and Timeliness of Monetary Transactions	18
Timeliness of Margin Call Issuance	19
Timeliness of Default Notice Issuance	19
Registration and Customer Relations	
Timeliness of Registration Processing	20
Timeliness of Customer Switching	20
Participant Training	20
Timeliness of addressing Participant Queries and Data Requests	22
Timeliness of addressing Participant/ Customer Complaints	23
II. Market Operator Performance from 26 June 2021 to 25 September 2021	
IT Systems	
Availability of Market Management Systems	24
Availability of WESM Website	25
Availability of Central Registration and Settlement System – User Interface (CRSS-UI)	25
Market Reports and Data Publication	
Availability	26
Timeliness	27
Forecast Accuracy	
RTD Forecast - MAPE	27
RTD Forecast - FAR	28
HAP Forecast - MAPE	29

DAP Forecast - MAPE	31
Dispatch Scheduling and Pricing	
RTD Workflow Successful Runs	32
Timeliness of Pricing Errors and Market Re-runs	33
Duration of Market Intervention Attributable to MO	34
Billing, Settlements and Accounts Management	
Timeliness of Preliminary and Final Settlement Statements	35
Accuracy of Preliminary Settlement Calculations	36
Accuracy of Final Settlement Calculations	36
Timeliness of Meter Data Error Detection	37
Efficiency and Timeliness of Monetary Transactions	37
Timeliness of Margin Call Issuance	38
Timeliness of Default Notice Issuance	38
Registration and Customer Relations	
Timeliness of Registration Processing	39
Timeliness of Customer Switching	39
Participant Training	40
Timeliness of addressing Participant Queries and Data Requests	41
Timeliness of addressing Participant/ Customer Complaints	41
Appendix A. 2015 Market Operator Performance Standards	42
Appendix B. Proposed MO Performance Metrics under EWDO	49
Appendix C. Rating System References – 2015 MOPS	50
Appendix D. Rating System References – Proposed MO Performance Metrics under EWDO	52
Appendix E. Market Management System Downtime	54
Appendix F. Public Website Downtime	55

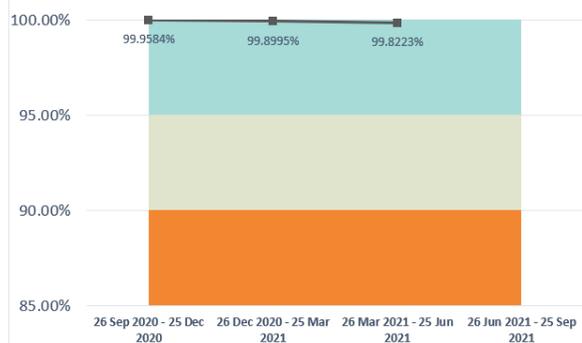
I. Market Operator Performance from 26 September 2020 to 25 June 2021

Measure	Brief Description	Weight	Target	Performance	Highlights																																													
IT Systems (20%)																																																		
Market Management Systems (MMS) Availability	Ratio of intervals that the MMS is functional or accessible to Users through the Market Participant Interface (MPI) to the total intervals it is required and expected to function or be accessible.	15%	99.80%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>99.9573%</td> <td>99.9751%</td> <td>99.9728%</td> <td>99.9378%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>99.9106%</td> <td>99.8532%</td> <td>99.8758%</td> </tr> <tr> <td>2016</td> <td>99.9977%</td> <td>99.9538%</td> <td>99.8018%</td> <td>99.8503%</td> </tr> <tr> <td>2017</td> <td>99.9970%</td> <td>99.9900%</td> <td>99.9900%</td> <td>99.9900%</td> </tr> <tr> <td>2018</td> <td>99.9900%</td> <td>99.9960%</td> <td>99.9960%</td> <td>99.9960%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>99.9512%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	99.9573%	99.9751%	99.9728%	99.9378%	2015	100%	99.9106%	99.8532%	99.8758%	2016	99.9977%	99.9538%	99.8018%	99.8503%	2017	99.9970%	99.9900%	99.9900%	99.9900%	2018	99.9900%	99.9960%	99.9960%	99.9960%	2019	100%	100%	100%	100%	2020	100%	100%	100%	100%	2021	100%	100%	99.9512%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 99.9512% availability • Recorded and considered 3.20 downtime hours (3 hours and 12 minutes) out of 6,552 hours <p>(see Appendix E for the list of recorded downtimes)</p>
Quarter	Q1	Q2	Q3	Q4																																														
2014	99.9573%	99.9751%	99.9728%	99.9378%																																														
2015	100%	99.9106%	99.8532%	99.8758%																																														
2016	99.9977%	99.9538%	99.8018%	99.8503%																																														
2017	99.9970%	99.9900%	99.9900%	99.9900%																																														
2018	99.9900%	99.9960%	99.9960%	99.9960%																																														
2019	100%	100%	100%	100%																																														
2020	100%	100%	100%	100%																																														
2021	100%	100%	99.9512%																																															

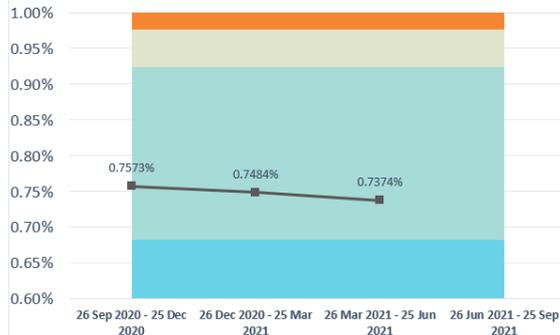
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Public WESM Website (PW) Availability	Percent of intervals that the PW is functional or accessible to Users vis-à-vis the total number of intervals it is required and expected to function or be accessible.	5%	99.50%	<table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>99.9873%</td> <td>99.9839%</td> <td>99.9880%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>99.7341%</td> <td>99.8237%</td> <td>99.8493%</td> </tr> <tr> <td>2016</td> <td>99.9344%</td> <td>99.9245%</td> <td>99.9498%</td> <td>99.8696%</td> </tr> <tr> <td>2017</td> <td>99.9900%</td> <td>99.9800%</td> <td>99.9800%</td> <td>99.9900%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>99.9100%</td> <td>99.9400%</td> <td>99.9500%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>99.9130%</td> <td>99.9423%</td> <td>99.9569%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>99.9982%</td> </tr> <tr> <td>2021</td> <td>99.9404%</td> <td>99.9094%</td> <td>99.9247%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	99.9873%	99.9839%	99.9880%	2015	100%	99.7341%	99.8237%	99.8493%	2016	99.9344%	99.9245%	99.9498%	99.8696%	2017	99.9900%	99.9800%	99.9800%	99.9900%	2018	100%	99.9100%	99.9400%	99.9500%	2019	100%	99.9130%	99.9423%	99.9569%	2020	100%	100%	100%	99.9982%	2021	99.9404%	99.9094%	99.9247%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 99.9247% availability • Recorded 5.36 downtime hours out of 6,552 hours but only 4.93 downtime hours (4 hours and 56 minutes) was considered in the calculation of the PW availability • The rest of downtime hours were excluded as provided in the MOPS <p>(see Appendix F for the list of recorded downtimes)</p>
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	99.9873%	99.9839%	99.9880%																																														
2015	100%	99.7341%	99.8237%	99.8493%																																														
2016	99.9344%	99.9245%	99.9498%	99.8696%																																														
2017	99.9900%	99.9800%	99.9800%	99.9900%																																														
2018	100%	99.9100%	99.9400%	99.9500%																																														
2019	100%	99.9130%	99.9423%	99.9569%																																														
2020	100%	100%	100%	99.9982%																																														
2021	99.9404%	99.9094%	99.9247%																																															
Market Reports and Data Publication (15%)																																																		

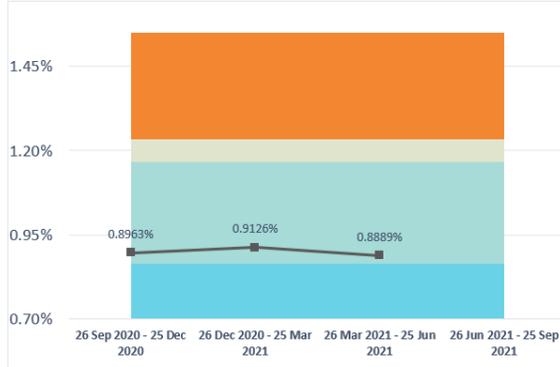
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Availability	Average of the measured publications' availability percentages, which are the ratio of the actual number of published reports/data to the total expected number.	5%	95%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>99.9468%</td> <td>99.9050%</td> <td>99.9256%</td> <td>99.9460%</td> </tr> <tr> <td>2015</td> <td>91.6311%</td> <td>94.5559%</td> <td>99.9703%</td> <td>99.9695%</td> </tr> <tr> <td>2016</td> <td>99.9924%</td> <td>98.6100%</td> <td>99.9900%</td> <td>99.9900%</td> </tr> <tr> <td>2017</td> <td>99.9970%</td> <td>99.9980%</td> <td>99.9980%</td> <td>99.9970%</td> </tr> <tr> <td>2018</td> <td>99.9980%</td> <td>99.9990%</td> <td>99.9990%</td> <td>99.9990%</td> </tr> <tr> <td>2019</td> <td>98.0536%</td> <td>99.9994%</td> <td>99.9927%</td> <td>99.9750%</td> </tr> <tr> <td>2020</td> <td>99.7145%</td> <td>99.9901%</td> <td>99.9927%</td> <td>99.9939%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>99.9957%</td> <td>99.9672%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	99.9468%	99.9050%	99.9256%	99.9460%	2015	91.6311%	94.5559%	99.9703%	99.9695%	2016	99.9924%	98.6100%	99.9900%	99.9900%	2017	99.9970%	99.9980%	99.9980%	99.9970%	2018	99.9980%	99.9990%	99.9990%	99.9990%	2019	98.0536%	99.9994%	99.9927%	99.9750%	2020	99.7145%	99.9901%	99.9927%	99.9939%	2021	100%	99.9957%	99.9672%		4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 99.9672% availability • 39 publications rated greater than 99% availability
Quarter	Q1	Q2	Q3	Q4																																														
2014	99.9468%	99.9050%	99.9256%	99.9460%																																														
2015	91.6311%	94.5559%	99.9703%	99.9695%																																														
2016	99.9924%	98.6100%	99.9900%	99.9900%																																														
2017	99.9970%	99.9980%	99.9980%	99.9970%																																														
2018	99.9980%	99.9990%	99.9990%	99.9990%																																														
2019	98.0536%	99.9994%	99.9927%	99.9750%																																														
2020	99.7145%	99.9901%	99.9927%	99.9939%																																														
2021	100%	99.9957%	99.9672%																																															

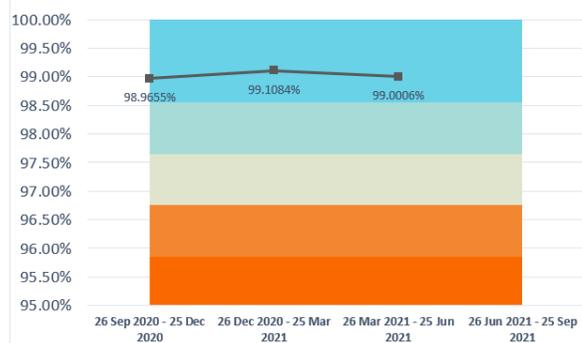
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

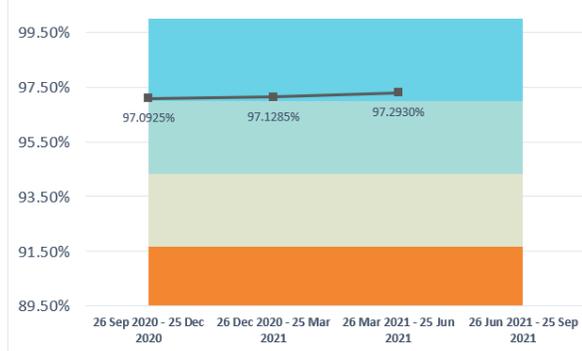
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Timeliness	Average of the measured publications' timeliness percentages, which are the ratio of the actual number of timely published reports/data to the total expected number.	10%	95%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>94.9204%</td> <td>96.3589%</td> <td>97.7729%</td> <td>98.3542%</td> </tr> <tr> <td>2015</td> <td>89.6857%</td> <td>92.9824%</td> <td>96.8219%</td> <td>96.7664%</td> </tr> <tr> <td>2016</td> <td>96.7675%</td> <td>96.0600%</td> <td>95.4900%</td> <td>95.0200%</td> </tr> <tr> <td>2017</td> <td>96.8200%</td> <td>97.4100%</td> <td>97.6800%</td> <td>98.1500%</td> </tr> <tr> <td>2018</td> <td>97.3900%</td> <td>96.6700%</td> <td>96.5800%</td> <td>93.2400%</td> </tr> <tr> <td>2019</td> <td>94.6118%</td> <td>96.6319%</td> <td>97.2929%</td> <td>98.0669%</td> </tr> <tr> <td>2020</td> <td>99.3319%</td> <td>99.5190%</td> <td>99.6521%</td> <td>99.7406%</td> </tr> <tr> <td>2021</td> <td>99.9584%</td> <td>99.8995%</td> <td>99.8223%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	94.9204%	96.3589%	97.7729%	98.3542%	2015	89.6857%	92.9824%	96.8219%	96.7664%	2016	96.7675%	96.0600%	95.4900%	95.0200%	2017	96.8200%	97.4100%	97.6800%	98.1500%	2018	97.3900%	96.6700%	96.5800%	93.2400%	2019	94.6118%	96.6319%	97.2929%	98.0669%	2020	99.3319%	99.5190%	99.6521%	99.7406%	2021	99.9584%	99.8995%	99.8223%		4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 99.8223% timeliness • 26 publications with timeliness rating greater than 98%
Quarter	Q1	Q2	Q3	Q4																																														
2014	94.9204%	96.3589%	97.7729%	98.3542%																																														
2015	89.6857%	92.9824%	96.8219%	96.7664%																																														
2016	96.7675%	96.0600%	95.4900%	95.0200%																																														
2017	96.8200%	97.4100%	97.6800%	98.1500%																																														
2018	97.3900%	96.6700%	96.5800%	93.2400%																																														
2019	94.6118%	96.6319%	97.2929%	98.0669%																																														
2020	99.3319%	99.5190%	99.6521%	99.7406%																																														
2021	99.9584%	99.8995%	99.8223%																																															
Forecast Accuracy (20%)																																																		

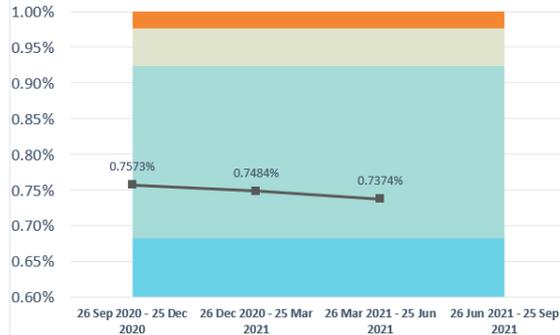
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

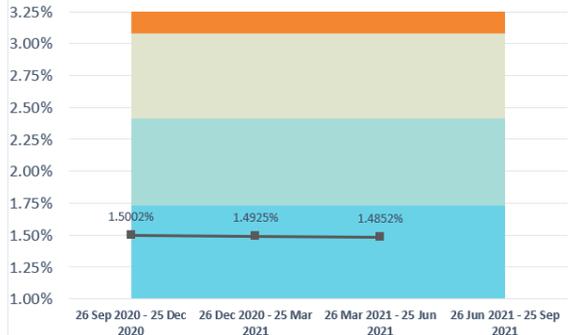
Measure	Brief Description	Weight	Target	Performance	Highlights																																																															
Real Time Dispatch (RTD) Forecast Mean Absolute Percentage Error (MAPE) for Luzon	<p>Measures how far the RTD forecasted demand is from the actual demand in Luzon.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	3.75%	0.95%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>0.7918%</td> <td>0.8261%</td> <td>0.8028%</td> <td>0.8200%</td> </tr> <tr> <td>2015</td> <td>0.7809%</td> <td>0.8151%</td> <td>0.7841%</td> <td>0.7932%</td> </tr> <tr> <td>2016</td> <td>0.7437%</td> <td>0.7650%</td> <td>0.7862%</td> <td>0.7951%</td> </tr> <tr> <td>2017</td> <td>0.7800%</td> <td>0.8100%</td> <td>0.8000%</td> <td>0.8000%</td> </tr> <tr> <td>2018</td> <td>0.7600%</td> <td>0.7500%</td> <td>0.7400%</td> <td>0.7400%</td> </tr> <tr> <td>2019</td> <td>0.7065%</td> <td>0.6884%</td> <td>0.6777%</td> <td>0.6889%</td> </tr> <tr> <td>2020</td> <td>0.6743%</td> <td>0.7017%</td> <td>0.6958%</td> <td>0.7020%</td> </tr> <tr> <td>2021</td> <td>0.7573%</td> <td>0.7484%</td> <td>0.7374%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	0.7918%	0.8261%	0.8028%	0.8200%	2015	0.7809%	0.8151%	0.7841%	0.7932%	2016	0.7437%	0.7650%	0.7862%	0.7951%	2017	0.7800%	0.8100%	0.8000%	0.8000%	2018	0.7600%	0.7500%	0.7400%	0.7400%	2019	0.7065%	0.6884%	0.6777%	0.6889%	2020	0.6743%	0.7017%	0.6958%	0.7020%	2021	0.7573%	0.7484%	0.7374%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 0.7374% MAPE • Considered 6,304 out of 6,552 intervals, with highest absolute forecast error of 7.40%%, in the computation of this measure • Excluded 248 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>24</td> </tr> <tr> <td>Market Suspension</td> <td>38</td> </tr> <tr> <td>Generator Tripping</td> <td>4</td> </tr> <tr> <td>Load Dropping</td> <td>3</td> </tr> <tr> <td>Line Tripping</td> <td>24</td> </tr> <tr> <td>Non-compliance of Kalayaan PSPP to its pump schedule</td> <td>34</td> </tr> <tr> <td>Sudden change in weather</td> <td>93</td> </tr> <tr> <td>Snapshot-related data error</td> <td>28</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	24	Market Suspension	38	Generator Tripping	4	Load Dropping	3	Line Tripping	24	Non-compliance of Kalayaan PSPP to its pump schedule	34	Sudden change in weather	93	Snapshot-related data error	28
Quarter	Q1	Q2	Q3	Q4																																																																
2014	0.7918%	0.8261%	0.8028%	0.8200%																																																																
2015	0.7809%	0.8151%	0.7841%	0.7932%																																																																
2016	0.7437%	0.7650%	0.7862%	0.7951%																																																																
2017	0.7800%	0.8100%	0.8000%	0.8000%																																																																
2018	0.7600%	0.7500%	0.7400%	0.7400%																																																																
2019	0.7065%	0.6884%	0.6777%	0.6889%																																																																
2020	0.6743%	0.7017%	0.6958%	0.7020%																																																																
2021	0.7573%	0.7484%	0.7374%																																																																	
Reason for Exclusion	No. of Trading Intervals																																																																			
Market Intervention	24																																																																			
Market Suspension	38																																																																			
Generator Tripping	4																																																																			
Load Dropping	3																																																																			
Line Tripping	24																																																																			
Non-compliance of Kalayaan PSPP to its pump schedule	34																																																																			
Sudden change in weather	93																																																																			
Snapshot-related data error	28																																																																			

Measure	Brief Description	Weight	Target	Performance	Highlights																																																											
RTD Forecast MAPE for Visayas	<p>Measures how far the RTD forecasted demand is from the actual demand in Visayas.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	3.75%	1.20%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>1.1332%</td> <td>1.1952%</td> <td>1.1949%</td> <td>1.2031%</td> </tr> <tr> <td>2015</td> <td>1.1333%</td> <td>1.1637%</td> <td>1.1537%</td> <td>1.1587%</td> </tr> <tr> <td>2016</td> <td>1.0146%</td> <td>1.1991%</td> <td>1.4943%</td> <td>1.5037%</td> </tr> <tr> <td>2017</td> <td>1.1500%</td> <td>1.1800%</td> <td>1.1500%</td> <td>1.1400%</td> </tr> <tr> <td>2018</td> <td>1.0400%</td> <td>1.0300%</td> <td>1.0000%</td> <td>0.9900%</td> </tr> <tr> <td>2019</td> <td>0.8992%</td> <td>0.8840%</td> <td>0.8824%</td> <td>0.8897%</td> </tr> <tr> <td>2020</td> <td>0.8893%</td> <td>0.8608%</td> <td>0.8455%</td> <td>0.8423%</td> </tr> <tr> <td>2021</td> <td>0.8963%</td> <td>0.9126%</td> <td>0.8889%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	1.1332%	1.1952%	1.1949%	1.2031%	2015	1.1333%	1.1637%	1.1537%	1.1587%	2016	1.0146%	1.1991%	1.4943%	1.5037%	2017	1.1500%	1.1800%	1.1500%	1.1400%	2018	1.0400%	1.0300%	1.0000%	0.9900%	2019	0.8992%	0.8840%	0.8824%	0.8897%	2020	0.8893%	0.8608%	0.8455%	0.8423%	2021	0.8963%	0.9126%	0.8889%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 0.8889% MAPE • Considered 6,317 out of 6,552 intervals, with maximum absolute forecast error of 8.19%, in the calculation of this measure • Excluded 235 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>4</td> </tr> <tr> <td>Generator Tripping</td> <td>8</td> </tr> <tr> <td>Line Tripping</td> <td>51</td> </tr> <tr> <td>Load Dropping</td> <td>17</td> </tr> <tr> <td>Sudden change in weather</td> <td>130</td> </tr> <tr> <td>Snapshot-related data error</td> <td>25</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	4	Generator Tripping	8	Line Tripping	51	Load Dropping	17	Sudden change in weather	130	Snapshot-related data error	25
Quarter	Q1	Q2	Q3	Q4																																																												
2014	1.1332%	1.1952%	1.1949%	1.2031%																																																												
2015	1.1333%	1.1637%	1.1537%	1.1587%																																																												
2016	1.0146%	1.1991%	1.4943%	1.5037%																																																												
2017	1.1500%	1.1800%	1.1500%	1.1400%																																																												
2018	1.0400%	1.0300%	1.0000%	0.9900%																																																												
2019	0.8992%	0.8840%	0.8824%	0.8897%																																																												
2020	0.8893%	0.8608%	0.8455%	0.8423%																																																												
2021	0.8963%	0.9126%	0.8889%																																																													
Reason for Exclusion	No. of Trading Intervals																																																															
Market Intervention	4																																																															
Generator Tripping	8																																																															
Line Tripping	51																																																															
Load Dropping	17																																																															
Sudden change in weather	130																																																															
Snapshot-related data error	25																																																															

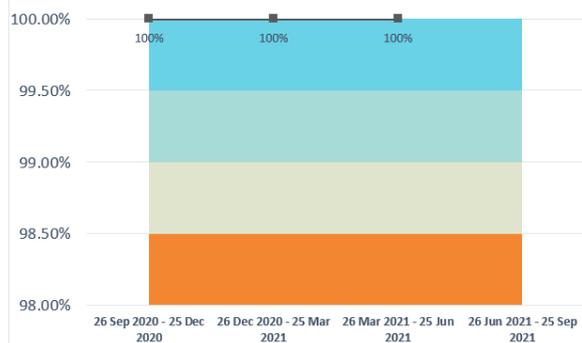
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
RTD Forecast Accuracy Rating (FAR) for Luzon	The percent of intervals with forecast error that is within the MAPE tolerance level of $\pm 3\%$ in Luzon.	3.75%	97.20%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>98.8769%</td> <td>98.4309%</td> <td>98.5548%</td> <td>98.3438%</td> </tr> <tr> <td>2015</td> <td>98.8769%</td> <td>98.4778%</td> <td>98.7879%</td> <td>98.7754%</td> </tr> <tr> <td>2016</td> <td>98.2791%</td> <td>98.4701%</td> <td>98.5335%</td> <td>98.6449%</td> </tr> <tr> <td>2017</td> <td>98.8700%</td> <td>98.5300%</td> <td>98.6400%</td> <td>98.7900%</td> </tr> <tr> <td>2018</td> <td>99.1000%</td> <td>99.1800%</td> <td>99.1400%</td> <td>99.2200%</td> </tr> <tr> <td>2019</td> <td>98.9386%</td> <td>99.0500%</td> <td>99.1768%</td> <td>99.2550%</td> </tr> <tr> <td>2020</td> <td>99.4364%</td> <td>99.2561%</td> <td>99.1152%</td> <td>99.0305%</td> </tr> <tr> <td>2021</td> <td>98.9655%</td> <td>99.1084%</td> <td>99.0006%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	98.8769%	98.4309%	98.5548%	98.3438%	2015	98.8769%	98.4778%	98.7879%	98.7754%	2016	98.2791%	98.4701%	98.5335%	98.6449%	2017	98.8700%	98.5300%	98.6400%	98.7900%	2018	99.1000%	99.1800%	99.1400%	99.2200%	2019	98.9386%	99.0500%	99.1768%	99.2550%	2020	99.4364%	99.2561%	99.1152%	99.0305%	2021	98.9655%	99.1084%	99.0006%		4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 99.0006% forecast accuracy rating • Considered 6,241 out of the 6,304 valid intervals, with forecast error within the $\pm 3\%$ tolerance level, in the computation • Excluded same intervals as enumerated in the RTD Forecast MAPE for Luzon measure
Quarter	Q1	Q2	Q3	Q4																																														
2014	98.8769%	98.4309%	98.5548%	98.3438%																																														
2015	98.8769%	98.4778%	98.7879%	98.7754%																																														
2016	98.2791%	98.4701%	98.5335%	98.6449%																																														
2017	98.8700%	98.5300%	98.6400%	98.7900%																																														
2018	99.1000%	99.1800%	99.1400%	99.2200%																																														
2019	98.9386%	99.0500%	99.1768%	99.2550%																																														
2020	99.4364%	99.2561%	99.1152%	99.0305%																																														
2021	98.9655%	99.1084%	99.0006%																																															

Measure	Brief Description	Weight	Target	Performance	Highlights																																													
RTD Forecast Accuracy Rating (FAR) for Visayas	The percent of intervals with forecast error that is within the MAPE tolerance level of $\pm 3\%$ in Visayas.	3.75%	93.00%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>95.7477%</td> <td>94.7129%</td> <td>94.7319%</td> <td>94.5798%</td> </tr> <tr> <td>2015</td> <td>95.8433%</td> <td>94.9781%</td> <td>94.9835%</td> <td>95.0283%</td> </tr> <tr> <td>2016</td> <td>97.3941%</td> <td>94.4653%</td> <td>90.0000%</td> <td>89.7037%</td> </tr> <tr> <td>2017</td> <td>94.2600%</td> <td>93.5900%</td> <td>94.1900%</td> <td>94.5000%</td> </tr> <tr> <td>2018</td> <td>95.8400%</td> <td>95.9100%</td> <td>96.2100%</td> <td>96.4600%</td> </tr> <tr> <td>2019</td> <td>96.9866%</td> <td>97.4556%</td> <td>97.6390%</td> <td>97.4933%</td> </tr> <tr> <td>2020</td> <td>97.3025%</td> <td>97.5379%</td> <td>97.7003%</td> <td>97.7543%</td> </tr> <tr> <td>2021</td> <td>97.0925%</td> <td>97.1285%</td> <td>97.2930%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	95.7477%	94.7129%	94.7319%	94.5798%	2015	95.8433%	94.9781%	94.9835%	95.0283%	2016	97.3941%	94.4653%	90.0000%	89.7037%	2017	94.2600%	93.5900%	94.1900%	94.5000%	2018	95.8400%	95.9100%	96.2100%	96.4600%	2019	96.9866%	97.4556%	97.6390%	97.4933%	2020	97.3025%	97.5379%	97.7003%	97.7543%	2021	97.0925%	97.1285%	97.2930%		4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 97.2930% forecast accuracy rating • Considered 6,146 out of the 6,317 valid intervals, with forecast error within the $\pm 3\%$ tolerance level, in the calculation • Excluded same intervals as enumerated in the RTD Forecast MAPE for Visayas measure
Quarter	Q1	Q2	Q3	Q4																																														
2014	95.7477%	94.7129%	94.7319%	94.5798%																																														
2015	95.8433%	94.9781%	94.9835%	95.0283%																																														
2016	97.3941%	94.4653%	90.0000%	89.7037%																																														
2017	94.2600%	93.5900%	94.1900%	94.5000%																																														
2018	95.8400%	95.9100%	96.2100%	96.4600%																																														
2019	96.9866%	97.4556%	97.6390%	97.4933%																																														
2020	97.3025%	97.5379%	97.7003%	97.7543%																																														
2021	97.0925%	97.1285%	97.2930%																																															

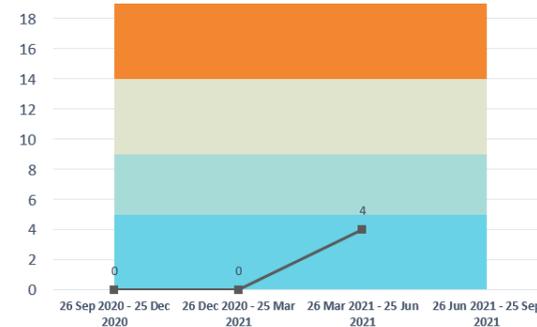
Measure	Brief Description	Weight	Target	Performance	Highlights																																																															
Day Ahead Projection (DAP) Forecast MAPE for Luzon	<p>Measures how far the DAP forecasted demand is from the actual demand in Luzon.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	2.50%	1.60%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>0.7918%</td> <td>0.8261%</td> <td>0.8028%</td> <td>0.8200%</td> </tr> <tr> <td>2015</td> <td>0.7809%</td> <td>0.8151%</td> <td>0.7841%</td> <td>0.7932%</td> </tr> <tr> <td>2016</td> <td>0.7437%</td> <td>0.7650%</td> <td>0.7862%</td> <td>0.7951%</td> </tr> <tr> <td>2017</td> <td>0.7800%</td> <td>0.8100%</td> <td>0.8000%</td> <td>0.8000%</td> </tr> <tr> <td>2018</td> <td>0.7600%</td> <td>0.7500%</td> <td>0.7400%</td> <td>0.7400%</td> </tr> <tr> <td>2019</td> <td>0.7065%</td> <td>0.6884%</td> <td>0.6777%</td> <td>0.6889%</td> </tr> <tr> <td>2020</td> <td>0.6743%</td> <td>0.7017%</td> <td>0.6958%</td> <td>0.7020%</td> </tr> <tr> <td>2021</td> <td>0.7573%</td> <td>0.7484%</td> <td>0.7374%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	0.7918%	0.8261%	0.8028%	0.8200%	2015	0.7809%	0.8151%	0.7841%	0.7932%	2016	0.7437%	0.7650%	0.7862%	0.7951%	2017	0.7800%	0.8100%	0.8000%	0.8000%	2018	0.7600%	0.7500%	0.7400%	0.7400%	2019	0.7065%	0.6884%	0.6777%	0.6889%	2020	0.6743%	0.7017%	0.6958%	0.7020%	2021	0.7573%	0.7484%	0.7374%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 1.2200% MAPE • Considered 6,089 out of 6,552, with maximum absolute forecast error of 16.19%, in the computation • Excluded 463 intervals in the calculation due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>27</td> </tr> <tr> <td>Market Suspension</td> <td>38</td> </tr> <tr> <td>Generator Tripping</td> <td>10</td> </tr> <tr> <td>Line Tripping</td> <td>23</td> </tr> <tr> <td>Load Dropping</td> <td>3</td> </tr> <tr> <td>Non-following of pump schedule of Kalayaan PSPP</td> <td>105</td> </tr> <tr> <td>Sudden change in weather</td> <td>220</td> </tr> <tr> <td>Snapshot-related data error</td> <td>37</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	27	Market Suspension	38	Generator Tripping	10	Line Tripping	23	Load Dropping	3	Non-following of pump schedule of Kalayaan PSPP	105	Sudden change in weather	220	Snapshot-related data error	37
Quarter	Q1	Q2	Q3	Q4																																																																
2014	0.7918%	0.8261%	0.8028%	0.8200%																																																																
2015	0.7809%	0.8151%	0.7841%	0.7932%																																																																
2016	0.7437%	0.7650%	0.7862%	0.7951%																																																																
2017	0.7800%	0.8100%	0.8000%	0.8000%																																																																
2018	0.7600%	0.7500%	0.7400%	0.7400%																																																																
2019	0.7065%	0.6884%	0.6777%	0.6889%																																																																
2020	0.6743%	0.7017%	0.6958%	0.7020%																																																																
2021	0.7573%	0.7484%	0.7374%																																																																	
Reason for Exclusion	No. of Trading Intervals																																																																			
Market Intervention	27																																																																			
Market Suspension	38																																																																			
Generator Tripping	10																																																																			
Line Tripping	23																																																																			
Load Dropping	3																																																																			
Non-following of pump schedule of Kalayaan PSPP	105																																																																			
Sudden change in weather	220																																																																			
Snapshot-related data error	37																																																																			

Measure	Brief Description	Weight	Target	Performance	Highlights																																																											
DAP Forecast MAPE for Visayas	<p>Measures how far the DAP forecasted demand is from the actual demand in Visayas.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	2.50%	2.20%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2015</td> <td>2.4838%</td> <td>2.3758%</td> <td>2.2676%</td> <td>2.1794%</td> </tr> <tr> <td>2016</td> <td>1.6225%</td> <td>1.7769%</td> <td>1.8980%</td> <td>1.9968%</td> </tr> <tr> <td>2017</td> <td>2.0500%</td> <td>2.2400%</td> <td>2.3000%</td> <td>2.2000%</td> </tr> <tr> <td>2018</td> <td>1.8400%</td> <td>1.7600%</td> <td>1.7500%</td> <td>1.7300%</td> </tr> <tr> <td>2019</td> <td>1.4432%</td> <td>1.5577%</td> <td>1.5501%</td> <td>1.5330%</td> </tr> <tr> <td>2020</td> <td>1.4857%</td> <td>1.4634%</td> <td>1.4021%</td> <td>1.3825%</td> </tr> <tr> <td>2021</td> <td>1.5002%</td> <td>1.4925%</td> <td>1.4852%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014					2015	2.4838%	2.3758%	2.2676%	2.1794%	2016	1.6225%	1.7769%	1.8980%	1.9968%	2017	2.0500%	2.2400%	2.3000%	2.2000%	2018	1.8400%	1.7600%	1.7500%	1.7300%	2019	1.4432%	1.5577%	1.5501%	1.5330%	2020	1.4857%	1.4634%	1.4021%	1.3825%	2021	1.5002%	1.4925%	1.4852%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> 1.4852% MAPE Considered 6,117 out of 6,552 intervals, with maximum absolute forecast error of 16.60%, in the calculation of this measure Excluded 435 intervals in the computation due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>7</td> </tr> <tr> <td>Generator Tripping</td> <td>9</td> </tr> <tr> <td>Line Tripping</td> <td>69</td> </tr> <tr> <td>Load Dropping</td> <td>21</td> </tr> <tr> <td>Sudden change in weather</td> <td>298</td> </tr> <tr> <td>Snapshot-related data error</td> <td>31</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	7	Generator Tripping	9	Line Tripping	69	Load Dropping	21	Sudden change in weather	298	Snapshot-related data error	31
Quarter	Q1	Q2	Q3	Q4																																																												
2014																																																																
2015	2.4838%	2.3758%	2.2676%	2.1794%																																																												
2016	1.6225%	1.7769%	1.8980%	1.9968%																																																												
2017	2.0500%	2.2400%	2.3000%	2.2000%																																																												
2018	1.8400%	1.7600%	1.7500%	1.7300%																																																												
2019	1.4432%	1.5577%	1.5501%	1.5330%																																																												
2020	1.4857%	1.4634%	1.4021%	1.3825%																																																												
2021	1.5002%	1.4925%	1.4852%																																																													
Reason for Exclusion	No. of Trading Intervals																																																															
Market Intervention	7																																																															
Generator Tripping	9																																																															
Line Tripping	69																																																															
Load Dropping	21																																																															
Sudden change in weather	298																																																															
Snapshot-related data error	31																																																															
Dispatch Scheduling and Pricing (20%)																																																																
RTD (ex-ante) Workflow Successful Run	Percent of RTD market runs with available schedules and completed within the timetable	2.50%	99.75%	No unsuccessful RTD run since 2014 excluding intervals which resulted in Market Intervention.	<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> 100% RTD successful runs Considered 6,548 out of 6,552 RTX runs in the computation of this measure, which excluded four (4) intervals under market intervention attributable to the MO 																																																											

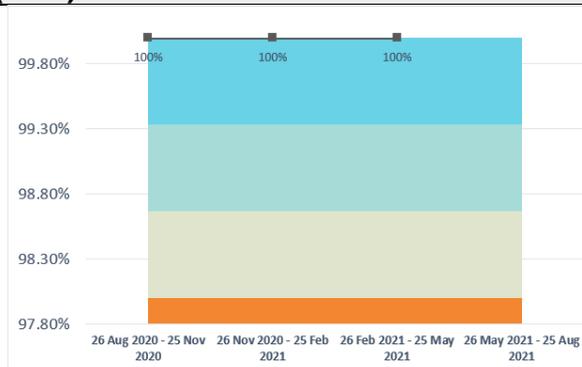
Measure	Brief Description	Weight	Target	Performance	Highlights																																																	
RTX (ex-post) Workflow Successful Run	Percent of RTX market runs with available schedules and completed within the timetable	2.50%	99.75%	<table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>99.9770%</td> <td>99.9847%</td> <td>99.9886%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>99.9085%</td> <td>99.9229%</td> <td>99.9194%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>99.9083%</td> <td>99.9542%</td> <td>99.9696%</td> <td>99.9772%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>99.9847%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	99.9770%	99.9847%	99.9886%	2015	100%	99.9085%	99.9229%	99.9194%	2016	100%	100%	100%	100%	2017	100%	100%	100%	100%	2018	100%	100%	100%	100%	2019	100%	100%	100%	100%	2020	99.9083%	99.9542%	99.9696%	99.9772%	2021	100%	100%	99.9847%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> • 99.9847% RTX successful runs • One (1) RTX unsuccessful run <table border="1"> <thead> <tr> <th>Date</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>16 Jun 2021, 1700H</td> <td>Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Considered 6,548 out of 6,552 RTX runs in the computation of this measure, which excluded four (4) intervals under market intervention attributable to the MO 	Date	Reason	16 Jun 2021, 1700H	Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status
Quarter	Q1	Q2	Q3	Q4																																																		
2014	100%	99.9770%	99.9847%	99.9886%																																																		
2015	100%	99.9085%	99.9229%	99.9194%																																																		
2016	100%	100%	100%	100%																																																		
2017	100%	100%	100%	100%																																																		
2018	100%	100%	100%	100%																																																		
2019	100%	100%	100%	100%																																																		
2020	99.9083%	99.9542%	99.9696%	99.9772%																																																		
2021	100%	100%	99.9847%																																																			
Date	Reason																																																					
16 Jun 2021, 1700H	Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status																																																					

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%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2015</td> <td>100%</td> <td>99.9500%</td> <td>99.9700%</td> <td>99.9800%</td> </tr> <tr> <td>2016</td> <td>98.4877%</td> <td>98.3103%</td> <td>99.0181%</td> <td>99.1701%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>99.4900%</td> <td>99.5100%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>99.5354%</td> <td>99.6251%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014					2015	100%	99.9500%	99.9700%	99.9800%	2016	98.4877%	98.3103%	99.0181%	99.1701%	2017	100%	100%	99.4900%	99.5100%	2018	100%	100%	100%	100%	2019	100%	100%	99.5354%	99.6251%	2020	100%	100%	100%	100%	2021	100%	100%	100%	100%	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> 100% timely completion of validation and submission of market prices for settlements Only intervals with non-congestion pricing errors were considered in the calculation as summarized in the table below <table border="1"> <thead> <tr> <th>Region</th> <th>RTD-PEN</th> <th>RTX-PEN</th> </tr> </thead> <tbody> <tr> <td>Luzon</td> <td>264</td> <td>195</td> </tr> <tr> <td>Visayas</td> <td>449</td> <td>372</td> </tr> </tbody> </table>	Region	RTD-PEN	RTX-PEN	Luzon	264	195	Visayas	449	372
Quarter	Q1	Q2	Q3	Q4																																																							
2014																																																											
2015	100%	99.9500%	99.9700%	99.9800%																																																							
2016	98.4877%	98.3103%	99.0181%	99.1701%																																																							
2017	100%	100%	99.4900%	99.5100%																																																							
2018	100%	100%	100%	100%																																																							
2019	100%	100%	99.5354%	99.6251%																																																							
2020	100%	100%	100%	100%																																																							
2021	100%	100%	100%	100%																																																							
Region	RTD-PEN	RTX-PEN																																																									
Luzon	264	195																																																									
Visayas	449	372																																																									

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.	3.00%	99.50%	<table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>99.9557%</td> <td>99.9782%</td> <td>99.9831%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>99.9000%</td> <td>99.9100%</td> <td>99.9200%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	99.9557%	99.9782%	99.9831%	2015	100%	100%	100%	100%	2016	100%	100%	100%	100%	2017	100%	99.9000%	99.9100%	99.9200%	2018	100%	100%	100%	100%	2019	100%	100%	100%	100%	2020	100%	100%	100%	100%	2021	100%	100%	100%	100%	
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	99.9557%	99.9782%	99.9831%																																														
2015	100%	100%	100%	100%																																														
2016	100%	100%	100%	100%																																														
2017	100%	99.9000%	99.9100%	99.9200%																																														
2018	100%	100%	100%	100%																																														
2019	100%	100%	100%	100%																																														
2020	100%	100%	100%	100%																																														
2021	100%	100%	100%	100%																																														

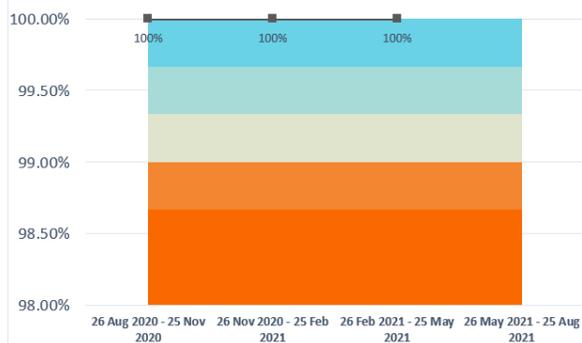
Measure	Brief Description	Weight	Target	Performance	Highlights																																																									
Duration of Market Intervention Attributable to MO	Number of trading intervals with Market Intervention that was caused by MO, such as intervention due to software error.	10.00%	≤ 14	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2015</td> <td>0</td> <td>4</td> <td>6</td> <td>8</td> </tr> <tr> <td>2016</td> <td>0</td> <td>3</td> <td>15</td> <td>16</td> </tr> <tr> <td>2017</td> <td>0</td> <td>0</td> <td>0</td> <td>4</td> </tr> <tr> <td>2018</td> <td>7</td> <td>7</td> <td>9</td> <td>9</td> </tr> <tr> <td>2019</td> <td>0</td> <td>3</td> <td>6</td> <td>6</td> </tr> <tr> <td>2020</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>2021</td> <td>0</td> <td>0</td> <td>4</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014					2015	0	4	6	8	2016	0	3	15	16	2017	0	0	0	4	2018	7	7	9	9	2019	0	3	6	6	2020	2	2	2	2	2021	0	0	4		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> Four (4) market interventions attributable to the MO <table border="1"> <thead> <tr> <th>Date</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>16 June 2021 1800H-2100H</td> <td>Market intervention was declared in the Luzon and Visayas grid on 1800H-2100H of 16 June 2021 due to Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Other market intervention / market suspension declared in 58 trading intervals in Luzon due to the following reasons: <table border="1"> <thead> <tr> <th>MI/MS Description</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention – SO initiated at 0038H effective 0100H due to un-implementable RTD brought about by Typhoon Ulysses (12 November 2020)</td> <td>9</td> </tr> <tr> <td>Market Suspension – ERC declared due to typhoon Ulysses (12 – 13 November 2020)</td> <td>38</td> </tr> <tr> <td>Market Intervention – SO Initiated at 1304H effective 1400H-1700H due to generation deficiency or insufficient generation resources on 31 May 2021</td> <td>4</td> </tr> </tbody> </table>	Date	Reason	16 June 2021 1800H-2100H	Market intervention was declared in the Luzon and Visayas grid on 1800H-2100H of 16 June 2021 due to Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status	MI/MS Description	No. of Trading Intervals	Market Intervention – SO initiated at 0038H effective 0100H due to un-implementable RTD brought about by Typhoon Ulysses (12 November 2020)	9	Market Suspension – ERC declared due to typhoon Ulysses (12 – 13 November 2020)	38	Market Intervention – SO Initiated at 1304H effective 1400H-1700H due to generation deficiency or insufficient generation resources on 31 May 2021	4
Quarter	Q1	Q2	Q3	Q4																																																										
2014																																																														
2015	0	4	6	8																																																										
2016	0	3	15	16																																																										
2017	0	0	0	4																																																										
2018	7	7	9	9																																																										
2019	0	3	6	6																																																										
2020	2	2	2	2																																																										
2021	0	0	4																																																											
Date	Reason																																																													
16 June 2021 1800H-2100H	Market intervention was declared in the Luzon and Visayas grid on 1800H-2100H of 16 June 2021 due to Market Management System (MMS) hardware failure. The Sable Application failed to go on "UP" status																																																													
MI/MS Description	No. of Trading Intervals																																																													
Market Intervention – SO initiated at 0038H effective 0100H due to un-implementable RTD brought about by Typhoon Ulysses (12 November 2020)	9																																																													
Market Suspension – ERC declared due to typhoon Ulysses (12 – 13 November 2020)	38																																																													
Market Intervention – SO Initiated at 1304H effective 1400H-1700H due to generation deficiency or insufficient generation resources on 31 May 2021	4																																																													

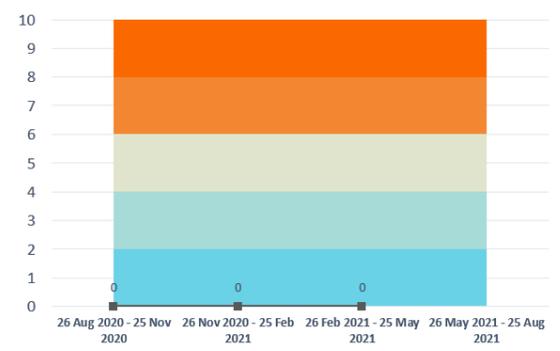
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights																																													
					Market Intervention – SO Initiated at 1048H effective 1100H-1700H due to generation deficiency or insufficient generation resources on 1 June 2021																																													
Billing, Settlements, and Accounts Management (15%)																																																		
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%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2015</td> <td>99.1700%</td> <td>99.5800%</td> <td>99.7200%</td> <td>99.7900%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>99.1700%</td> <td>99.5833%</td> <td>99.7222%</td> <td>99.7917%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>99.7917%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	100%	100%	100%	2015	99.1700%	99.5800%	99.7200%	99.7900%	2016	100%	100%	100%	100%	2017	100%	100%	100%	100%	2018	100%	100%	100%	100%	2019	99.1700%	99.5833%	99.7222%	99.7917%	2020	100%	100%	100%	99.7917%	2021	100%	100%	100%		4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> 100% timely issuance of settlement statements
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	100%	100%	100%																																														
2015	99.1700%	99.5800%	99.7200%	99.7900%																																														
2016	100%	100%	100%	100%																																														
2017	100%	100%	100%	100%																																														
2018	100%	100%	100%	100%																																														
2019	99.1700%	99.5833%	99.7222%	99.7917%																																														
2020	100%	100%	100%	99.7917%																																														
2021	100%	100%	100%																																															

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Accuracy of Preliminary Settlement Calculations	Compares the difference between preliminary and the final settlement calculations.	2.00%	95%	<table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>89.9443%</td> <td>89.8874%</td> <td>83.1152%</td> <td>84.5178%</td> </tr> <tr> <td>2015</td> <td>77.3157%</td> <td>87.4815%</td> <td>91.8155%</td> <td>93.6432%</td> </tr> <tr> <td>2016</td> <td>96.6186%</td> <td>98.1134%</td> <td>98.2174%</td> <td>98.2676%</td> </tr> <tr> <td>2017</td> <td>99.3900%</td> <td>99.2800%</td> <td>99.1200%</td> <td>99.1900%</td> </tr> <tr> <td>2018</td> <td>99.1200%</td> <td>99.1800%</td> <td>91.4800%</td> <td>92.6700%</td> </tr> <tr> <td>2019</td> <td>38.8876%</td> <td>59.4445%</td> <td>62.7144%</td> <td>71.2977%</td> </tr> <tr> <td>2020</td> <td>96.7140%</td> <td>98.2728%</td> <td>98.3564%</td> <td>98.6976%</td> </tr> <tr> <td>2021</td> <td>95.6576%</td> <td>97.8685%</td> <td>98.6093%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	89.9443%	89.8874%	83.1152%	84.5178%	2015	77.3157%	87.4815%	91.8155%	93.6432%	2016	96.6186%	98.1134%	98.2174%	98.2676%	2017	99.3900%	99.2800%	99.1200%	99.1900%	2018	99.1200%	99.1800%	91.4800%	92.6700%	2019	38.8876%	59.4445%	62.7144%	71.2977%	2020	96.7140%	98.2728%	98.3564%	98.6976%	2021	95.6576%	97.8685%	98.6093%		4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> 98.6093% accuracy of Preliminary Settlement Calculations
Quarter	Q1	Q2	Q3	Q4																																														
2014	89.9443%	89.8874%	83.1152%	84.5178%																																														
2015	77.3157%	87.4815%	91.8155%	93.6432%																																														
2016	96.6186%	98.1134%	98.2174%	98.2676%																																														
2017	99.3900%	99.2800%	99.1200%	99.1900%																																														
2018	99.1200%	99.1800%	91.4800%	92.6700%																																														
2019	38.8876%	59.4445%	62.7144%	71.2977%																																														
2020	96.7140%	98.2728%	98.3564%	98.6976%																																														
2021	95.6576%	97.8685%	98.6093%																																															

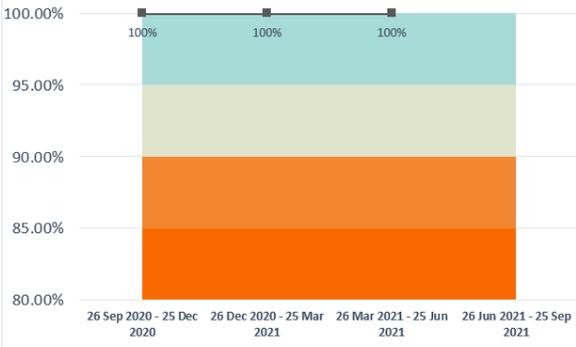
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Accuracy of Final Settlement Calculations	Compares the difference between the original and last adjusted total trading amounts in the final settlement calculations.	3.00%	99%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>99.3600%</td> <td>99.6830%</td> <td>99.6645%</td> <td>99.6996%</td> </tr> <tr> <td>2015</td> <td>90.0462%</td> <td>94.8247%</td> <td>96.7210%</td> <td>97.6177%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>99.8893%</td> <td>99.9190%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>99.9700%</td> <td>99.9700%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>99.7900%</td> </tr> <tr> <td>2019</td> <td>76.9366%</td> <td>75.2397%</td> <td>17.5239%</td> <td>38.4627%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	99.3600%	99.6830%	99.6645%	99.6996%	2015	90.0462%	94.8247%	96.7210%	97.6177%	2016	100%	100%	99.8893%	99.9190%	2017	100%	100%	99.9700%	99.9700%	2018	100%	100%	100%	99.7900%	2019	76.9366%	75.2397%	17.5239%	38.4627%	2020	100%	100%	100%	100%	2021	100%	100%	100%	100%	4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> • 100% accuracy of Final Settlement Calculations • No adjustment in final settlement calculations
Quarter	Q1	Q2	Q3	Q4																																														
2014	99.3600%	99.6830%	99.6645%	99.6996%																																														
2015	90.0462%	94.8247%	96.7210%	97.6177%																																														
2016	100%	100%	99.8893%	99.9190%																																														
2017	100%	100%	99.9700%	99.9700%																																														
2018	100%	100%	100%	99.7900%																																														
2019	76.9366%	75.2397%	17.5239%	38.4627%																																														
2020	100%	100%	100%	100%																																														
2021	100%	100%	100%	100%																																														

Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Frequency of Adjustments to Final Settlement Statements	Number of adjustments to the Final Settlement Statements.	2.00%	6	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr><td>2014</td><td>1</td><td>1</td><td>2</td><td>2</td></tr> <tr><td>2015</td><td>2</td><td>2</td><td>2</td><td>2</td></tr> <tr><td>2016</td><td>0</td><td>0</td><td>1</td><td>1</td></tr> <tr><td>2017</td><td>0</td><td>0</td><td>1</td><td>1</td></tr> <tr><td>2018</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>2019</td><td>3</td><td>6</td><td>9</td><td>9</td></tr> <tr><td>2020</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>2021</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	1	1	2	2	2015	2	2	2	2	2016	0	0	1	1	2017	0	0	1	1	2018	0	0	0	0	2019	3	6	9	9	2020	0	0	0	0	2021	0	0	0	0	4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> No adjustments in Final Statements for September 2020 to May 2021 billing months
Quarter	Q1	Q2	Q3	Q4																																														
2014	1	1	2	2																																														
2015	2	2	2	2																																														
2016	0	0	1	1																																														
2017	0	0	1	1																																														
2018	0	0	0	0																																														
2019	3	6	9	9																																														
2020	0	0	0	0																																														
2021	0	0	0	0																																														
Timeliness of Meter Data Error Detection	Percent of timely issuance of Meter Trouble Reports (MTRs) within four (4) calendar days after receipt of meter data from MSP and RMSP.	2.00%	98%	No late MTR processing since 2014.	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> 100% timeliness in issuance of MTRs <table border="1"> <thead> <tr> <th>Category</th> <th>Monthly MTR</th> <th>Daily MTR</th> </tr> </thead> <tbody> <tr> <td>WESM</td> <td>7,199</td> <td>45,255</td> </tr> <tr> <td>RCOA</td> <td>6,370</td> <td>13,480</td> </tr> <tr> <td>Total</td> <td>13,569</td> <td>58,735</td> </tr> </tbody> </table>	Category	Monthly MTR	Daily MTR	WESM	7,199	45,255	RCOA	6,370	13,480	Total	13,569	58,735																																	
Category	Monthly MTR	Daily MTR																																																
WESM	7,199	45,255																																																
RCOA	6,370	13,480																																																
Total	13,569	58,735																																																
Efficiency of Monetary Transactions	Measures the amount of late monetary remittances. This is	1.00%	0 late	No late remittances since 2014.	4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> No late monetary transactions 																																													

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights
	an all or nothing measure, which means even 1 peso of late remittance would mean a Poor rating.				<ul style="list-style-type: none"> On time remittance to sellers of PHP36.269B 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 means even 1 day late remittance would mean a Poor rating.	1.00%	0 late		
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%	No late margin calls since 2014.	4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> 100% timely issuance of margin calls Issued 234 margin calls on time
Timeliness of Default Notice	Measures the timeliness of the MO's issuance of default notice upon non-payment of a	1.00%	0 late	No late default notices since 2015. <i>The timeliness of default notice issuance was only measured since 2015.</i>	4Q 2020 – 2Q 2021 Highlights (26 Aug 2020 – 25 May 2021) <ul style="list-style-type: none"> 100% timely issuance of default notices Issued 81 default notices on time

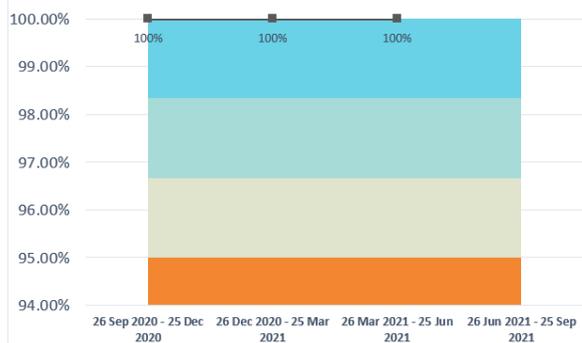
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

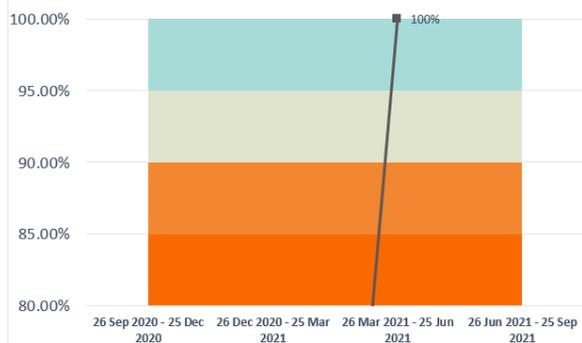
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
	WESM member within the month.																																																	
Registration and Customer Relations (10%)																																																		
Timeliness of Registration Application Processing	Percent of registration applications processed within 15 working days from the submission of complete requirements	2.00%	95%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2015</td> <td>92.5926%</td> <td>95.1220%</td> <td>96.2963%</td> <td>97.0588%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>96.6700%</td> </tr> <tr> <td>2017</td> <td>99.0000%</td> <td>99.7500%</td> <td>99.7900%</td> <td>99.8000%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	100%	100%	100%	2015	92.5926%	95.1220%	96.2963%	97.0588%	2016	100%	100%	100%	96.6700%	2017	99.0000%	99.7500%	99.7900%	99.8000%	2018	100%	100%	100%	100%	2019	100%	100%	100%	100%	2020	100%	100%	100%	100%	2021	100%	100%	100%	100%	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 100% timely processing of registration applications • Processed 230 registration applications (12 WESM applications and 218 RCOA applications)
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	100%	100%	100%																																														
2015	92.5926%	95.1220%	96.2963%	97.0588%																																														
2016	100%	100%	100%	96.6700%																																														
2017	99.0000%	99.7500%	99.7900%	99.8000%																																														
2018	100%	100%	100%	100%																																														
2019	100%	100%	100%	100%																																														
2020	100%	100%	100%	100%																																														
2021	100%	100%	100%	100%																																														
Timeliness of Customer Switching Requests Processing	Percent of customer switching requests processed on time	1.00%	95%	No late processing of customer switching requests since its commencement in 2015.	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 100% timely processing of customer switching requests • Processed 187 customer switching requests 																																													
Timeliness of the Conduct of Participant Trainings	Percent of participant trainings conducted as per schedule	2.00%	95%	No late training since 2014.	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)																																													

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

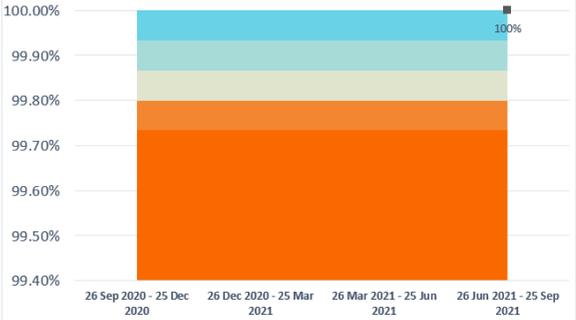
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
					<ul style="list-style-type: none"> Conducted 17 participant trainings on time <ul style="list-style-type: none"> 11 Basic WESM Training three (3) Advanced WESM Training three (3) RCOA Training 																																													
Feedback on Participant Trainings	Average of the participant feedback score on trainings, as gathered from survey forms	1.00%	90%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>96.0400%</td> <td>95.5700%</td> <td>95.9450%</td> <td>95.9400%</td> </tr> <tr> <td>2015</td> <td>96.5000%</td> <td>96.0400%</td> <td>95.1700%</td> <td>95.3800%</td> </tr> <tr> <td>2016</td> <td>94.8500%</td> <td>94.5700%</td> <td>94.7000%</td> <td>94.8000%</td> </tr> <tr> <td>2017</td> <td>96.7700%</td> <td>96.7400%</td> <td>96.7300%</td> <td>96.8200%</td> </tr> <tr> <td>2018</td> <td>97.2400%</td> <td>97.5400%</td> <td>97.6400%</td> <td>97.4500%</td> </tr> <tr> <td>2019</td> <td>97.4350%</td> <td>97.8417%</td> <td>97.8417%</td> <td>98.0900%</td> </tr> <tr> <td>2020</td> <td>99.8800%</td> <td>99.2450%</td> <td>99.2450%</td> <td>96.9943%</td> </tr> <tr> <td>2021</td> <td>97.7514%</td> <td>97.8289%</td> <td>97.7553%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	96.0400%	95.5700%	95.9450%	95.9400%	2015	96.5000%	96.0400%	95.1700%	95.3800%	2016	94.8500%	94.5700%	94.7000%	94.8000%	2017	96.7700%	96.7400%	96.7300%	96.8200%	2018	97.2400%	97.5400%	97.6400%	97.4500%	2019	97.4350%	97.8417%	97.8417%	98.0900%	2020	99.8800%	99.2450%	99.2450%	96.9943%	2021	97.7514%	97.8289%	97.7553%		<p>4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021)</p> <ul style="list-style-type: none"> An average feedback of 97.7553% on the participant trainings
Quarter	Q1	Q2	Q3	Q4																																														
2014	96.0400%	95.5700%	95.9450%	95.9400%																																														
2015	96.5000%	96.0400%	95.1700%	95.3800%																																														
2016	94.8500%	94.5700%	94.7000%	94.8000%																																														
2017	96.7700%	96.7400%	96.7300%	96.8200%																																														
2018	97.2400%	97.5400%	97.6400%	97.4500%																																														
2019	97.4350%	97.8417%	97.8417%	98.0900%																																														
2020	99.8800%	99.2450%	99.2450%	96.9943%																																														
2021	97.7514%	97.8289%	97.7553%																																															

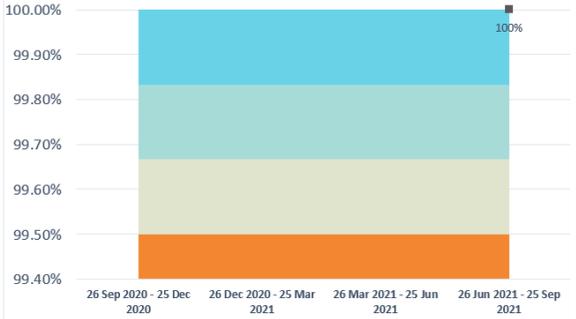
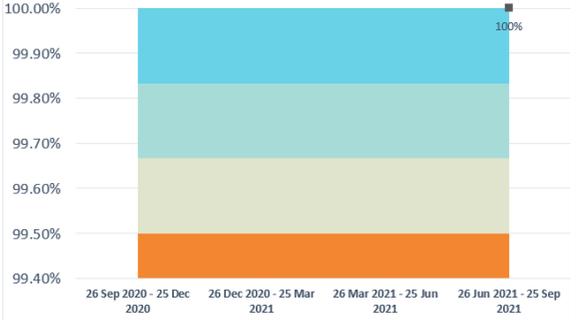
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

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%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>99.2308%</td> <td>98.7013%</td> <td>99.0506%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>98.1308%</td> <td>98.7952%</td> <td>99.0196%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>99.1900%</td> </tr> <tr> <td>2019</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	99.2308%	98.7013%	99.0506%	2015	100%	98.1308%	98.7952%	99.0196%	2016	100%	100%	100%	100%	2017	100%	100%	100%	100%	2018	100%	100%	100%	99.1900%	2019	100%	100%	100%	100%	2020	100%	100%	100%	100%	2021	100%	100%	100%	100%	4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> • 100% rating in addressing participants' data requests and queries • Addressed 357 participants' data requests and queries within the required timeline <ul style="list-style-type: none"> ○ TOD responded to 344 data requests and queries ○ CPC processed 13 data requests and queries with payment
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	99.2308%	98.7013%	99.0506%																																														
2015	100%	98.1308%	98.7952%	99.0196%																																														
2016	100%	100%	100%	100%																																														
2017	100%	100%	100%	100%																																														
2018	100%	100%	100%	99.1900%																																														
2019	100%	100%	100%	100%																																														
2020	100%	100%	100%	100%																																														
2021	100%	100%	100%	100%																																														

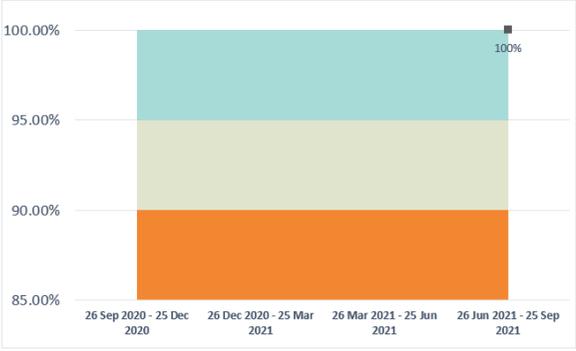
Measure	Brief Description	Weight	Target	Performance	Highlights																																													
Timeliness of resolving Participant/ Customer Complaints	Percent of valid complaints that were resolved as per schedule	2.00%	95%	 <table border="1"> <thead> <tr> <th>Quarter</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> <th>Q4</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2015</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2016</td> <td>100%</td> <td>100%</td> <td>98.1100%</td> <td>98.5100%</td> </tr> <tr> <td>2017</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2018</td> <td>100%</td> <td>100%</td> <td>96.7700%</td> <td>96.8800%</td> </tr> <tr> <td>2019</td> <td>n/a</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2020</td> <td>100%</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> <tr> <td>2021</td> <td>n/a</td> <td>n/a</td> <td>100%</td> <td></td> </tr> </tbody> </table>	Quarter	Q1	Q2	Q3	Q4	2014	100%	100%	100%	100%	2015	100%	100%	100%	100%	2016	100%	100%	98.1100%	98.5100%	2017	100%	100%	100%	100%	2018	100%	100%	96.7700%	96.8800%	2019	n/a	100%	100%	100%	2020	100%	100%	100%	100%	2021	n/a	n/a	100%		4Q 2020 – 2Q 2021 Highlights (26 Sep 2020 – 25 Jun 2021) <ul style="list-style-type: none"> Resolved 100% (1 out of 1) valid complaint received during the monitoring period
Quarter	Q1	Q2	Q3	Q4																																														
2014	100%	100%	100%	100%																																														
2015	100%	100%	100%	100%																																														
2016	100%	100%	98.1100%	98.5100%																																														
2017	100%	100%	100%	100%																																														
2018	100%	100%	96.7700%	96.8800%																																														
2019	n/a	100%	100%	100%																																														
2020	100%	100%	100%	100%																																														
2021	n/a	n/a	100%																																															
Overall Rating (26 September 2020 – 25 June 2021)					4.75 – Very Satisfactory																																													

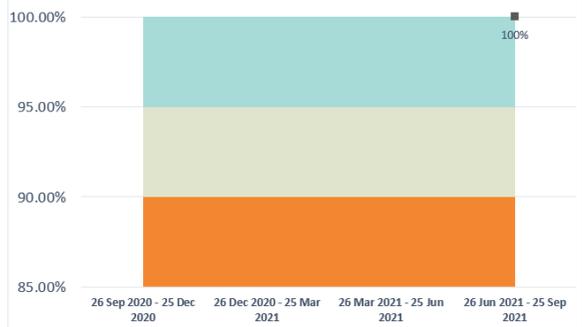
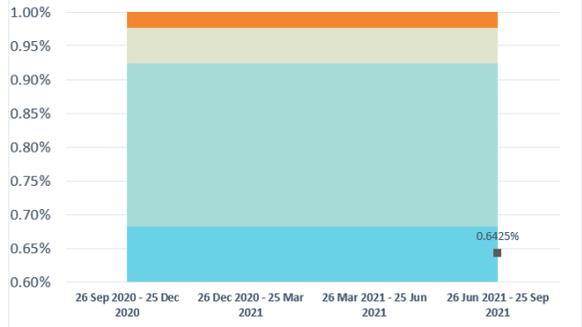
II. Market Operator Performance from 26 June 2021 to 25 September 2021

Measure	Brief Description	Weight	Target	Performance	Highlights
IT Systems (20%)					
Market Management Systems (MMS) Availability	Ratio of intervals that the MMS is functional or accessible to Users through the Market Participant Interface (MPI) to the total intervals it is required and expected to function or be accessible.	12%	99.80%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% availability • No downtime out of 2,208 hours recorded

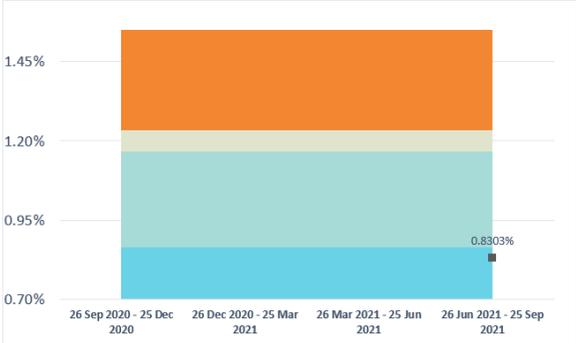
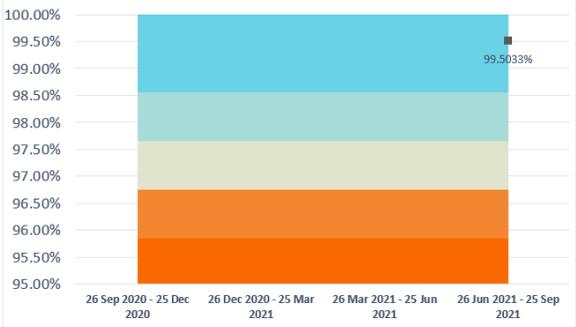
Measure	Brief Description	Weight	Target	Performance	Highlights
Public WESM Website (PW) Availability	Percent of intervals that the PW is functional or accessible to Users vis-à-vis the total number of intervals it is required and expected to function or be accessible.	3%	99.50%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% availability • No downtime out of 2,208 hours recorded
Central Registration and Settlement System – User Interface (CRSS-UI)	Ratio of intervals that the CRSS-UI is functional or accessible to Users to the total intervals it is required and expected to function or be accessible.	5%	99.50%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% availability • No downtime out of 2,208 hours recorded
Market Reports and Data Publication (15%)					

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

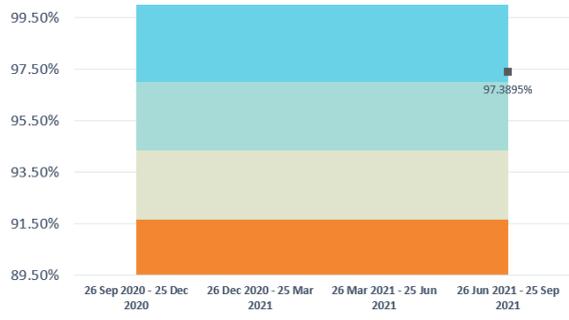
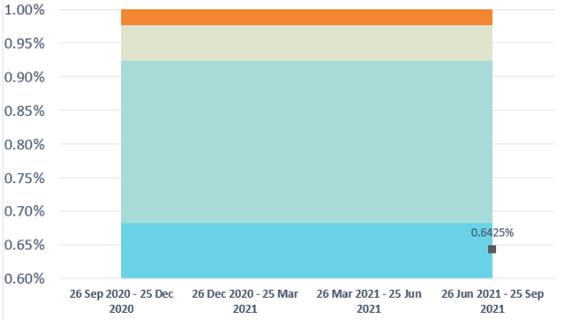
Measure	Brief Description	Weight	Target	Performance	Highlights
Availability	Average of the measured publications' availability percentages, which are the ratio of the actual number of published reports/data to the total expected number.	5%	95%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% availability • IEMOP informed that there was a limitation on the software used to monitor the publication logs for July. To address this, a new customized data transfer tool was utilized around 2nd week of August 2021. However, a malware attack occurred on 29 August 2021 and was mitigated on 03 September 2021. IEMOP further informed the event corrupted the publication logs for August and parts of September. PEMC and PAC considered IEMOP's request in the evaluation of this measure, thus, the following publications were not evaluated for July and August 2021: <ul style="list-style-type: none"> ○ WAP (MPI and public website) ○ DAP (MPI and public website) ○ HAP (MPI and public website) ○ RTD (MPI and public website) ○ Post-Market Run Prices (GWAP, LWAP, DIPC Prices, Marginal Plants, Administered Prices) ○ MPI Advisories ○ SO Dispatch Instruction Report ○ Marginal Plants and Market Clearing Prices

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%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% timeliness • The same considerations regarding IEMOP's request in the availability of publication were applied in the evaluation of timeliness of publication 												
Forecast Accuracy (23%)																	
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%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 0.6425% MAPE • Considered 26,372 out of 26,496 intervals, with highest absolute forecast error of 7.9488%, in the computation of this measure • Excluded 124 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1" data-bbox="1556 1125 2060 1316"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>6</td> </tr> <tr> <td>Generator Tripping</td> <td>55</td> </tr> <tr> <td>Line Tripping</td> <td>5</td> </tr> <tr> <td>Load Dropping</td> <td>10</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>48</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	6	Generator Tripping	55	Line Tripping	5	Load Dropping	10	Real-Time Data Issue	48
Reason for Exclusion	No. of Trading Intervals																
Market Intervention	6																
Generator Tripping	55																
Line Tripping	5																
Load Dropping	10																
Real-Time Data Issue	48																

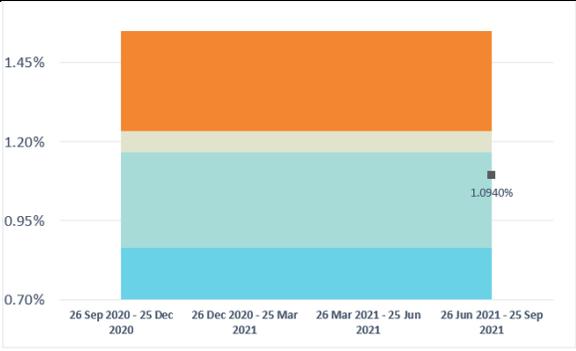
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

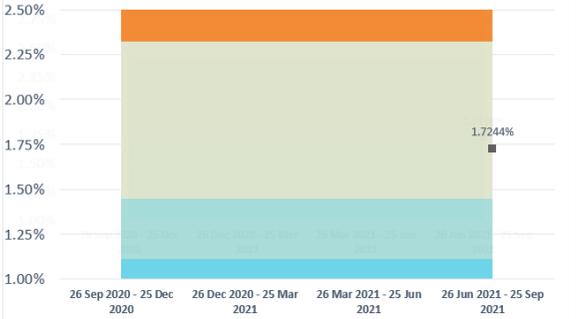
Measure	Brief Description	Weight	Target	Performance	Highlights														
RTD Forecast MAPE for Visayas	<p>Measures how far the RTD forecasted demand is from the actual demand in Visayas.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	3.75%	1.20%		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> • 0.8303% MAPE • Considered 26,125 out of 26,496 intervals, with maximum absolute forecast error of 15.8512%, in the calculation of this measure • Excluded 371 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>88</td> </tr> <tr> <td>Generator Tripping</td> <td>10</td> </tr> <tr> <td>Line Tripping</td> <td>120</td> </tr> <tr> <td>Load Dropping</td> <td>65</td> </tr> <tr> <td>Sudden change in weather</td> <td>30</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>58</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	88	Generator Tripping	10	Line Tripping	120	Load Dropping	65	Sudden change in weather	30	Real-Time Data Issue	58
Reason for Exclusion	No. of Trading Intervals																		
Market Intervention	88																		
Generator Tripping	10																		
Line Tripping	120																		
Load Dropping	65																		
Sudden change in weather	30																		
Real-Time Data Issue	58																		
RTD Forecast Accuracy Rating (FAR) for Luzon	<p>The percent of intervals with forecast error that is within the MAPE tolerance level of $\pm 3\%$ in Luzon.</p>	3.75%	97.20%		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> • 99.5033% forecast accuracy rating • Considered 26,241 out of the 26,372 valid intervals, with forecast error within the $\pm 3\%$ tolerance level, in the computation • Excluded same intervals as enumerated in the RTD Forecast MAPE for Luzon measure 														

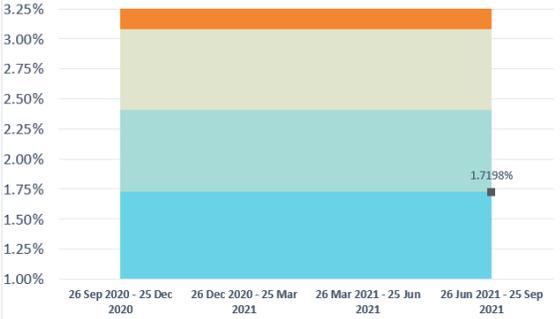
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

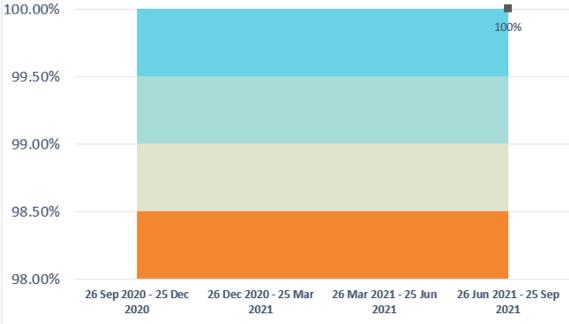
Measure	Brief Description	Weight	Target	Performance	Highlights												
RTD Forecast Accuracy Rating (FAR) for Visayas	The percent of intervals with forecast error that is within the MAPE tolerance level of $\pm 3\%$ in Visayas.	3.75%	93.00%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 97.3895% forecast accuracy rating • Considered 25,443 out of the 26,125 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 												
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%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 0.9048% MAPE • Considered 315,622 out of 317,952 intervals, with highest absolute forecast error of 81.6881%, in the computation of this measure • Excluded 2,330 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1" data-bbox="1563 1201 2063 1378"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>43</td> </tr> <tr> <td>Generator Tripping</td> <td>660</td> </tr> <tr> <td>Line Tripping</td> <td>60</td> </tr> <tr> <td>Load Dropping</td> <td>115</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>576</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	43	Generator Tripping	660	Line Tripping	60	Load Dropping	115	Real-Time Data Issue	576
Reason for Exclusion	No. of Trading Intervals																
Market Intervention	43																
Generator Tripping	660																
Line Tripping	60																
Load Dropping	115																
Real-Time Data Issue	576																

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

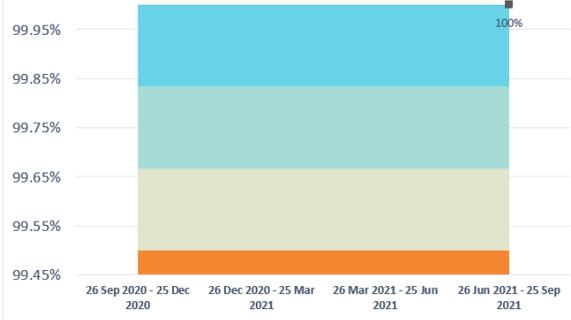
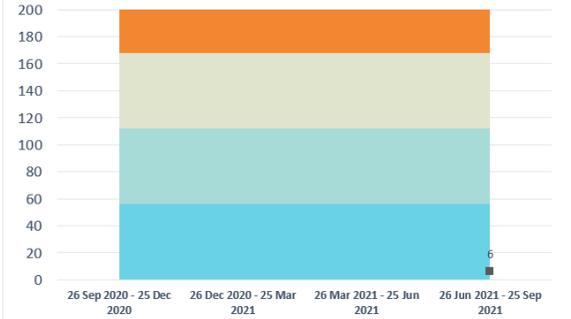
Measure	Brief Description	Weight	Target	Performance	Highlights																
					<table border="1"> <tr> <td>Missing</td> <td>876</td> </tr> </table> <ul style="list-style-type: none"> IEMOP explained that the missing intervals were caused by errors that occurred during the HAP runs. These errors were mitigated immediately so it would not transpire to the RTD forecasts. 	Missing	876														
Missing	876																				
HAP Forecast MAPE for Visayas	<p>Measures how far the HAP forecasted demand is from the actual demand in Visayas.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	2%	1.20%		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> 1.0940% MAPE Considered 312,689 out of 317,952 intervals, with maximum absolute forecast error of 99.7334%, in the calculation of this measure Excluded 5,263 intervals in the calculations due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>991</td> </tr> <tr> <td>Generator Tripping</td> <td>120</td> </tr> <tr> <td>Line Tripping</td> <td>1440</td> </tr> <tr> <td>Load Dropping</td> <td>780</td> </tr> <tr> <td>Sudden change in weather</td> <td>360</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>696</td> </tr> <tr> <td>Missing</td> <td>876</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	991	Generator Tripping	120	Line Tripping	1440	Load Dropping	780	Sudden change in weather	360	Real-Time Data Issue	696	Missing	876
Reason for Exclusion	No. of Trading Intervals																				
Market Intervention	991																				
Generator Tripping	120																				
Line Tripping	1440																				
Load Dropping	780																				
Sudden change in weather	360																				
Real-Time Data Issue	696																				
Missing	876																				

Measure	Brief Description	Weight	Target	Performance	Highlights														
Day Ahead Projection (DAP) Forecast MAPE for Luzon	<p>Measures how far the DAP forecasted demand is from the actual demand in Luzon.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	2%	1.60%	 <p>2.50% 2.25% 2.00% 1.75% 1.50% 1.25% 1.00%</p> <p>26 Sep 2020 - 25 Dec 2020 26 Dec 2020 - 25 Mar 2021 26 Mar 2021 - 25 Jun 2021 26 Jun 2021 - 25 Sep 2021</p> <p>1.7244%</p>	<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> • 1.7244% MAPE • Considered 8,713 out of 8,832, with maximum absolute forecast error of 21.1736%, in the computation • Excluded 119 intervals in the calculation due to the following reasons as provided in the MOPS: <table border="1" data-bbox="1563 646 2060 853"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>19</td> </tr> <tr> <td>Generator Tripping</td> <td>44</td> </tr> <tr> <td>Line Tripping</td> <td>4</td> </tr> <tr> <td>Load Dropping</td> <td>8</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>36</td> </tr> <tr> <td>Missing</td> <td>8</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • IEMOP explained that the missing intervals were caused by errors that occurred during the DAP runs. These errors were mitigated immediately so it would not transpire to the RTD forecasts. 	Reason for Exclusion	No. of Trading Intervals	Market Intervention	19	Generator Tripping	44	Line Tripping	4	Load Dropping	8	Real-Time Data Issue	36	Missing	8
Reason for Exclusion	No. of Trading Intervals																		
Market Intervention	19																		
Generator Tripping	44																		
Line Tripping	4																		
Load Dropping	8																		
Real-Time Data Issue	36																		
Missing	8																		

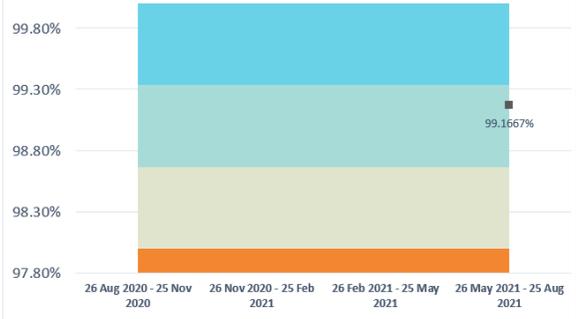
Measure	Brief Description	Weight	Target	Performance	Highlights																
DAP Forecast MAPE for Visayas	<p>Measures how far the DAP forecasted demand is from the actual demand in Visayas.</p> <p>The closer the rating is to 0%, the higher the MAPE rating.</p>	2%	2.20%		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> 1.7198% MAPE Considered 8,557 out of 8,832 intervals, with maximum absolute forecast error of 44.1585%, in the calculation of this measure Excluded 275 intervals in the computation due to the following reasons as provided in the MOPS: <table border="1"> <thead> <tr> <th>Reason for Exclusion</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention</td> <td>51</td> </tr> <tr> <td>Generator Tripping</td> <td>8</td> </tr> <tr> <td>Line Tripping</td> <td>96</td> </tr> <tr> <td>Load Dropping</td> <td>48</td> </tr> <tr> <td>Sudden change in weather</td> <td>24</td> </tr> <tr> <td>Real-Time Data Issue</td> <td>40</td> </tr> <tr> <td>Missing</td> <td>8</td> </tr> </tbody> </table>	Reason for Exclusion	No. of Trading Intervals	Market Intervention	51	Generator Tripping	8	Line Tripping	96	Load Dropping	48	Sudden change in weather	24	Real-Time Data Issue	40	Missing	8
Reason for Exclusion	No. of Trading Intervals																				
Market Intervention	51																				
Generator Tripping	8																				
Line Tripping	96																				
Load Dropping	48																				
Sudden change in weather	24																				
Real-Time Data Issue	40																				
Missing	8																				
Dispatch Scheduling and Pricing (17%)																					
RTD (ex-ante) Workflow Successful Run	Percent of RTD market runs with available schedules and completed within the timetable	2.50%	99.75%		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> 100% RTD successful runs Considered 26,490 out of 26,496 RTD runs in the computation of this measure, which excluded six (6) intervals under market intervention attributable to the MO 																

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%	 <p>26 Sep 2020 - 25 Dec 2020 26 Dec 2020 - 25 Mar 2021 26 Mar 2021 - 25 Jun 2021 26 Jun 2021 - 25 Sep 2021</p>	3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 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 <table border="1" data-bbox="1646 614 1982 710"> <thead> <tr> <th>Region</th> <th>RTD-PEN</th> </tr> </thead> <tbody> <tr> <td>Luzon</td> <td>538</td> </tr> <tr> <td>Visayas</td> <td>538</td> </tr> </tbody> </table>	Region	RTD-PEN	Luzon	538	Visayas	538
Region	RTD-PEN										
Luzon	538										
Visayas	538										

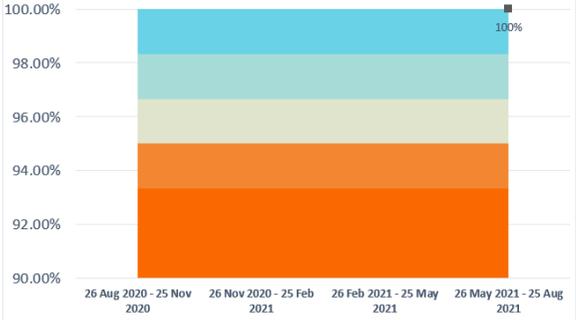
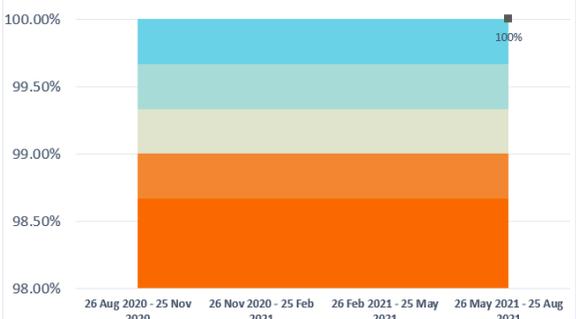
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

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%														
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		<p>3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021)</p> <ul style="list-style-type: none"> Six (6) market interventions attributable to the MO <table border="1"> <thead> <tr> <th>Date</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>28 June 2021 1340H</td> <td>Market Intervention due to non-generation of RTD schedule</td> </tr> <tr> <td>21 August 2021 1250H – 1255H</td> <td>Market Intervention due to non-generation of RTD schedule (Non-responsive database)</td> </tr> <tr> <td>24 August 2021 2345H</td> <td>Market Intervention due to non-generation of RTD schedule (MPI transfer failure)</td> </tr> <tr> <td>25 August 2021 0040H</td> <td>Market Intervention due to non-generation of RTD schedule (MPI transfer failure)</td> </tr> <tr> <td>04 September 2021 2345H</td> <td>Market Intervention due to non-generation of RTD schedule (MPI transfer failure)</td> </tr> </tbody> </table>	Date	Reason	28 June 2021 1340H	Market Intervention due to non-generation of RTD schedule	21 August 2021 1250H – 1255H	Market Intervention due to non-generation of RTD schedule (Non-responsive database)	24 August 2021 2345H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)	25 August 2021 0040H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)	04 September 2021 2345H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)
Date	Reason																
28 June 2021 1340H	Market Intervention due to non-generation of RTD schedule																
21 August 2021 1250H – 1255H	Market Intervention due to non-generation of RTD schedule (Non-responsive database)																
24 August 2021 2345H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)																
25 August 2021 0040H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)																
04 September 2021 2345H	Market Intervention due to non-generation of RTD schedule (MPI transfer failure)																

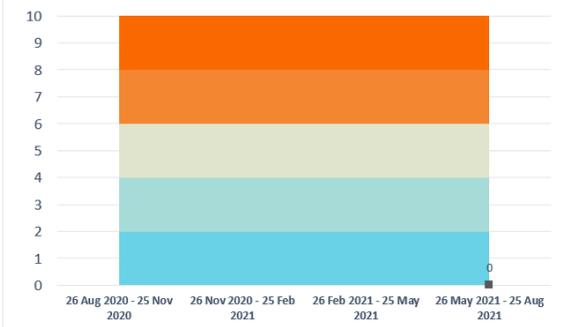
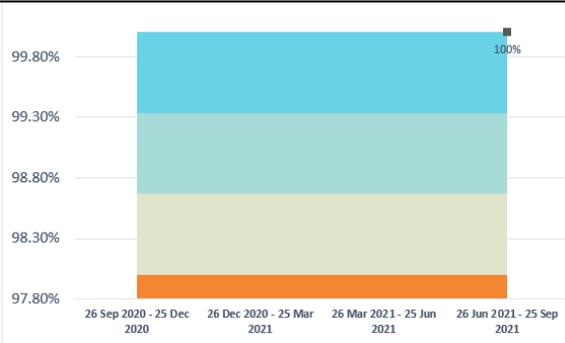
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights						
					<ul style="list-style-type: none"> Other market intervention / market suspension declared in 82 trading intervals in Visayas due to the following reasons: <table border="1"> <thead> <tr> <th>MI/MS Description</th> <th>No. of Trading Intervals</th> </tr> </thead> <tbody> <tr> <td>Market Intervention – SO initiated effective 0000H – 0630H due to partial system blackout in the Visayas Grid (21 August 2021)</td> <td>79</td> </tr> <tr> <td>Market Intervention – per MO, this was SO initiated effective 1515H – 1525H due to extremely erroneous nodal load at Sta. Barbara substation (13 September 2021)</td> <td>3</td> </tr> </tbody> </table>	MI/MS Description	No. of Trading Intervals	Market Intervention – SO initiated effective 0000H – 0630H due to partial system blackout in the Visayas Grid (21 August 2021)	79	Market Intervention – per MO, this was SO initiated effective 1515H – 1525H due to extremely erroneous nodal load at Sta. Barbara substation (13 September 2021)	3
MI/MS Description	No. of Trading Intervals										
Market Intervention – SO initiated effective 0000H – 0630H due to partial system blackout in the Visayas Grid (21 August 2021)	79										
Market Intervention – per MO, this was SO initiated effective 1515H – 1525H due to extremely erroneous nodal load at Sta. Barbara substation (13 September 2021)	3										
Billing, Settlements, and Accounts Management (15%)											
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%		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> 99.1667% timely issuance of settlement statements IEMOP considered an additional validation day for processing the preliminary settlement statement for July 2021 billing month due to lack of familiarity of some TPs with CRSS BCQ Upload Interface, incomplete submission of MQs by majority of MSPs, and system issues encountered on data exchange interfaces. Upon IEMOP's request, PEMC and PAC considered said additional validation day in the evaluation, thus, excluding 						

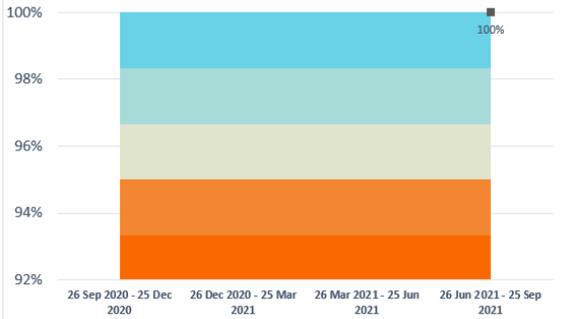
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights
					this in the count of days late in the issuance of the statement.
Accuracy of Preliminary Settlement Calculations	Compares the difference between preliminary and the final settlement calculations.	2.00%	95%		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> • 100% accuracy of Preliminary Settlement Calculations
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%		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> • 100% accuracy of Final Settlement Calculations • No adjustment in final settlement calculations

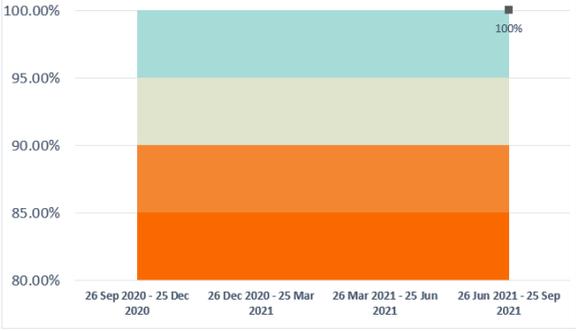
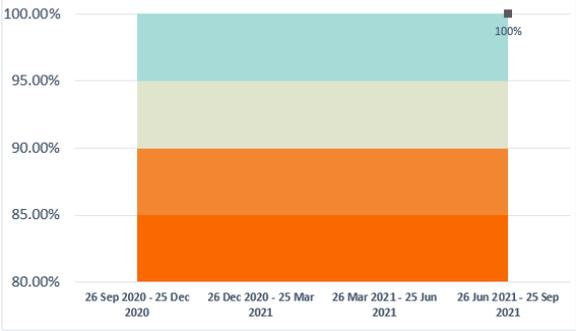
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights												
Frequency of Adjustments to Final Settlement Statements	Number of adjustments to the Final Settlement Statements.	2.00%	6		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> No adjustments in Final Statements for June 2021 to August 2021 billing months 												
Timeliness of Meter Data Error Detection	Percent of timely issuance of Meter Trouble Reports (MTRs) within four (4) calendar days after receipt of meter data from MSP and RMSP.	2.00%	98%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> 100% timeliness in issuance of MTRs <table border="1" data-bbox="1556 845 2060 989"> <thead> <tr> <th>Category</th> <th>Monthly MTR</th> <th>Daily MTR</th> </tr> </thead> <tbody> <tr> <td>WESM</td> <td>3,291</td> <td>141,472</td> </tr> <tr> <td>RCOA</td> <td>4,938</td> <td>163,656</td> </tr> <tr> <td>Total</td> <td>8,229</td> <td>305,128</td> </tr> </tbody> </table>	Category	Monthly MTR	Daily MTR	WESM	3,291	141,472	RCOA	4,938	163,656	Total	8,229	305,128
Category	Monthly MTR	Daily MTR															
WESM	3,291	141,472															
RCOA	4,938	163,656															
Total	8,229	305,128															
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		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> No late monetary transactions On time remittance to sellers of PHP31.332B WESM payments received by the MO 												

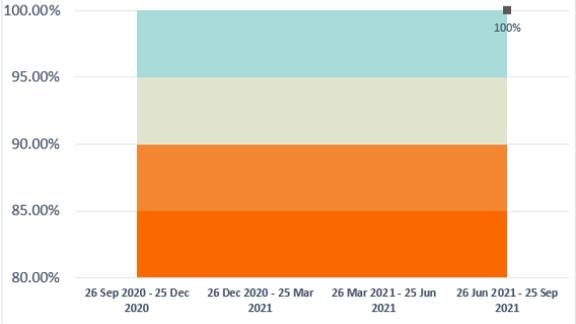
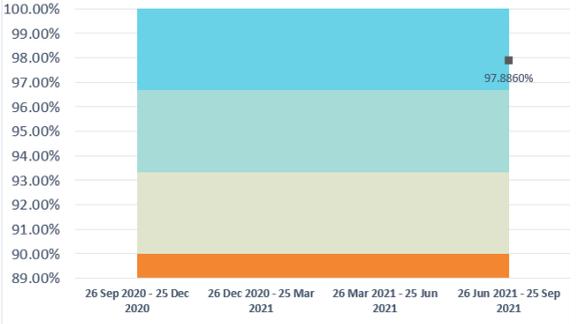
Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

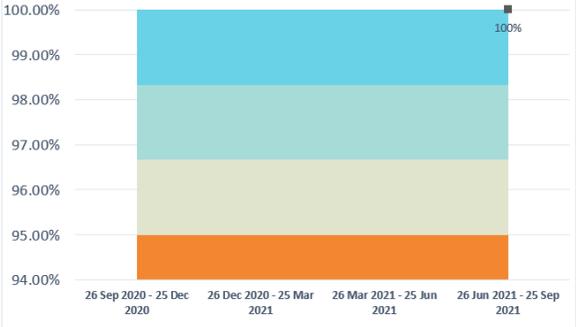
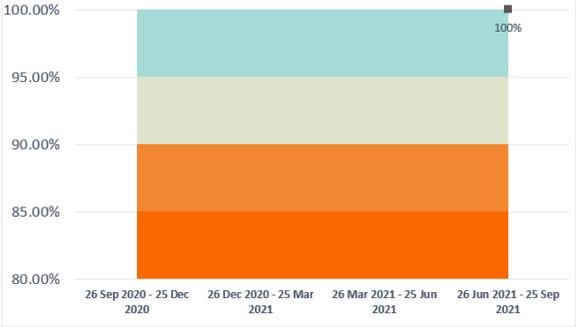
Measure	Brief Description	Weight	Target	Performance	Highlights
Timeliness of Monetary Transactions	All monetary transactions must be remitted to WESM members within the next working day from receipt of payments. This is an all or nothing measure, which means even 1 day late remittance would mean a Poor rating.	1.00%	0 late		
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%	 <p>The chart displays performance percentages for four periods: 26 Sep 2020 - 25 Dec 2020, 26 Dec 2020 - 25 Mar 2021, 26 Mar 2021 - 25 Jun 2021, and 26 Jun 2021 - 25 Sep 2021. The performance is 100% for the final period (26 Jun 2021 - 25 Sep 2021).</p>	3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> • 100% timely issuance of margin calls • IEMOP considered not to issue Margin Calls for July 2021 billing month due to the reasonable expectation that there will be significant changes to the prelim statements issued after the corrected MQ and BCQ data are submitted. Upon IEMOP's request, PEMC and PAC considered said non-issuance, thus, excluding the billing month in the evaluation of this performance measure. • Issued 130 margin calls on time for June and August billing months.
Timeliness of Default Notice	Measures the timeliness of the MO's issuance of default notice upon non-payment of a	1.00%	0 late		3Q 2021 Highlights (26 May 2021 – 25 Aug 2021) <ul style="list-style-type: none"> • 100% timely issuance of default notices • Issued 65 default notices on time

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

Measure	Brief Description	Weight	Target	Performance	Highlights
	WESM member within the month.				
Registration and Customer Relations (10%)					
Timeliness of Registration Application Processing	Percent of registration applications processed within 15 working days from the submission of complete requirements	2.00%	95%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% timely processing of registration applications • Processed 95 registration applications (6 WESM applications and 89 RCOA applications)
Timeliness of Customer Switching Requests Processing	Percent of customer switching requests processed on time	1.00%	95%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% timely processing of customer switching requests • Processed 22 customer switching requests

Legend: ■ Poor ■ Needs Improvement ■ Satisfactory ■ Very Satisfactory ■ Excellent

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%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> Conducted 5 participant trainings on time <ul style="list-style-type: none"> three (3) Basic WESM Training one (1) Advanced WESM Training on Pricing and Settlement one (1) RCOA Training
Feedback on Participant Trainings	Average of the participant feedback score on trainings, as gathered from survey forms	1.00%	90%		3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> An average feedback of 97.8860% 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%	 <p>100.00% 99.00% 98.00% 97.00% 96.00% 95.00% 94.00%</p> <p>26 Sep 2020 - 25 Dec 2020 26 Dec 2020 - 25 Mar 2021 26 Mar 2021 - 25 Jun 2021 26 Jun 2021 - 25 Sep 2021</p>	3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • 100% rating in addressing participants' data requests and queries • Addressed 258 participants' data requests and queries within the required timeline <ul style="list-style-type: none"> ○ TOD responded to 257 data requests and queries ○ CPC processed 1 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%	 <p>100.00% 95.00% 90.00% 85.00% 80.00%</p> <p>26 Sep 2020 - 25 Dec 2020 26 Dec 2020 - 25 Mar 2021 26 Mar 2021 - 25 Jun 2021 26 Jun 2021 - 25 Sep 2021</p>	3Q 2021 Highlights (26 Jun 2021 – 25 Sep 2021) <ul style="list-style-type: none"> • Resolved 100% (14 out of 14) valid complaint received during the monitoring period
Overall Rating (26 June 2021 – 25 September 2021)				4.90 – Very Satisfactory	

Appendix A. 2015 Market Operator Performance Standards

Performance Category	Description
<p>A. IT Systems</p>	<p>IT systems cover the availability to market participants of the Market Management System (MMS) and the public WESM website, which is referred to as the market information website under the WESM Rules.</p> <p>The MMS and public WESM website are being administered, maintained and monitored 24/7 to ensure that the market results are available and published on time. Participants' complaints or concerns regarding these systems are reported to the MO through phone calls or emails. In addition, any system malfunction or errors detected internally are likewise immediately reported and addressed.</p>
<p>Market Management Systems (MMS)</p>	<p>The various IT components of the MMS is essential in the continuous and efficient communication of the market systems, gathering of market workflow inputs, dispatch scheduling, processing and publication of market outputs and emergency systems.</p> <p>Unavailability of the MMS that was caused by third party service providers, such as electricity supply and communication link providers of MO, are excluded from the MOPS.</p>
<p>Public WESM Website</p>	<p>The public IEMOP website, or the Market Information Website, is the facility and electronic communication system wherein the MO publishes information that may be accessed by WESM Members, interested parties and the general public. It provides extensive information about the MO, WESM and Retail Competition and Open Access (RCOA), market operations and governance. It also makes available market data and operational reports, registration and training information, and various documents, including the relevant laws, issuances, rules, and manuals.</p> <p>A new public website was made which is the IEMOP Public Website and can be found at www.iemop.ph. The public IEMOP website also contains relevant publication such as news, notices, announcements, and information on events. It also has a platform, i.e. Ticketing System, wherein inquiries, concerns, and even complaints can be made electronically by any interested party.</p> <p>In measuring its availability, downtimes refer to incidents when the public WESM website is not accessible due to errors caused by the MO's internal system and processes. Those attributed or caused by third parties are excluded since these are beyond the MO's control.</p>

Performance Category	Description
<p>B. Market Reports and Data Publication</p>	<p>Market participants rely on market information for them to make informed business decisions, whether it be on electricity trading or making long term electricity industry investments. Readily available information are also helpful to the DOE and Energy Regulatory Commission (ERC) in their policy and regulatory decisions, respectively. Thus, making market information available through timely publication is essential in maintaining the transparency in the operations of the WESM.</p> <p>The MO is required to publish various market information, in accordance with the WESM Rules, market manuals and policy/regulatory directives. The list of market information for publication is provided in Annex D of the MOPS document.</p> <p>"Publication" as defined in the WESM Rules is "to make available information". While there are other means to make available information⁴, for the purposes of this MOPS monitoring, publication of market reports and data is interpreted to being made through the public WESM website, MPI, email, and newspaper of general circulation, as applicable. Note that publications through file transfer protocol (FTP) are monitored internally.</p> <p>The requirement to publish market information, in market reports format or in data format, is measured under the MOPS based on availability and timeliness. Published market reports and data that were considered in the latter are those with a prescribed timeline for publication in corresponding enabling rules/guidelines. On the other hand, reports or data are considered available once published, including those that have remained unchanged since its first publication (such as WESM Manuals, e.g. procedures regarding constraint violation coefficients).</p> <p>Availability pertains to the actual number of publications against the total number of required publications for each of the publications monitored. The average of the availability ratings for the publications provides the basis for rating this measure, such that regardless of the volume of the published market information, all publications have equal weights.</p> <p>Timeliness of market information publication refers to the MO's compliance to the required timing of publication of market information in accordance to the schedules under the WESM Rules, Manuals, internal procedures or the MOPS document. Similar to the calculation of availability, timeliness</p>

⁴ Publication is also done via data sharing or file transfer facility to market participants who have availed of this paid service. Data sharing or file transfers of MMS-generated and other market data and/or reports are provided to the monitoring systems of the DOE and ERC.

Performance Category	Description
	<p>pertains to the actual number of timely publications against the total number of required publications for each of the publications monitored. The average of the timeliness ratings for the publications provides the basis for rating for this measure, such that regardless of the volume of the published information, all publications have equal weights.</p>
C. Forecast Accuracy	<p>Load forecasting is a key determinant of market prices and schedules, and therefore must be as accurate as is reasonably possible. Any difference between the forecast load and the actual load represents an economic cost to the market in that either too much or too little generation is scheduled.</p> <p>The MO currently prepares and publishes week ahead (WAP), day ahead (DAP) and hour ahead (RTD) market projections to forecast load scenarios considering various factors (e.g. network service provider data, reserve requirements, generation offer, among others).</p> <p>As provided in the MOPS, however, only the DAP and RTD projections shall be measured as to their accuracy. The RTD accuracy is measured in terms of Mean Absolute Percentage Error (MAPE) and Forecast Accuracy Rate (FAR) while the DAP accuracy is measured with the MAPE only. Both RTD and DAP are measured per region, i.e. Luzon and Visayas.</p>
RTD Forecast	<p>The hour ahead forecast or the RTD forecast is one of the variables that are used to determine the ex-ante schedules and prices for the target trading interval. For clarity, it is noted that the data used in the computation of RTD forecast accuracy is the MMS generated forecast for Luzon and Visayas.⁵ The said regions are measured separately since RTD is published on a regional basis. The accuracy is measured against the actual demand based on snapshot data of all generators at minute 59,⁶ as follows:</p> <ul style="list-style-type: none"> • MAPE - reflects the average of the absolute percent difference between the actual and forecasted demand across all intervals • FAR - reflects the number of intervals in percent wherein the forecast is within the MAPE tolerance level, which is set at $\pm 3\%$.
DAP Forecast	<p>The DAP MAPE is used to measure the accuracy of DAP forecast. For clarity, the data used in the computation of DAP MAPE is the Similar Day Load Forecast (SDLF) Demand for Luzon and Visayas. Similar with the computation of RTD forecast, the accuracy of DAP forecast is measured</p>

⁵ Previously, hourly load forecasts that are inputs to the MMS (LDF or LDP) were used, in accordance with the MOPS, Issue 1.0.

⁶ In the absence of 59th minute snapshot data, the 54th minute snapshot data before the target hour or the 4th minute snapshot data of the target trading interval could be used. As an example, the 1559H or 1554H or 1604H snapshot data shall be used as actual demand for the 1600H interval.

Performance Category	Description
	against the actual demand based on snapshot data of all generators at minute 59. The same exclusions in the RTD forecasts are applied in the DAP forecasts.
D. Dispatch Scheduling and Pricing	This category deals with the market scheduling and pricing performance by the MO. It is particularly important that market processes be properly managed because of its impact to participant behavior and market outcome. As such, this category is measured in terms of the success in implementing RTD and real-time ex-post (RTX) workflow processes, timeliness of pricing error issuance and the duration of market intervention (MI) attributable to the MO.
RTD Workflow	<p>Since the RTD workflow process is run at an hourly interval, its success rate is evaluated by the number of trading intervals with resulting schedule completed within the timetable. These include RTD runs that were manually run by PEMC within the timetable.</p> <p>Under the MOPS, unsuccessful RTD runs that are attributable to factors beyond the control of MO (e.g. attributable to the SO and communication failure by service providers) are excluded from the calculations. Further, RTD runs with MI attributable to the MO are excluded in the trading intervals considered.</p>
RTX Workflow	The ex-post run or RTX workflow is measured in the same manner as with the RTD workflow process.
Pricing Errors and Market Re-runs	This refers to the process of validation of intervals with PENs and the timely completion of market re-runs (MRR) prior to the issuance of preliminary and final settlements for Luzon and Visayas.
Market Intervention Attributable to MO	The duration or frequency of market interventions (MIs) that are attributable to the MO is being monitored to ensure that the WESM is operational 24/7. The allowable number of MIs in a year is equal to or less than 14 trading intervals.
E. Billings, Settlements and Accounts Management	This category is related to the financial aspect of the WESM operations. It is essential that the MO handle financial transactions of the WESM with utmost integrity and efficiency considering the possible financial impact of

Performance Category	Description
	the transactions to the Market Participants. The MOPS provides that this category be measured in terms of timeliness, frequency and accuracy.
Issuance of Preliminary and Final Settlement Statements	The WESM Rules require that Preliminary Settlement Statements are issued within seven (7) days after the end of each billing period. It also provides that the issuance of Final Settlement Statements should not be later than 18 days after the end of each billing period. If the deadline falls on a Non-Working Day, the issuance of the settlement statements shall be made during the next immediate Working Day.
Preliminary and Final Settlement Calculations	<p>Given the possible financial impact of WESM settlement statements, the MO is rated according to the accuracy of issued billing statements. Accuracy rating of Preliminary Settlements is computed as the mean of the absolute percentage error of the preliminary settlement total trading amount (TTA) and the final settlement TTA per participant invoice.</p> <p>The adjustments related to claims for additional compensation for Administered Prices (AP) and must run units (MRUs) are excluded, as well as the adjustments due to corrections in meter quantities that are attributable to the metering service provider (MSP).</p> <p>Final settlement statements are also evaluated according to the number of adjustments in the final settlement calculations with the target being less than 6 adjustments per year.</p>
Meter Data Error Detection	<p>The MO is also evaluated in terms of its ability to detect meter data errors through the timely issuance of Meter Trouble Reports (MTRs) within four (4) calendar days after receipt of meter data from the Metering Services Provider (MSP).</p> <p>The MO receives daily meter quantities (MQ) electronically in Meter Data Exchange Format (MDEF – a software format) and monthly MQ via compact disc (CD) in Excel format from the MSP. The daily MQ is used for daily monitoring, processing and validation while the formatted-excel MQ is used for monthly settlement in the WESM. In cases where there exists orphan⁷ meter data and meter data with uncertain and missing values⁸, the MO will issue an MTR to the MSP. In turn, the MSP should issue the corrected daily meter data within ten (10) calendar days and monthly meter data within two (2) business days.⁹</p>

⁷ Values of the metered data whose meter is not registered in the MMS master lists are known as the “Orphan Values” (Section 7.3.2.3 of the WESM Manual on Metering Standards and Procedures).

⁸ Section 7.3.4 of the WESM Manual on Metering Standards and Procedures

⁹ Section 10.4.1.3-4 of the WESM Manual on Metering Standards and Procedures

Performance Category	Description
Monetary Transactions and Remittance Efficiency	As provided in the MOPS and the WESM Billing and Settlements Manual, all monetary transactions must be remitted to WESM Members in accordance to the WESM settlement timetable, i.e. no later than 3:00 p.m. on the next business day following the day on which the MO is to be paid.
Margin Call	<p>In accordance with the WESM Rules, the MO should verify whether each market participant has sufficient levels of prudential support to cover their financial trading activity in the spot market. If the actual exposure of a Market Participant exceeds its trading limit, then the MO shall issue a "Margin Call" to the Market Participant. As provided in the MOPS, the MO shall be evaluated according to the timeliness of issuing a notice for margin call to relevant WESM Member.</p> <p>The MO target of margin call issuance is on or before the 20th of the next month after the billing period, i.e. for the billing month 26 January 2020 to 25 February 2020, margin calls should have been issued on or before 20 March 2020.</p>
Default Notice	WESM Rule 3.14.11.2 requires the MO to issue a default notice, which specifies the nature of the alleged default, as soon as practicable, during any of the default events specified under WESM Rule 3.14.11.1. Further, the MO is required to disclose information pursuant to DOE DC No. 2013-07-0018 issued on 26 July 2013, Section 1.1.(a) containing the Settlement amount unpaid by the end of the month, and the specific WESM member that failed to pay the settlement amounts.
F. Registration and Customer Relations	This category evaluates the MO in relation to its efficiency in addressing the concerns and requests of external parties, which may directly influence the perception of the market participants on PEMC as an organization, and WESM as a venue for trading electricity.
Registration Processing	<p>The process of registration of the WESM participants under the WESM Rules is being implemented according to the following timeline:</p> <ul style="list-style-type: none"> • Within five (5) working days from receiving an application, the MO shall advise the applicant of any further information which the MO reasonably considers to be required to properly assess the application (WESM Rules, Clause 2.5.3.1);

Performance Category	Description
	<ul style="list-style-type: none"> • The MO shall send written notice of approval to the applicant within 15 working days from receipt of the application or the additional information or fees, if any; • The registration of the applicant shall take effect on the date specified in the notice of approval which shall be a date not more than 7 working days after the date on which the MO sends the notice of approval.
Customer Switching Requests	In accordance with the Retail Rules, customer switching requests should be processed by the MO, subject to the completion of all requirements, within 30 days prior to the proposed effective date.
Participants' Training and Feedback	To gauge the effectiveness of trainings, their timely conduct and the participants' feedback on the trainer/speaker and other aspects of the training (e.g. logistics and materials), which are gathered through survey forms to rate, are monitored.
Participant Queries and Data Requests	The MOPS requires the MO to address queries and data requests in a timely manner. Queries and data requests may include requests for historical data, clarifications regarding WESM concepts and requests for in-depth analysis or simulations.
Participant/Customer Complaint	The MOPS provides that complaints by customers should be resolved in a timely manner, i.e. within 5 working days. The MOPS provides that customers refer to Trading Participants, which may be generation companies or customer/load, Network Service Provider, Metering Services Provider, the System Operator, Contestable Customers, Retail Metering Services Provider, Retail Suppliers, the DOE, and the ERC.

Appendix B. Proposed MO Performance Metrics under EWDO

The components of the Proposed MO Performance Metrics under EWDO are similar to the 2015 MOPS with the addition and removal of the following performance categories:

Performance Category	Description
Additional performance categories	
Central Registration and Settlement System – User Interface (CRSS-UI)	The Central Registration and Settlement System (the “CRSS”) is the main system used in the registration of wholesale and retail participants, and settlement. The CRSS-UI serves as the main system in gathering registration and settlement inputs, and publication of settlement outputs. The CRSS-UI shall be measured also in terms of “Availability”.
Hour-Ahead Projection (HAP) Forecast	Consisted of the hour-ahead schedules and prices, the HAP forecast shall be measured in terms of “Accuracy” of the forecasts for the same scope and shall be evaluated based on the MAPE.
Removed performance category	
RTX Workflow	There are no RTX workflows under EWDO

Appendix C. Rating System Reference – 2015 MOPS

MO Performance Category	Measure	Rating System	Target	Ranges				
				Excellent 5	Very Satisfactory 4	Satisfactory 3	Needs Improvement 2	Poor 1
IT Systems (20%)								
Market Management Systems	Availability	RS 2a	99.80%	$99.93\% \leq x \leq 100\%$	$99.87\% \leq x < 99.93\%$	$99.80\% \leq x < 99.87\%$	$99.80\% > x \geq 99.73\%$	$99.73\% > x$
WESM Website	Availability	RS 2a	99.50%	$99.83\% \leq x \leq 100\%$	$99.67\% \leq x < 99.83\%$	$99.50\% \leq x < 99.67\%$	$99.50\% > x \geq 99.33\%$	$99.33\% > x$
Market Reports and Data Publication (15%)	Availability	RS 3	95%	=100%	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
	Timeliness	RS 3	95%	=100%	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Forecast Accuracy (20%)								
RTD Forecast - MAPE	Accuracy - Luzon	RS 4b	0.95%	$x \leq 0.68\%$	$0.68\% < x < 0.92\%$	$0.92\% \leq x \leq 0.98\%$	$0.98\% < x < 1.28\%$	$x \geq 1.28\%$
	Accuracy - Visayas		1.20%	$x \leq 0.86\%$	$0.86\% < x < 1.17\%$	$1.17\% \leq x \leq 1.23\%$	$1.23\% < x < 1.65\%$	$x \geq 1.65\%$
RTD Forecast - FAR	Accuracy - Luzon	RS 2b	97.20%	$x \geq 98.55\%$	$98.55\% > x > 97.65\%$	$97.65\% \geq x \geq 96.75\%$	$96.75\% > x > 95.85\%$	$x \leq 95.85\%$
	Accuracy - Visayas		93.00%	$x \geq 97.00\%$	$97.00\% > x > 94.33\%$	$94.33\% \geq x \geq 91.67\%$	$91.67\% > x > 89.00\%$	$x \leq 89.00\%$
DAP Forecast - MAPE	Accuracy - Luzon	RS 4C	1.60%	$x < 1.11$	$1.11\% < x < 1.45\%$	$1.45\% < x < 2.32\%$	$2.32\% < x < 3.20\%$	$x > 3.20\%$
	Accuracy - Visayas		2.20%	$x < 1.73$	$1.73\% < x < 2.41\%$	$2.41\% < x < 3.08\%$	$3.08\% < x < 3.27\%$	$x > 3.27\%$
Dispatch Scheduling and Pricing (20%)								
RTD Workflow	Successful Run	RS 2a	99.75%	$99.92\% \leq x \leq 100\%$	$99.83\% \leq x < 99.92\%$	$99.75\% \leq x < 99.83\%$	$99.75\% > x \geq 99.67\%$	$99.67\% > x$
RTX Workflow	Successful Run	RS 2a	99.75%	$99.92\% \leq x \leq 100\%$	$99.83\% \leq x < 99.92\%$	$99.75\% \leq x < 99.83\%$	$99.75\% > x \geq 99.67\%$	$99.67\% > x$
Pricing Errors and Market Re-runs	Timeliness - Prelim	RS 2a	98.50%	$99.50\% < x < 100\%$	$99.50\% < x < 99.00\%$	$98.50\% < x < 99.00\%$	$98.50\% < x < 98.00\%$	$98.00\% > x$
	Timeliness - Final	RS 2a	99.50%	$99.83\% \leq x \leq 100\%$	$99.67\% \leq x < 99.83\%$	$99.50\% \leq x < 99.67\%$	$99.50\% > x \geq 99.33\%$	$99.33\% > x$

MO Performance Category	Measure	Rating System	Target	Ranges				
				Excellent 5	Very Satisfactory 4	Satisfactory 3	Needs Improvement 2	Poor 1
Market Intervention Attributable to MO	Duration	RS 4a	14	$5 \geq x \geq 0$	$9 \geq x > 5$	$14 \geq x > 9$	$14 < x \leq 19$	$19 < x$
Billings, Settlements and Accounts Management (15%)								
Preliminary and Final Settlement Statements	Timeliness	RS 2a	98%	$99.33\% \leq x \leq 100\%$	$98.67\% \leq x < 99.33\%$	$98\% \leq x < 98.67\%$	$98\% > x \geq 97.33\%$	$97.33\% > x$
Preliminary Settlement Calculations	Accuracy	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Final Settlement Calculations	Accuracy	RS 2a	99%	$99.67\% \leq x \leq 100\%$	$99.33\% \leq x < 99.67\%$	$99\% \leq x < 99.33\%$	$99\% > x \geq 98.67\%$	$98.67\% > x$
	Frequency	RS 4a	≤ 6	$2 \geq x \geq 0$	$4 \geq x > 2$	$6 \geq x > 4$	$6 < x \leq 8$	$8 < x$
Meter Data Error Detection	Timeliness	RS 2a	98%	$99.33\% \leq x \leq 100\%$	$98.67\% \leq x < 99.33\%$	$98\% \leq x < 98.67\%$	$98\% > x \geq 97.33\%$	$97.33\% > x$
Monetary Transactions	Remittance Efficiency	RS 1	0 amount late	$x=0$				$x > 0$
	Timeliness	RS 1a	0 days late	$x=0$				$x > 0$
Margin Call	Timeliness	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Default Notice	Timeliness	RS 1	0 days late	$x=0$				$x > 0$
Registration and Customer Relations (10%)								
Registration	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Customer Switching	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Participant Training	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
	Feedback	RS 2a	90%	$96.67\% \leq x \leq 100\%$	$93.33\% \leq x < 96.67\%$	$90\% \leq x < 93.33\%$	$90\% > x \geq 86.67\%$	$86.67\% > x$
Participant Queries and Data Requests	Timeliness	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Participant/ Customer Complaints	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$

Appendix D. Rating System Reference – Proposed MO Performance Metrics under EWDO

MO Performance Category	Measure	Rating System	Target	Ranges				
				Excellent 5	Very Satisfactory 4	Satisfactory 3	Needs Improvement 2	Poor 1
IT Systems (20%)								
Market Management Systems	Availability	RS 2a	99.80%	$99.93\% \leq x \leq 100\%$	$99.87\% \leq x < 99.93\%$	$99.80\% \leq x < 99.87\%$	$99.80\% > x \geq 99.73\%$	$99.73\% > x$
WESM Website	Availability	RS 2a	99.50%	$99.83\% \leq x \leq 100\%$	$99.67\% \leq x < 99.83\%$	$99.50\% \leq x < 99.67\%$	$99.50\% > x \geq 99.33\%$	$99.33\% > x$
CRSS-UI	Availability	RS 2a	99.50%	$99.83\% \leq x \leq 100\%$	$99.67\% \leq x < 99.83\%$	$99.50\% \leq x < 99.67\%$	$99.50\% > x \geq 99.33\%$	$99.33\% > x$
Market Reports and Data Publication (15%)	Availability	RS 3	95%	=100%	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
	Timeliness	RS 3	95%	=100%	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Forecast Accuracy (23%)								
RTD Forecast - MAPE	Accuracy - Luzon	RS 4b	0.95%	$x \leq 0.68\%$	$0.68\% < x < 0.92\%$	$0.92\% \leq x \leq 0.98\%$	$0.98\% < x < 1.28\%$	$x \geq 1.28\%$
	Accuracy - Visayas		1.20%	$x \leq 0.86\%$	$0.86\% < x < 1.17\%$	$1.17\% \leq x \leq 1.23\%$	$1.23\% < x < 1.65\%$	$x \geq 1.65\%$
RTD Forecast - FAR	Accuracy - Luzon	RS 2b	97.20%	$x \geq 98.55\%$	$98.55\% > x > 97.65\%$	$97.65\% \geq x \geq 96.75\%$	$96.75\% > x > 95.85\%$	$x \leq 95.85\%$
	Accuracy - Visayas		93.00%	$x \geq 97.00\%$	$97.00\% > x > 94.33\%$	$94.33\% \geq x \geq 91.67\%$	$91.67\% > x > 89.00\%$	$x \leq 89.00\%$
HAP Forecast - MAPE	Accuracy - Luzon	RS 2b	0.95%	$x \leq 0.68\%$	$0.68\% < x < 0.92\%$	$0.92\% \leq x \leq 0.98\%$	$0.98\% < x < 1.28\%$	$x \geq 1.28\%$
	Accuracy - Visayas		1.20%	$x \leq 0.86\%$	$0.86\% < x < 1.17\%$	$1.17\% \leq x \leq 1.23\%$	$1.23\% < x < 1.65\%$	$x \geq 1.65\%$
DAP Forecast - MAPE	Accuracy - Luzon	RS 4c	1.60%	$x < 1.11$	$1.11\% < x < 1.45\%$	$1.45\% < x < 2.32\%$	$2.32\% < x < 3.20\%$	$x > 3.20\%$
	Accuracy - Visayas		2.20%	$x < 1.73$	$1.73\% < x < 2.41\%$	$2.41\% < x < 3.08\%$	$3.08\% < x < 3.27\%$	$x > 3.27\%$
Dispatch Scheduling and Pricing (17%)								
RTD Workflow	Successful Run	RS 2a	99.75%	$99.92\% \leq x \leq 100\%$	$99.83\% \leq x < 99.92\%$	$99.75\% \leq x < 99.83\%$	$99.75\% > x \geq 99.67\%$	$99.67\% > x$
Pricing Errors and Market Re-runs	Timeliness - Prelim	RS 2a	98.50%	$99.50\% < x < 100\%$	$99.50\% < x < 99.00\%$	$98.50\% < x < 99.00\%$	$98.50\% < x < 98.00\%$	$98.00\% > x$
	Timeliness - Final	RS 2a	99.50%	$99.83\% \leq x \leq 100\%$	$99.67\% \leq x < 99.83\%$	$99.50\% \leq x < 99.67\%$	$99.50\% > x \geq 99.33\%$	$99.33\% > x$

MO Performance Category	Measure	Rating System	Target	Ranges				
				Excellent 5	Very Satisfactory 4	Satisfactory 3	Needs Improvement 2	Poor 1
Market Intervention Attributable to MO	Duration	RS 4a	168	$56 \geq x \geq 0$	$112 \geq x > 56$	$168 \geq x > 112$	$168 < x \leq 224$	$224 < x$
Billings, Settlements and Accounts Management (15%)								
Preliminary and Final Settlement Statements	Timeliness	RS 2a	98%	$99.33\% \leq x \leq 100\%$	$98.67\% \leq x < 99.33\%$	$98\% \leq x < 98.67\%$	$98\% > x \geq 97.33\%$	$97.33\% > x$
Preliminary Settlement Calculations	Accuracy	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Final Settlement Calculations	Accuracy	RS 2a	99%	$99.67\% \leq x \leq 100\%$	$99.33\% \leq x < 99.67\%$	$99\% \leq x < 99.33\%$	$99\% > x \geq 98.67\%$	$98.67\% > x$
	Frequency	RS 4a	≤ 6	$2 \geq x \geq 0$	$4 \geq x > 2$	$6 \geq x > 4$	$6 < x \leq 8$	$8 < x$
Meter Data Error Detection	Timeliness	RS 2a	98%	$99.33\% \leq x \leq 100\%$	$98.67\% \leq x < 99.33\%$	$98\% \leq x < 98.67\%$	$98\% > x \geq 97.33\%$	$97.33\% > x$
Monetary Transactions	Remittance Efficiency	RS 1	0 amount late	$x=0$				$x>0$
	Timeliness	RS 1a	0 days late	$x=0$				$x>0$
Margin Call	Timeliness	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Default Notice	Timeliness	RS 1	0 days late	$x=0$				$x>0$
Registration and Customer Relations (10%)								
Registration	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Customer Switching	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
Participant Training	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$
	Feedback	RS 2a	90%	$96.67\% \leq x \leq 100\%$	$93.33\% \leq x < 96.67\%$	$90\% \leq x < 93.33\%$	$90\% > x \geq 86.67\%$	$86.67\% > x$
Participant Queries and Data Requests	Timeliness	RS 2a	95%	$98.33\% \leq x \leq 100\%$	$96.67\% \leq x < 98.33\%$	$95\% \leq x < 96.67\%$	$95\% > x \geq 93.33\%$	$93.33\% > x$
Participant/ Customer Complaints	Timeliness	RS 3	95%	$x=100\%$	$95\% \leq x < 100\%$	$90\% \leq x < 95\%$	$85\% \leq x < 90\%$	$x < 85\%$

Appendix E. MMS Downtime

For the period 26 September 2020 to 25 September 2021

The listed downtimes were recorded using the PEMC monitoring tool.

Date	Time of Incident	Time Resolved	Downtime (in Hours)	Reason/Remarks	Included? (Yes/No)
6/16/2021	16:45:00	19:57:00	3.20	Switchover of MMS system From Ortigas to Diliman Site.	Yes

Appendix F. Public Website Downtime

For the period 26 September 2020 to 25 September 2021

The listed downtimes were recorded using the PEMC monitoring tool.

Date	Time of Incident	Time Resolved	Downtime (in Hours)	Reason/Remarks	Included? (Yes/No)
09/29/2020	10:55:04	11:18:44	0.39	PRTG log resulted to downtime with ETPI	No
09/29/2020	11:29:36	11:31:18	0.03	PRTG log resulted to downtime with ETPI	No
11/07/2020	18:27:09	19:42:12	1.25	Encountered Slow Response of IEMOP.PH and HOST Server. Disk in Amber was replaced.	Yes
11/24/2020	12:01:00	12:04:00	0.05	PW intermittent network connection PW server network connection	Yes
12/30/2020	10:10:00	11:20:00	1.17	Firewall Network Port Problem	Yes
02/02/2021	21:15:00	21:25:00	0.17	Firewall Network Port Problem	Yes
02/03/2021	0:30:00	0:45:00	0.25	Firewall Network Port Problem	Yes
02/03/2021	2:10:00	2:17:00	0.12	Firewall Network Port Problem	Yes
02/03/2021	3:25:00	3:35:00	0.17	Firewall Network Port Problem	Yes
02/18/2021	1:16:00	1:42:00	0.43	Firewall Network Port Problem	Yes
03/11/2021	23:50:00	0:00:00	0.17	IEMOP Website Internet Connectivity Interruption. ETPI internet data service fiber cut affecting public website	Yes
03/12/2021	0:00:00	0:10:00	0.17	IEMOP Website Internet Connectivity Interruption. ETPI internet data service fiber cut affecting public website	Yes
05/24/2021	08:00:00	09:00:00	1.00	Switchover public website to Cebu backup site. Replaced defective HDD.	Yes