



Republic of the Philippines
DEPARTMENT OF ENERGY

DEPARTMENT CIRCULAR NO. _____

**ADOPTING FURTHER AMENDMENTS TO THE WHOLESALE ELECTRICITY
SPOT MARKET (WESM) RULES AND MARKET MANUALS ON METERING FOR
THE IMPLEMENTATION OF ENHANCEMENTS TO WESM DESIGN AND
OPERATIONS
(Provisions to Metering Standards and Metering Service Providers'
Performance)**

WHEREAS, Sections 30 and 37(f) of the Electric Power Industry Reform Act (EPIRA) provides that the DOE, jointly with the electric power industry participants, shall establish the Wholesale Electricity Spot Market (WESM) and formulate the detailed rules governing the operations thereof;

WHEREAS, on 28 June 2002, the DOE, with the endorsement of the electric power industry participants, promulgated the WESM Rules through Department Circular No. DC2002-06-003;

WHEREAS, on 14 October 2016, the DOE promulgated the amended WESM Rules for the enhancements of WESM design and operations through Department Circular DC2016-10-0014;

WHEREAS, any changes, amendments, and modifications to the WESM Rules, Retail Rules and their Market Manuals shall be undertaken in accordance with the provisions of Chapter 8 of the WESM Rules;

WHEREAS, on 12 February 2019, the Market Operator submitted to the Rules Change Committee (RCC) its proposed amendments to the WESM Rules and Market Manual on Metering Standards and Procedures;

WHEREAS, the proposal seeks to clarify that the Philippine Electricity Market Corporation (PEMC) shall have the responsibility to monitor the MSP performance as part of its governance function;

WHEREAS, 22 February 2019, the RCC during its 149th RCC Meeting discussed with Market Operator the abovementioned proposal, and thereafter approved the publication of the proposed amendments in the market information website to solicit comments from market participants and other interested parties;

WHEREAS, in response to the RCC's call for comments, written submissions were received from the Manila Electric Company (MERALCO), National Grid Corporation of the Philippines (NGCP), Technical Committee (TC), and the DOE;

WHEREAS, on 03 April 2019, the NGCP also submitted to the RCC its proposed amendments to the WESM Rules and Market Manual on Metering Standards and

Procedures with the objective of aligning the WESM's Market Manual on metering with the procedures and standards set forth in the Philippine Grid Code (PGC), Philippine Distribution Code (PDC), issuances from the DOE and Energy Regulatory Commission (ERC) and other international and national standards;

WHEREAS, 12 April 2019, the RCC during its 151st RCC Meeting discussed with NGCP the abovementioned proposal, and thereafter approved the publication of the proposed amendments in the market information website to solicit comments from market participants and other interested parties;

WHEREAS, in response to the RCC's call for comments, written submissions were received from the TC, PEMC, MERALCO, SPC Power Corporation (SPC), and the DOE;

WHEREAS, the RCC during its 151st RCC Meeting held on 12 April 2019 and 152nd RCC Meeting held on 17 May 2019, deliberated upon the abovementioned proposal of the Market Operator, giving due course to the comments and recommendations submitted by the relevant parties;

WHEREAS, during the 153rd RCC Meeting and 154th RCC Meeting held on 21 June and 19 July 2019 respectively, the RCC deliberated upon the abovementioned proposal of NGCP giving due consideration to the submitted comments and the corresponding responses of the proponent;

WHEREAS, the RCC finalized the proposed amendments of the Market Operator and NGCP, and thereafter approved for endorsement to the PEM Board on 17 May 2019 and 19 July 2019, respectively;

WHEREAS, on 29 May 2019 and 31 July 2019 during the Regular PEM Board Meetings, the PEM Board, after due evaluation and deliberation, approved the above stated RCC-approved proposal for endorsement to the DOE;

WHEREAS, on __October 2019, the DOE conducted various public consultation on the said proposed amendments to ensure transparency and consistency with the objectives of the EPIRA and the WESM;

WHEREAS, the DOE reviewed the said PEM Board-approved proposal and the comments and recommendations from the public consultation, made further revisions on the proposed amendments for consistency with the objectives of the WESM such as transparency and efficiency;

NOW THEREFORE, pursuant to its authority under the EPIRA and the WESM Rules, the DOE hereby adopts, issues, and promulgates the following amendments to the WESM Rules, Retail Rules and various Market Manuals:

Section 1. Amendments to the WESM Rules. The following provisions in the WESM Rules are hereby amended:

- (a) Clause 4.4.1 under Registration of Metering Services Providers is amended to read as –

“4.4.1 A Metering Services Provider is a person or an entity who:

- (a) Is authorized by the ERC to provide metering services;
- (b) Is registered with the Market Operator as a Metering Services Provider, and
- (c) Is required to have the qualifications and adhere to any performance standards specified in the relevant Market Manual.”

Section 2. Amendments to the WESM Manual on Metering Standards and Procedures Issue 11.0. The following provisions in the WESM Manual on Metering Standards and Procedures Issue 11.0 are hereby amended:

- (a) Section 10.1 (Introduction) under Performance Measurement-Metering Service Provider is amended to read as –

“10.1. INTRODUCTION

The integrity and timeliness of submission/delivery of meter data to the *Market Operator* by the Metering Service Provider/s (MSP) allow the *Market Operator* to produce and transmit settlement-ready data to the trading participant/s (TP) on a timely basis. Erroneous meter data and / or a delay in submission / delivery of meter data may affect the timely and accurate billing and settlement of WESM generators, and customers.”

- (b) Section 10.2 (Purpose) under Performance Measurement-Metering Service Provider is amended to read as –

“10.2. PURPOSE

This section provides the steps that Trading Participant/s, Meter Service Provider/s, *Market Operator* and PEMC steps shall follow for the review, evaluation and measurement of the performance of a Metering Services Provider (MSP). The measurement process monitors the conformance of an MSP to the WESM Rule Section 4.3.3 – MSP Obligation and as discussed in this section.”

- (c) Section 10.3 (Scope) and its Subsections under Performance Measurement-Metering Service Provider are amended to read as –

“10.3. SCOPE

This procedure is intended to provide the steps that Trading Participant/s, Meter Service Provider/s, *Market Operator* and PEMC information shall follow in rating the performance of the Metering Service Provider/s. The procedural work flows described in this section serve as reference for the trading participant/s, metering services provider/s, *Market Operator* and PEMC in reflecting the requirement in the WESM Rules.

The scope of an MSP Performance Measurement includes the following:

10.3.1. The integrity of meter data provided by the Meter Service Provider/s to the *Market Operator*, and the Trading Participant/s.

xxx xxx xxx”

- (d) Section 10.7.2 (Semi-Annual Customer Satisfaction Rating) under Performance Rating is amended to read as –

“10.7.2. Semi-Annual Customer Satisfaction Rating

Every six (6) months, PEMC shall conduct a CSR on the MSP performance through the issuance of the CSR form to all the WESM trading participants to be accomplished and submitted back to PEMC. The CSR forms are to be accomplished every first week of July of the current year and January of the following year. The July rating comprises the MSP performance from January to June of the current year and the January rating of the following year corresponds to the second half of the previous year (July to December).”

- (e) Section 10.7.3 (Annual Performance Rating) under Performance Rating is amended to read as –

“10.7.3. Annual Performance Rating

Annual Performance Rating covers the billing periods January to December of each year. It shall consist of:

1. The annual Performance Measures under Sub-section 10.4.1 – Service Delivery (Average of the 12 months billing).
2. The Customer Satisfaction Rating under Sub-sections 10.4.2 and 10.7.2.”

- (f) Diagram on Work Flow for MSP Performance Rating under Performance Rating is amended as shown in Annex A of this Circular.

Section 3. Amendments to the WESM Manual on Metering Standards and Procedures Issue 12.0. The following provisions in the WESM Manual on Metering Standards and Procedures Issue 12.0 are hereby amended:

- (a) Section 2.2 (Location of the Metering Point) under Metering Installation Standards is amended to read as –

“2.2 Location of the Metering Point

The location of the metering point shall adhere to the applicable provisions of the latest versions of the WESM Rules, the Philippine Grid Code (PGC), the Philippine Distribution Code (PDC), and other relevant issuances of the Energy Regulatory Commission (ERC) and the Department of Energy (DOE).

The metering point shall be located at the market trading node and shall be installed within 500 meters from the connection point between the systems of the Network Service Provider and Trading Participant, unless the installation of the metering equipment is physically difficult, unsafe, uneconomical or impractical.

If the metering point is located more than 500 meters from the connection point, Site-Specific Loss Adjustment (SSLA) shall be applied to the meter data for the full distance from the connection point representing the energy produced or consumed by the Trading Participant at that metering point for determining the quantities to be settled in the WESM. If the metering point is located within 500 meters from the connection point, no Site-Specific Loss Adjustment (SSLA) shall be applied.”

- (b) Section 2.4 (Meters) and its Subsections under Metering Installation Standards are amended to read as –

“2.4. METERS

2.4.1. Requirements for Transmission Grid Revenue Meters

There shall be a main and alternate meter preferably of different meter model but are both compliant to the requirements of the prevailing Philippine Grid Code (PGC).

The meter shall also have a mass memory capable of recording the 5-minute required demand interval data for a period of at least 60 days and have communication capabilities for remote and manual data retrievals.

2.4.2. Requirements for Revenue Meters for Embedded Generators Registered as WESM Participants

For Embedded Generators registered as WESM Participants, the main meter shall adhere to the prevailing requirements of the Philippine Distribution Code (PDC) and shall be capable of recording 5-minute interval data. If there is an alternate meter, it shall also adhere to the requirements of the prevailing PDC Edition.”

- (c) Section 2.5.1 (General Requirements) and its Subsections under Instrument Transformers are amended to read as –

“2.5.1. General Requirements

Metering installations, if applicable, shall include instrument transformers.

2.5.1.1. Requirements for Transmission Grid Instrument Transformers

Instrument Transformers used for metering of Transmission Grid Connections shall adhere to the requirements of the prevailing Philippine Grid Code.

2.5.1.2. Requirements for Embedded Generators Registered as WESM Participants

Instrument Transformers used for metering of Embedded Generators registered as WESM Participants shall adhere to the requirements of the prevailing Philippine Distribution Code.”

- (d) Section 2.5.2 (Use of Instrument Transformers) under Instrument Transformers is amended to read as –

“2.5.2. Use of Instrument Transformers

- a. The use of an instrument transformer for meters other than the registered WESM Meters except as permitted in this section; and
- b. Paralleling of current transformers.

Meters covered by Energy Conversion Agreements (ECA) contracts which were already in effect prior to the operation of WESM shall be temporarily permitted to share the instrument transformers used for WESM metering until the end of the ECA cooperation period; provided that the ECA and WESM meters shall have separate meter enclosure/box and that the secondary terminals of the instrument transformers are properly sealed.”

- (e) Section 2.5.4 (Accuracy Requirements) and its Subsections under Instrument Transformers are amended to read as –

“2.5.4. Accuracy Requirements

2.5.4.1. Current Transformers

Current transformers shall adhere to the requirements of the prevailing PGC. In addition, the accuracy of the current transformers shall be guaranteed from 0-100% of the rated burden.

2.5.4.2. Voltage Transformers

Voltage transformers shall adhere to the requirements of the prevailing PGC. In addition, the accuracy of the voltage transformers shall be guaranteed from 0-100% of the rated burden.

2.5.4.3. Proof of Accuracy Compliance

Proof of compliance with Sections 2.5.4.1 and 2.5.4.2 shall be provided in the form of factory routine test reports showing the serial numbers of the instrument transformers.

2.5.4.4. Other Requirements Relating to Accuracy

Where accuracy tests are required, they shall comply with the following requirements:

- a. tests shall be carried out by the Metering Service Provider using equipment traceable to National or International Standards of Measurements;
 - b. tests shall include ratio and phase-angle error tests;
 - c. ratio and phase-angle tests of current transformers shall be measured over a range of test currents based on the accuracy curve as defined by the applicable standards whereby the current transformer was designed;
 - d. test results shall provide ratio correction factors at each test point which may be applied, if deemed necessary for WESM settlement, to both active and reactive power.”
- (f) Section 2.5.5.2 (Not to Exceed Nameplate Ratings) under Instrument Transformer Burdens: General Requirements is amended to read as –

“2.5.5.2. Not to Exceed Nameplate Ratings

The measurement shall verify that actual burdens in service do not exceed the rated burden limits specified under Section 2.5.4.1.”

- (g) Section 2.5.5.4 (Not to Exceed Nameplate Ratings) under Instrument Transformer Burdens: General Requirements is amended to read as –

“2.5.5.4. Not to Exceed Nameplate Ratings

The measurement shall verify that actual burdens in service do not exceed the rated burden limits specified under Section 2.5.4.2.”

- (h) Section 2.5.9 (Surge Arrester) under Instrument Transformers is amended to read as –

“2.5.9. Surge Arrester

2.5.9.1. Surge Arresters installed (if necessary) at the WESM metering installation, shall meet the minimum requirements listed below:

Nominal System Voltage	Max. Rated Voltage	Standard Lightning Impulse Withstand Voltage	Max. Continuous Operating Voltage	Max. Nominal Discharge Current	Maximum Line Discharge Class		Long Duration Current Impulse Withstand Capability
[KV]	[KV]	[KV]	[KV]	[KA]	IEC	ANSI	[KVA]
13.8	15	95	12	10	CL 2	Station	100
34.5	36	170	29	10	CL 2	Station	100
69	72.5	325	58	10	CL 2	Station	100
115	123	550	98	10	CL 2	Station	100
138	145	650	116	10	CL 2	Station	100
230	245	900	196	10	CL 2	Station	100
500	525	1550	420	20	CL 4	Station	100

If there are existing Surge Arresters in the facility where the Metering Installation is located which already provides the protection as required by this WESM Manual, installation of additional metering Surge Arresters shall no longer be necessary.

- (i) Section 2.6.1. (Location of Primary Terminals of Current Transformer) under Primary Connections is amended to read as –

“2.6.1. Location of Primary Terminals of Current Transformer

The primary terminals of each current transformer shall be located as close as practicable to the prescribed Connection Point.”

- (j) Section 2.6.2. (Location of Primary Terminals of Voltage Transformer) under Primary Connections is amended to read as –

“2.6.2. Location of Primary Terminals of Voltage Transformer

The primary terminals of each voltage transformer shall be located as close as practicable to the prescribed Connection Point.”

- (k) Section 2.7.3 (Codes and Conditions) and its Subsections under Secondary Connections for Instrument Transformers are amended to read as –

“2.7.3. Codes and Conditions

2.7.3.1. the Philippine Electrical Code;

2.7.3.2. the meters shall be provided with dedicated current and voltage transformers used only for WESM Metering, except as permitted in Section 2.5.2;

2.7.3.3 current transformers may be supplied with more than one secondary core. However, no secondary core other than those intended for metering may be provided;

2.7.3.4. voltage transformer may be supplied with more than one secondary windings intended for the revenue meters and used for no other purpose;

xxx xxx xxx”

- (l) Section 2.9.1.1. (Instrument transformers connections) under Secondary Connections for Instrument Transformers is amended to read as –

“2.9.1.1. Instrument transformers connections

Primary and secondary cablings and connections shall be secure, tamper-resistant and compliant with the requirements of the prevailing Philippine Grid Code on security of registered revenue metering Installations and metering data. Any ratio-tap changing facility which cannot be secured using security seal or its equivalent shall not be permitted.”

- (m) Section 2.9.1.7. (Metering Perimeter) under Secondary Connections for Instrument Transformers is amended to read as –

“2.9.1.7. Metering Perimeter

The Metering Installation shall be secured by a perimeter fence similar to Figure 7 if applicable and its gate properly padlocked, sealed and secured. If the Metering Installation is located inside a perimeter which already provides equivalent security as required by this WESM Manual, installation of additional perimeter fence shall no longer be necessary. A perimeter fence shall also not be required for pole-mounted, vault-type and other similarly secured metering installations. Metering perimeter shall also be well lighted and free from any unwanted materials, equipment, vegetation, etc. (refer Table 7). Lighting shall

be provided by the owner of the perimeter where the metering installation is located.”

- (n) Section 2.10 (Redundant Metering Installation) and its Subsections under Metering Installations Standards are amended to read as –

“2.10. REDUNDANT METERING INSTALLATION

2.10.1. A redundant Metering Installation can be achieved using a single set of instrument transformers to either common or separate core.

2.10.2. The minimum requirement for redundant metering shall be the use of a single set of instrument transformers wherein the main and alternate meters are in series-parallel and connected to a common core.

2.10.3. The metered energy (kWh) and demand (kW) data recorded by the main and alternate Meters shall not deviate by more than +/- 0.6% of the monthly average values recorded by the meters for three (3) consecutive billing periods. In the event that the deviation exceeds this value, the MSP shall investigate and correct the causes of such deviations not later than three (3) months from discovery.”

- (o) Section 2.11 (Metering Installation - Existing) under Metering Installations Standards is amended to read as –

“2.11. An existing Metering Installation that does not fully comply with the requirement of this standard shall be permitted by the Market Operator to remain in service subject to the following conditions:

- a. ERC has tested/verified and sealed the meter;
- b. Meters which are non-compliant to the mass memory requirements shall be replaced when they become defective or until they reach the end of their economic life;
- c. All non-compliant instrument transformers shall be replaced within the period of two (2) years from the effectivity of this version of WESM Manual on Metering.

Continued non-compliance of metering installations shall be subject to applicable sanctions or penalties.

- (p) Section 4.3.2 under Metering Installations Standards is amended to read as –

“4.3.2. To initiate the registration of a metering installation, the WESM Metering Services Provider, on behalf of its Trading Participant, shall submit the following to the Market Operator:

- a. Accomplished Metering Installation Form signed or confirmed by both the Metering Service Provider and the Trading Participant;

xxx xxx xxx

I. Other Special Features of the Meter.”

- (q) Section 5.3.2 (Daily Process) under Collection and Submission Procedure is amended to read as –

“5.3.2. Daily Process

xxx xxx xxx

- b. All collected meter data shall be submitted by the Metering Services Provider to the Market Operator's Meter Data Warehouse on or before 0800H of the succeeding trading day. However, for metering facilities with failed communication capability, the Metering Service Provider shall attempt remote meter data retrieval and submit to the Market Operator not later than 1200H of the same day. The Metering Services Provider shall not make, cause or allow any alteration to the original stored meter data as retrieved in the metering installation.

xxx xxx xxx”

- (r) Section 5.3.3 (Monthly Process) under Collection and Submission Procedure is amended to read as –

“5.3.3. Monthly Process

- a. Not later than three (3) working days after the end of the billing period, the Metering Services Provider shall submit, via File Transfer Protocol (FTP) or any secure file storage device monthly preliminary metering data of all metering points of its associated Trading Participants. In addition, the Metering Services Provider shall submit a transmittal letter that includes a tabulation of all associated metering points and their corresponding total metered quantity for the billing period.

xxx xxx xxx

- c. Not later than seven (7) working days after the issuance of the Meter Trouble Report, the Metering Services Provider shall correct the metering data in accordance with the procedures set forth in Section 6.4.3 of this Manual.

xxx xxx xxx”

- (s) Section 6.4.3.1 under Meter Data Estimation and Editing is amended to read as –

“6.4.3.1. When validation indicates that the data from the main meter are missing or have an invalid data, the values shall be estimated and substituted by the Metering Services Provider for Settlement purposes.

The following shall be the hierarchy of methods to be used by the Metering Services Provider for meter data estimation and editing:

xxx xxx xxx

b. Meter Data from Alternate Meter

If more than twelve (12) consecutive intervals of main meter are missing or have invalid data, the values from the alternate meter may directly be substituted to the main meter provided that the data pass-the validation based on the checks performed on Section 6.3.1.2. If the average deviation between the main and alternate meter is greater than 0.2% but not exceeding 0.6%, a correction factor shall be applied.

c. Use of Computed Phase Voltage and Phase Current using % Phase Voltage or % Phase Current method

If there is a loss of a phase current or phase voltage, the estimation shall be computed by the Metering Services Provider, in coordination with the Market Operator and concerned Trading Participant, in accordance with the following formula:

$$Total\ Power = [(V_{an} * I_a) + (V_{bn} * I_b) + (V_{cn} * I_c)] * \cos \theta * M$$

where:

I_a, I_b, I_c	phase current values
V_{an}, V_{bn}, V_{cn}	phase voltage values
$\cos \theta$	average power factor
M	multiplier

Missing values of I_a :

$\% I_a = I_a / (I_a + I_b + I_c)$ using the valid data within the same billing month

Total $\% I_a =$ sum of $\% I_a$ of all intervals

Average $\% I_a =$ Total $\% I_a /$ No. of intervals

$I_a =$ Average $\% I_a \times (I_b + I_c) / (1 - \text{Average } \% I_a)$

where:

I_a computed phase A current
 I_b, I_c actual recorded per phase current

Note:
Computation shall be the same with other phases.

Missing values of V_{an} :

$\% V_{an} = V_{an} / (V_{an} + V_{bn} + V_{cn})$ using the valid data within the same billing month

Total $\% V_{an} =$ sum of $\% V_{an}$ of all intervals

Average $\% V_{an} =$ Total $\% V_{an} /$ No. of intervals

$V_{an} =$ Average $\% V_{an} \times (V_{bn} + V_{cn}) / (1 - \text{Average } \% V_{an})$

where:

V_{an} computed phase A voltage
 V_{bn}, V_{cn} actual recorded per phase voltage

Note:
Computation shall be the same with other phases.

d. Use of Remote Terminal Unit (RTU) Data

xxx xxx xxx

i. Parallel lines

PARALLEL LINES THAT ARE SEPARATELY METERED
(one line with meter data defect): Use metered quantity of the line that has no meter data defect with application of Adjustment Factor (AF).

Note: Adjustment Factor shall be based on historical data.

j. Temporary Use of correction factor In multiplier for Instrument Transformer in service that failed in accuracy limit.

i. For Current Transformer

Ratio Correction Factor (RCF) = True Primary Current / (True Secondary Current x Marked Ratio)

ii. For Voltage Transformer

Ratio Correction Factor (RCF) = True Primary Voltage / (True Secondary Voltage x Marked Ratio)”

(t) Section 7.2 (Initiation) under Meter Trouble Report is amended to read as –

“7.2. INITIATION

xxx xxx xxx

- b. a Metering Services Provider or a Trading Participant requests the Market Operator to issue a Meter Trouble Report to the Metering Services Provider due to difficulties in communicating with a metering installation, or validation of metering data. The Market Operator shall notify the Metering Services Provider or a Trading Participant of its decision within twenty-four (24) hours.

Issuance of MTR shall be suspended by the MO in cases where a massive communication link failure affects large areas due to force majeure and TELCO related problems which are beyond the control of the MSP. In cases that MSP still fails to deliver the meter data of the remaining Metering Point/s to MO, MO shall consider the estimation of meter data of the affected MPs until such time that the MSP has collected the meter data remotely or manually and transmitted to MO. In such cases, the MO shall inform the affected customer of the temporary estimation made by the MSP.”

(u) Section 7.2.1 (Improving Efficiency in Resolving MTRs) under Initiation is amended to read as –

“7.2.1. Improving Efficiency in Resolving MTRs

In case of outages, a Trading Participant and/or its Metering Services Provider shall notify the Market Operator and Metering Service Provider within 24 hours after its occurrence. Trading Participants may use the Metering Outages Form to notify their Metering Services Provider and the Market Operator of any outages that may affect the metering data. The Metering Services Provider will use this information to resolve MTRs that have been issued. A sample of the form and instructions for completion may be found in the Appendices.”

(v) Section 7.3 (Issuance) and its Subsections under Meter Trouble Report are amended to read as –

“7.3. Issuance

xxx xxx xxx

7.3.1. Timeline

Upon receipt of the Meter Trouble Report, the Metering Services Provider shall submit the correct metering data to the Market Operator within (7) working days.

7.3.2. Unresolved Meter Trouble Reports

xxx xxx xxx

b. Late Resolution

The Metering Services Provider may still resolve a Meter Trouble Report and provide metering data acceptable to the Market Operator after the deadline set in Section 7.3.1. For late resolutions, the deadline to be reflected in the final settlement statement shall be four (4) working days prior to the issuance of the final settlement statement

xxx xxx xxx

d. Certification

The Market Operator shall provide a certification on the adjusted metering data showing the agreement of all affected parties and the Metering Services Provider.

xxx xxx xxx”

- (w) Section 8.6.2 (Metering Service Provider) under Roles and Responsibilities is amended to read as –

“8.6.2. Metering Service Provider

8.6.2.1. The Metering Service Provider shall submit to the Market Operator all significant line and transformer parameters between the metering point and the connection point upon registration of the Metering Installation.

- a. Transformer Winding Resistance, R
- b. Transformer Winding Reactance, X
- c. Transmission Line Circuit Branch Resistance, R
- d. Transmission Line Circuit Branch Reactance, X
- e. Transmission Line Circuit Total Branch Susceptance, B

8.6.2.2. The Metering Service Provider shall submit to the Market Operator the meter data containing the daily energy consumption or delivery of all Trading Participants.”

- (x) Section 9.4.1 (Service Delivery) under Performance Measures is amended to read as –

“9.4.1. Service Delivery

9.4.1.1. Data Meter Data Delivery

Daily Meter Data Delivery or Meter Retrieval Success is the ratio of the number of metering installations successfully communicated to the total number of active registered metering installations. Required average daily result shall be greater than or equal to 95% as reported in Luzon and Visayas and 85% in Mindanao.

9.4.1.2. Integrity of Metering Data

Integrity of Metering Data is the valid meter data that passed the validation process as set forth by WESM. This measures the ratio of the number of metering installations for which the data passes the validation process to the total number of metering installation successfully retrieved (communicated) excluding suspended MP and with no meter data. Required average daily result shall be greater than or equal to 95% as reported in Luzon and Visayas and 85% in Mindanao.

9.4.1.3. Timeliness and Percentage Resolution to the Daily Meter Trouble Report

These measure the percentage of the total number of metering installations for which a daily meter trouble reports (MTR) are issued, that has been resolved or corrected in seven (7) working days. Required average daily result shall be greater than or equal to 90% as reported.

9.4.1.4. Timeliness and Percentage Resolution to the Monthly

The MTR issued (for each metering installation) based on the submitted monthly meter data for the billing period shall be resolved and corrected within two (2) working days. Required result shall be greater than or equal to 90% as reported.

xxx xxx xxx”

- (y) Appendix D (Metering Service Agreement) is amended as shown in Annex B of this Circular.
- (z) Appendix L (Specifications for Transmission Revenue Meters) is amended as shown in Annex C of this Circular.
- (aa) Appendix N (Specifications for Current Transformers) is amended as shown in Annex D of this Circular.
- (bb) Appendix O (Specifications for Voltage Transformers) is amended as shown in Annex E of this Circular.

(cc) Appendix P is amended as shown in Annex F of this Circular.

(dd) Appendix Q is amended as shown in Annex G of this Circular.

(ee) Table 5 is amended as shown in Annex H of this Circular.

(ff) Table 11 is amended as shown in Annex I of this Circular.

Section 4. Separability Clause. If for any reason, any section or provision of this Circular is declared unconstitutional or invalid, such parts not affected shall remain valid and subsisting.

Section 5. Repealing Clause. All issuances inconsistent with the provisions of this Circular are hereby repealed or amended accordingly.

Section 6. Effectivity. This Circular shall take effect 15 days following its complete publication in at least two (2) newspapers of general circulation and shall remain in effect until otherwise revoked. Copies thereof shall be filed with the University of the Philippines Law Center – Office of National Administrative Register (UPLC – ONAR).

Issued this ____ October 2019 at the DOE, Energy Center, Rizal Drive, Bonifacio Global City, Taguig City, Metro Manila.

ALFONSO G. CUSI
Secretary