



**WHOLESALE ELECTRICITY SPOT MARKET  
RULES CHANGE COMMITTEE**

**RESOLUTION NO. 2016-06**

**Disapproval of the Proposed Amendments to the WESM Manual on Metering  
Standards and Procedures regarding Site-Specific Loss Adjustment**

**WHEREAS**, on 13 January 2016, the Rules Change Committee received the Distribution Utilities' (DUs) – Ilocos Norte Electric Cooperative, Mactan Electric Company and Antique Electric Cooperative – proposed amendments to the WESM Manual on Metering Standards and Procedures regarding Site-Specific Loss Adjustment (SSLA);

**WHEREAS**, said proposal sought to amend Section 2.2 of the Manual recommending that site specific loss adjustment be applied to both the nodal price [Ex-Ante Price (EAP) and Ex-Post Price (EPP)] and the Ex-Ante Quantity (EAQ) of the energy supplied or consumed at the metering point, instead of in the Metered Quantity, for settlement purposes;

**WHEREAS**, the proposed amendments intend to address the additional distribution system losses absorbed by certain DUs due to SSLA by translating the same into monetary value instead of as energy quantities, as in the current formula;

**WHEREAS**, the proposal was presented before the RCC during its 109<sup>th</sup> Meeting held on 03 February 2016, and was thereafter approved for posting in the market website to solicit comments from participants;

**WHEREAS**, the proposal was published on 04 February 2016, with the corresponding notice to participants;

**WHEREAS**, during the 115<sup>th</sup> RCC Meeting held on 01 June 2016, the RCC deliberated upon the proposal, giving due consideration to the comments received from the DOE, PEMC, Aboitiz Power Corporation (APC), MERALCO, Philippine Rural Electric Cooperative Association (PhilRECA) and SN Aboitiz Power (SNAP) (*refer to Annex A for the matrix of comments*);

**WHEREAS**, MERALCO and APC merely commented that the proposed new formula needs more clarification, with the latter also expressing that the trading amount should not be affected by the proposed new computation;

**WHEREAS**, SNAP commented that the resolution of the issue should be aligned with the Price Determination Methodology and the optimal allocation of resources of the market dispatch optimization model;

**WHEREAS**, PhilRECA expressed its support to the proposal, with its arguments as follows:



- i. Since the assets connecting the Market Trading Node (MTN) and the customer's Metering Point are not owned by the customer or the electric cooperative (EC), the customer or EC does not in any manner have any authority or control over such assets to address the reduction of such system loss in order to mitigate its impact to its operation;
- ii. The customer or the ECs are unduly burdened by the SSLA because the energy loss is added up to its distribution system loss. While it can be recovered through the calculation of the Generation Rate Adjustment Mechanism approved by the ERC for an EC that is within the allowable system loss even including the quantity of the SSLA, the same contributes to the unreasonable reduction of its revenue and the decline of its overall performance as a distribution utility;
- iii. If an EC has a system loss beyond the allowable with the inclusion of the SSLA, it is obliged to subsidize the cost of the excess system loss resulting to loss of revenue and the decline of its distribution utility performance; and
- iv. In order to resolve the undue burden to an EC whose location of the metering is different from the MTN, it is strongly recommended that the SSLA (energy loss) be multiplied by the nodal price in order to translate it into monetary value, which can be reasonably treated as part of the Generation Cost because it is a loss in the transmission of the power requirements of the customer or EC. In this manner, the customer or EC can fully recover the total generation cost in accordance to the principle, "*Generation Cost is a revenue neutral pass through cost*".

**WHEREAS**, the Market Operator disagreed with the proposal and offered the following counter-arguments:

- i. The proposal would introduce inefficiencies in the computation of settlement in the spot market since the suggested formula calls for adjusting three market values (i.e., EAP, EPP, EAQ) instead of only one (i.e. Metered Quantity) in the current SSLA computation. A typical Customer MTN has more than one metering point mapped to it. The number of metering points mapped to an MTN means three times the number of adjusted market values;
- ii. An additional step in the computation would also have to be performed in relation to the Site-Specific Loss Factor (SSLF), which indicates the amount of loss that a metering point accumulated. For the proposal to reflect the EAP, EPP, and EAQ at the metering point, these three market values should be multiplied or divided by the SSLF depending on whether the MTN is above or below the metering point. For MTNs with more than one metering point, additional allocation of the EAQ at the market trading node using the adjusted meter data would have to be performed before the SSLF could be multiplied or divided to the allocated EAQ. Since SSLF is the number that can reflect the EAP, EPP, and EAQ at the metering point, the Market Operator therefore would still have to perform the present metering data adjustment but will not use the



adjusted meter data in settlement, instead only the SSLF would be used to reflect the EAP, EPP, and EAQ at the Customer metering point; and

- iii. The present SSLA also covers embedded facilities whose metering data are either added to, or subtracted from the metering data of the host facility to reflect the aggregate generation or consumption of the host facility. This adjustment of the host's metering data is in accordance with clauses 3.13.6 (b) and 3.13.6 (c) of the WESM Rules. The clauses 3.13.5 (b) and 3.13.5 (c) define the EAQ of embedded facilities, but there is no clause that defines price adjustment of embedded facilities because one cannot just simply perform addition or subtraction of prices whether embedded or grid connected.

**WHEREAS**, during the same meeting on 01 June 2016, the proponent expounded that a DU may incur approximately 3-5% site-specific loss, which it cannot recover if it is already within its systems loss cap. Moreover, since the said loss is not part of the distribution system loss, the DU is left with an unrecoverable generation charge mostly attributable to the SSLA;

**WHEREAS**, recognizing the DUs' concerns, the PEMC-Billing, Settlement and Metering Department (PEMC-BSMD) raised that it can provide, upon request of the DU, a certification of the DU's raw and adjusted meter data that the DU can use as supporting information to account for the SSLA;

**WHEREAS**, the proponent agreed with the PEMC-BSMD's recommendation as the identification of the DU's raw and adjusted meter data can be used to justify its filing to the ERC to consider the SSLA in the computation of its Average Generation Rate that it can pass-on to its customers;


**NOW THEREFORE**, we, the undersigned and in behalf of the sector we represent, after consideration of all arguments discussed, hereby resolve as follows:

**RESOLVED**, that the Proposed Amendment to the WESM Market Manual on Metering Standards and Procedures regarding Site-Specific Loss Adjustment is hereby disapproved due to the inefficiencies and distortions that such change will introduce into the market and given the alternative solution agreed upon between the parties that achieves the same objective as the proposal, rendering the amendment to the relevant provision unnecessary;

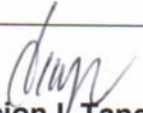
**RESOLVED FURTHER**, that the RCC's action on the Distribution Utilities' Proposed Amendments to the WESM Market Manual on Metering Standards and Procedures regarding Site-Specific Loss Adjustment be reported to the PEM Board, for information.

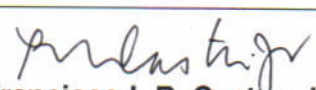
Done this 01 June 2016, Pasig City.


Approved by:  
RULES CHANGE COMMITTEE

  
**Maila Lourdes G. de Castro**  
Chairperson  
Independent

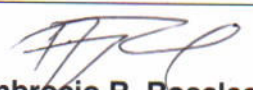
Members:


  
**Concepcion I. Tanglao**  
Independent


  
**Francisco L.R. Castro, Jr.**  
Independent

  
**Allan C. Nerves**  
Independent


**Isidro E. Cacho, Jr.**  
Market Operator  
Philippine Electricity Market Corporation  
(PEMC)

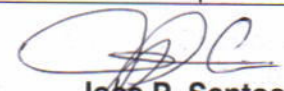
  
**Ambrocio R. Rosales**  
Transmission Sector  
National Grid Corporation of the Philippines  
(NGCP)


  
**Joselyn D. Carabuena**  
Generation Sector  
Power Sector Assets and Liabilities Management  
Corporation (PSALM)

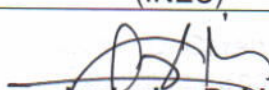
  
**Jose Ferlino P. Raymundo**  
Generation Sector  
SMC Global

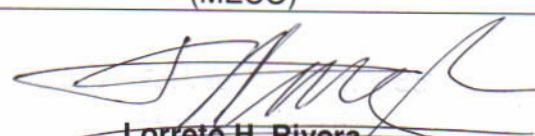
**Theo C. Sunico**  
Generation Sector  
Vivant Corporation

  
**Ciprinilo C. Meneses**  
Distribution Sector (PDU)  
Manila Electric Company  
(MERALCO)

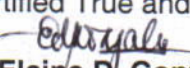
  
**Jose P. Santos**  
Distribution Sector (EC)  
Ilocos Norte Electric Cooperative, Inc.  
(INEC)

FOR:   
**Gilbert A. Pagobo**  
Distribution Sector  
Mactan Electric Company  
(MECO)

  
**Ludovico D. Lim**  
Distribution Sector  
Antique Electric Cooperative, Inc.  
(ANTECO)

  
**Lorreto H. Rivera**  
Supply Sector  
TeaM (Philippines) Energy Corporation  
(TPEC)

Certified True and Correct:

  
**Elaine D. Gonzales**  
RCC Secretary  
PEMC



### Proposed Amendments to the WESM Manual on Metering Standards and Procedures regarding Site-Specific Loss Adjustment

Title	Section	Provision	Proposed Amendment	Rationale	DOE	PEMC	APC	MERALCO	PHILRECA	SNAP
Metering Installation Standards	2.2 Location of the Metering Point	The location of the Metering Point is ideally at the Market Trading Node and shall be in accordance with the WESM Rules, the Grid Code, and the Distribution Code.  If the Metering Point is not located at the Market Trading Node, an agreed Site Specific Loss Adjustment (SSLA) shall be applied to the meter data representing the energy supplied by the Generator or consumed by the Customer at that Metering Point for determining the quantities to be settled in the WESM.	The location of the Metering Point is ideally at the Market Trading Node and shall be in accordance with the WESM Rules, the Grid Code, and the Distribution Code.  If the Metering Point is not located at the Market Trading Node, the <b>Metered Quantity (MQ) shall be maintained, however, an agreed Site Specific Loss Adjustment (SSLA) shall be applied to both the meter data—representing nodal price (EAP &amp; EPP) and the Ex-Ante Quantity (EAQ) of the energy supplied by the Generator or consumed by the Customer at that Metering Point for determining the quantities amount to be settled in the WESM.</b>	SSLA is the difference between the metered quantity measured at the market trading node (MTN) and the summation of metered quantity at the customer's delivery point or substation. The SSLA can be a function of many factors like: revenue meter incompatibility in terms of accuracy tolerance level, inequitable charging of electrical losses for multi-customer load of 69kV circuits, human and equipment errors, etc.  Presently SSLA is being charged by adjusting the actual metered quantity if the metering point is not located in the market trading node. (Total kWh Purchased = Actual Metered Quantity plus SSLA)	The existing methodology accounting for the systems loss due to the different location of the revenue meter and the customer delivery point is more transparent mechanism to ensure proper accounting of DU's systems losses and the generation charges that are passed through to the customers. In this regard, we recommend retaining the original provision. It is only proper to adjust the metered quantity equivalent to its value at the market trading node in which the Trading Participant will either buy or sell from the market. On the other hand, Adjusting the nodal prices to the temporary location of revenue meter will result to inaccurate accounting of	We disagree with the proposed WESM Manual changes for the following reasons:  1. The proposal is inconsistent with the general principles of the design of the market embodied in the WESM Price Determination Methodology (PDM), particularly local nodal pricing. Adjusting the local marginal price by the use of a multiplying factor will not reflect the accurate cost of loss and congestion associated with a resource/metering point. Adopting this measure will also result to changes in the PDM which will require ERC approval.  2. On the issue of Distribution System	We just want to kindly clarify how the proposed amendment will affect the EAQ. If the proposal is to include adjustments in the price rather than in quantity, then why is there a need to adjust the EAQ?  Kindly confirm if our understanding is correct: $EAP_{new} = EAP \times SSLLF$ $EPP_{new} = EPP \times SSLLF$  Where SSLLF is the Site Specific Loss Factor, and not the SSLA. Kindly also verify if the application to the EAP of the SSLLF is necessary, since in the original formula, it was only applied in the MQ.  If there is an adjustment to EAP, then is the adjustment in EAQ equal to 1/SSLLF?  Moreover, we believe that the <b>Trading</b>	The location of the Metering Point is ideally at the Market Trading Node and shall be in accordance with the WESM Rules, the Grid Code, and the Distribution Code.  If the Metering Point is not located at the Market Trading Node, an agreed Site Specific Loss Adjustment (SSLA) shall be applied...  <b>The computation of the SSLA and the resulting Total Trading Amount (TTA) are given by the following formulae:</b>  $SSLA = \dots$ $TTA = \dots$  May we seek clarification on what is meant by "...an agreed Site Specific Loss Adjustment (SSLA) nodal price (EAP & EPP)	May we state the following facts:  1) If the location of the Metering Point of the customer is the same as the Market Trading Node, there is no Site Specific Loss Adjustment (SSLA);  2) The Market Nodal Price multiplied by the Metered Quantity (MQ) = the amount of transactions to be settled with the WESM;  3) If the location of the Metering Point of the customer is different from the Market Trading Node, there is Site Specific Loss Adjustment; In this case, the SSLA was formulated to calculate the energy loss, attributable to the technical facilities needed to transmit the required energy from	<b>Alignment with PDM and MDOM - resolution of this issue it should agree with the PDM and the optimal allocation of resources of the MDOM.</b>

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				<p>Treating the SSLA as marginal energy purchase of the DU has its share of debatable attributes because there is no equivalent customer consuming the marginal energy adjustment. This will result to additional system loss which is being monitored by ERC.</p> <p>The prices at the Market trading node should be extended to the DU's metering point instead of adjusting the actual metered quantity</p> <p>Applying SSLA on the node price and EAQ rather than on the MQ is more logical and acceptable for trading participants. It is simply projecting the node prices and EAQ to the metering points in order to keep the MQ intact. In this way, the integrity of the meters is maintained since what you see in</p>	<p>distribution system losses.</p> <p>For the long term solution, all revenue meters should be properly installed at the market trading node, which should also be located at the connection point.</p>	<p>Loss monitored by the ERC, it must be noted that SSLA calculation only covers the computation of energy losses between the market trading node and the metering does not include the losses within the DU system. Also, the cost attributed to SSLA is already a part of the generation cost which is recovered by the DU as a pass through charge.</p> <p>3. Adjusting the prices (EAP or EPP) rather than the MQ will result to distortion and inefficiencies in the settlement process of the market.</p> <p>a) The present SSLA adjusts only the metering data while the proposal intends to adjust three market values (EAP, EPP and EAQ). A</p>	<p><b>Amount should NOT be affected by the proposed amendment.</b> That is the original formula will have the same amount as the proposed amendment, since we just applied the SSLF in the price rather than in the MQ.</p>	<p>and the Ex-Ante Quantity (EAQ) of the energy supplied by the Generator or consumed by the Customer at that Metering Point for determining the amount to be settled in the WESM.”?</p> <p>To avoid misinterpretation, we request that the proposed formula be provided.</p> <p>While we agree that there is a system loss incurred in the transmission of energy from the Market Trading Node to the customer's Metering Point, we strongly disagree that such is attributed to the customer or EC specifically for the following reasons:</p> <p>1) The assets connecting the Market Trading Node and the customer's Metering Point are not owned by the customer or EC;</p> <p>2) The customer or EC does not in any manner, have any authority or</p>	<p>the market node to the customer's metering point;</p> <p>4) The facilities physically connecting the Market Trading Node and customer's Metering Point are either owned by the NGCP or any other party but definitely not the customer.</p>	



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				the meter is what you will get in your WESM bill.		<p>typical market trading node (MTN) has more than one metering points mapped to it. The number of metering points mapped to an MTN means three times the number of adjusted market values.</p> <p>b) The SSLA produces a dynamic Site-Specific Loss Factor (SSLF) per metering point per settlement interval. The SSLF indicates the amount of loss that a metering point accumulated. For the proposal to reflect the EAP, EPP, and EAQ at the metering point, these three market values should be multiplied or divided by the SSLF depending on whether the MTN is above or below the metering point. For MTNs with more than one metering points, additional allocation of the EAQ at the</p>			<p>control over such assets to address the reduction of such system loss in order to mitigate its impact to its operation.</p> <p>Looking at the second paragraph of the Section 2.2 of the WESM Rules: "If the Metering Point is not located at the Market Trading Node, an agreed Site Specific Loss Adjustment (SSLA) shall be applied to the meter data representing the energy supplied by the Generator or consumed by the Customer at that Metering Point for determining the quantities to be settled in the WESM."</p> <p>This provision can be interpreted in the form of a formula as follows:</p> <p>Total KWH purchased = MQ + SSLA</p> <p>We totally agree to such formula interpretation of the afore-quoted</p>	

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						<p>market trading node using the adjusted meter data would have to be performed before the SSLF could be multiplied or divided to the allocated EAQ. Since SSLF is the number that can reflect the EAP, EPP, and EAQ at the metering point, the Market Operator therefore would still have to perform the present metering data adjustment but will not use the adjusted meter data in settlement, instead only the SSLF would be used to reflect the EAP, EPP, and EAQ at the Customer metering point.</p> <p>c) The present SSLA also covers embedded facilities whose metering data are either added to, or subtracted from the metering data of the host facility to reflect the aggregate generation or consumption of the</p>			<p>provision. However, the issue arises as the provision deals with "QUANTITIES" instead of "AMOUNT" which DOES NOT allow the conversion of the SSLA into monetary value and therefore transposing the SSLA QUANTITY to the customer or EC.</p> <p>In this scenario, the customer or the ECs are unduly burdened of the SSLA because the energy loss is added up to its distribution system loss. While it can be recovered through the calculation of the Generation Rate Adjustment Mechanism approved by the ERC for an EC that is within the allowable system loss even including the quantity of the SSLA, the same contributes to the UNREASONABLE reduction of its revenue and the decline of its overall performance as a distribution utility. Worst will happen to an EC which will have a system loss beyond the</p>	



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						<p>host facility. This adjustment of the host's metering data is in accordance with clauses 3.13.6 (b) and 3.13.6 (c) of the WESM Rules. The clauses 3.13.5 (b) and 3.13.5 (c) define the EAQ of embedded facilities, but there is no clause that defines price adjustment of embedded facilities because one cannot just simply perform addition or subtraction of prices whether embedded or grid connected.</p> <p>In effect, the proposal to adjust the EAP, EPP, and EAQ at the metering point entails more time, re-designing, operational work, risks, and work-around from the clauses of the WESM Rules. This may create more uncertainty considering the additional adjustment that shall be reflected in the monthly billing settlement.</p>			<p>allowable with the inclusion of the SSLA as it is obliged to subsidize the cost of the excess system loss resulting to loss of revenue and the decline of its distribution utility performance. Then, a question arises: Can the SSLA be ACCURATELY TRANSFERRED to the customer or EC as an ENERGY LOSS where in fact such is beyond its authority to control?</p> <p>In order to resolve the undue burden to the an EC whose location of the metering is different from the Market Trading Node, it is strongly recommended that the SSLA (energy loss) shall be MULTIPLIED by the nodal price in order to TRANSLATE it into MONETARY VALUE which can be reasonably treated as part of the Generation Cost because it is a loss in the transmission of the power requirements of the customer or EC.</p>	

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						<p>The recommended permanent solution is for the customer to provide the required facilities for the monitoring and controlling of the connection point as stated in the Open Access Transmission Service (B5.1). This way the integrity of meter data is maintained without any adjustment. As to the SSLA claimed to be causing additional (distribution) system loss (due to Distribution Cap) and monitored by the ERC, the Market Operator can provide the raw meter data, the adjusted meter data, and the SSLA (difference) upon request.</p>			<p>In this manner, the customer or EC can fully recover the TOTAL GENERATION COST in accordance to the principle, "Generation Cost is a revenue neutral pass through cost". An analogy to this case is when the regulator allowed the inclusion of different levels of system losses in the Luzon, Visayas and Mindanao Grids in the approved Time-of-Use (TOU) Rates of the National Power Corporation (NPC).</p> <p>PHILRECA therefore, fully supports the proposed amendment which is already long overdue and in consonance with THE PROPER ACCOUNTING OF SYSTEM LOSS AND COSTS.</p>	