

**WHOLESALE ELECTRICITY SPOT MARKET
RULES CHANGE COMMITTEE**

RESOLUTION NO. 2015-05

**Proposal for Amendments to the Administered Price Determination
Methodology Manual**

WHEREAS, the Philippine Electricity Market Corporation (PEMC) submitted two separate Proposals for Amendments to the Administered Price Determination Methodology (APDM) Manual to the Rules Change Committee (RCC) on 05 February 2015;

WHEREAS, the first set of Proposed Amendments is the addition of Section 4.2.1.4 in the manual to ensure appropriate calculation of Administered Price when MQ is zero;

WHEREAS, the second set of the Proposals for Amendments to the APDM by PEMC provides for the following:

- A. Revision of Section 4.2.5.2 and Appendix A to ensure appropriate settlement in trading intervals when regional administered pricing is applied and the administered region exports energy to the non-administered region;
- B. Addition of terms in the formula for calculating the customer administered settlement amounts of Section 4.2.2.1 to include the consideration of bilateral contracts to be consistent with Section 2.4 of the APDM Manual; and
- C. Amendment of Section 4.2.6, 4.2.7.2, and 4.2.7.3 for the integration of costs attributable to bilateral contract quantities of the customer administered settlement amounts.

WHEREAS, during the 98th RCC meeting held on 04 March 2015, the RCC approved the publication in the WESM website of the above-stated Proposals for Amendments to the APDM, to solicit comment of participants and interested parties;

WHEREAS, both Proposals for Amendments to the Administered Price Determination Methodology as stated above were published in the WESM website on 06 March 2015, with notice to participants sent on the same day;

WHEREAS, in response to the RCC's call for comments, the RCC received comments from the Philippine Independent Power Producers Association (PIPPA) and SN Aboitiz Power (SNAP) in relation to the said proposals for amendments to the APDM Manual;

WHEREAS, during the 99th RCC Meeting held on 08 April 2015, the Proposal, including the comments received relative thereto, were given due course by the RCC;



WHEREAS, the RCC, noting SNAP's comment on the Proposal, revised the Proposal to clarify the basis of using ex-post prices within one year prior to the trading day and hour;

WHEREAS, the representative from PIPPA discussed in detail the comments submitted by PIPPA relative to the Proposal;

WHEREAS, in summary, the comments of PIPPA recommended a revised formula for determining the Administered Price to ensure that no line rentals are imputed to the Customer BCQ when prices are administered;

WHEREAS, based on the presentation made by the PIPPA representative, the RCC recognized the merits on the PIPPA's comments, but commented that if the comments of PIPPA will be adopted by the RCC, it will entail a major change in the original Proposal submitted by the PEMC on the APDM Manual;

WHEREAS, the RCC recommended the PIPPA's submission of a separate request for Amendments to the APDM Manual, instead of submitting its proposed amendments as mere comments to the PEMC's proposal;

WHEREAS, the PIPPA representative noted the RCC's recommendation and based on the recommendation, expressed that PIPPA will formally submit a new proposal for amendments to the APDM Manual;

WHEREAS, the RCC, upon due deliberation, has determined the need to amend the Administered Price Determination Methodology Manual and found merit on the PEMC Proposal;

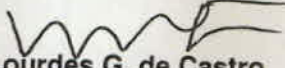



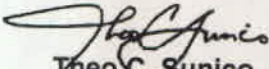
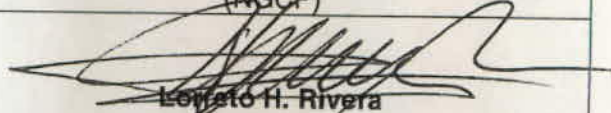
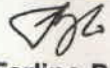

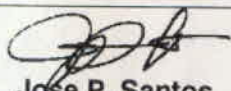

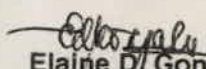
WHEREAS, in the same meeting, the RCC approved the Proposed Amendments to the Administered Price Determination Methodology Manual and agreed on its endorsement to the PEM Board;

NOW THEREFORE, we, the undersigned and in behalf of the sector we represent, hereby resolve as follows:

RESOLVED, that the Proposal for Amendments to the Administered Price Determination Methodology Manual (ANNEX A), is hereby adopted and approved by the RCC;

RESOLVED FURTHER, that the attached Proposal for Amendments to the Administered Price Determination Methodology Manual is hereby endorsed to the PEM Board for approval.

Done this 08 April 2015, Pasig City.

Approved by: RULES CHANGE COMMITTEE  Maila Lourdes G. de Castro Acting Chairperson Independent	
Members:	
 Concepcion I. Tanglao Independent	Francisco L.R. Castro, Jr. Independent Tensaiken Consulting
 Isidro E. Cacho, Jr. Market Operator Philippine Electricity Market Corporation (PEMC)	 Ambrocio R. Rosales Transmission Sector National Grid Corporation of the Philippines (NGCP)
 Theo C. Sunico Generation Sector 1590 Energy Corporation	 Loreto H. Rivera Supply Sector Team (Philippines) Energy Corporation
 Jose Ferlino P. Raymundo Generation Sector SMC Global	 Joselyn D. Carabuena Generation Sector Power Sector Assets and Liabilities Management Corporation (PSALM)
 Jose P. Santos Distribution Sector (EC) Ilocos Norte Electric Cooperative, Inc. (INEC)	 Ciprinilo C. Meneses Distribution Sector (PDU) Manila Electric Company (MERALCO)
Gilbert A. Pagobo Distribution Sector Mactan Electric Company (MECO)	
	Certified True and Correct:  Elaine D. Gonzales RCC Secretary PEMC



ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
Generator Administered Prices - Average Ex-Post Nodal Energy Price	4.2.1	<p>4.2.1. Generator Administered Prices - Average Ex-Post Nodal Energy Price</p> <p>4.2.1.1. For each generator node, the administered price will be computed as the load weighted average of the ex-post nodal energy prices and meter quantity of the four most recent same-day (i.e., Monday to Sunday, Holidays) same-hour trading intervals that have not been administered.</p> <p>Thus, for any generator node i:</p> $AP_{Gen-i} = \frac{\sum_{D=1}^4 EPP_{Gen-i,D} * MQ_{Gen-i,D}}{\sum_{D=1}^4 MQ_{Gen-i,D}}$ <p>Where: EPP = Ex-Post Price AP = Administered Price D = number of historical trading days to be considered i = Generator resources MQ = Meter Quantity</p>	<p>4.2.1 xxx</p> <p>4.2.1.1 xxx</p> <p>4.2.1.2 xxx</p> <p>4.2.1.3 xxx</p> <p><u>4.2.1.4. If no administered price can be determined for a generator trading node because the generating plant associated with that trading node had no actual generation, i.e., no metered quantity or MQ, the administered price shall be determined as follows:</u></p> <p><u>4.2.1.4.1. The Ex-post Price of the immediately preceding same day, same hour, non-administered price, with actual generation, within one (1) year prior to the trading day and hour being considered shall be used in calculating the administered price.</u></p> <p><u>4.2.1.4.2 In case Section 4.2.1.4.1 failed to determine a valid value for administered price, it shall then be computed by obtaining the simple average</u></p>	<p>When the concerned generating plant has not produced electricity for the last previous four weeks, the computation for the administered price values results to indeterminate values. This issue has been raised by the PA in their findings, PA.MS.3 and occurred in the case of San Roque Hydro Electric Power Plant during the Market Suspension due to Typhoon Glenda.</p>

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
		<p>4.2.1.2. In case any of the prices covered by the four preceding same days have been administered, said prices shall be excluded and replaced with the prices that have not been administered from the most recent earlier same or similar day.</p> <p>4.2.1.3. In cases where any of the prices in the four preceding same days reflect constraint violation coefficient prices, or are subject of a pricing error notice or price substitution as a result of a pricing error, the substitute market prices used for settlement of WESM transactions by the Market Operator pursuant to relevant pricing error or price substitution methodologies under the WESM Rules or relevant market manual will be used.</p>	<p><u>of the ex-post nodal energy prices of four preceding same-day, same-hour trading intervals that have not been administered . This is as set out in the following formula:</u></p> $AP_{Gen-i} = \frac{\sum_{D=1}^4 EPP_{Gen-i,D}}{4}$ <p>Where: EPP = Ex-Post Price AP = Administered Price D = number of historical trading days to be considered i = Generator resources MQ = Meter Quantity</p>	
Customer Settlement Amounts	4.2.2.1	<p>For any customer at load node j, the Settlement Amount (SA) is given by the following:</p> $SA_{Load-j} = \frac{\sum_{i=1}^n AP_{Gen-i} \times MQ_{Gen-i}}{\sum_{j=1}^m MQ_{Load-i}} \times MQ_{Load-j}$	<p>For any customer at load node j, the Settlement Amount (SA) is given by the following:</p> $SA_{Load-j} = \frac{\sum_{i=1}^n AP_{Gen-i} \times MQ_{Gen-i}}{\sum_{j=1}^m MQ_{Load-i} - \sum_{i=1}^k BCQ_{Gen-i,Load-j} \times P_{Gen-i}}$	Clarify the consideration of bilateral contract transactions in the calculation of the customer administered settlement amount

ear

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
			<p>Where,</p> <p>BCQ = Bilateral Contract Quantity P = Price of the generator counterparty of Load j wherein P is the Ex-Ante Price if the generator is from the non-administered region and P is the administered price if the generator is from the administered region</p>	
Regional Application of Market Suspension or Intervention	4.2.5.2 (b)	The export trading amount shall be determined by multiplying the export metered quantities by the nodal price at an assigned reference market trading node in the non-administered region. The appropriate reference market trading nodes shall be determined by the Market Operator and shall be published at the market information website	The export trading amount shall be determined by multiplying the export metered quantities by the <u>metered quantity-weighted average price of the administered generators</u> nodal price at an assigned reference market trading node in the non-administered region. The appropriate reference market trading nodes shall be determined by the Market Operator and shall be published at the market information website.	Revised to shift the charging to the non-administered loads of the amount attributed to the exported energy by the administered region and the price difference between the administered and non-administered region

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
Regional Application of Market Suspension or Intervention	4.2.5.2 (c)	(New provision)	<u>The settlement amount calculated by multiplying the export metered quantities by the difference of the nodal price at an assigned reference market trading node in the non-administered region and the metered quantity-weighted average price of the administered generators shall be allocated to all loads in the non-administered region based on their metered quantities. The appropriate reference market trading nodes shall be determined by the Market Operator and shall be published at the market information website.¹</u>	This amount corresponds to the amount that is currently being charged to the loads from the administered region but is attributable to energy consumed by the loads from the non-administered region. This provision will recover the amount from the loads from the non-administered region based on their metered quantities.
Computation of Line Rental	4.2.6	Computation of Line Rental	Computation of Line Rental <u>Amounts associated with Bilateral Contract Quantities</u>	The amount associated with bilateral contract quantities are proposed to not be presented as "Line Rental" since the formal concept of line rental is not consistent with the resulting amounts
Computation of Line Rental	4.2.6.1	Where market suspension or intervention is declared in one region only, and the generator in that region has a bilateral contract quantity with the customer in the normal region, the administered prices determined according to this Manual shall be applied only to the suppliers Ex-Ante price while the Location Marginal Price (LMP) will be the basis for the Ex-Ante price of the customer.	Where market suspension or intervention is declared in one region only, and the generator in that region has a bilateral contract quantity with the customer in the normal region, <u>the trading participant that pays for the line rental shall be charged an amount calculated by multiplying the bilateral contract quantity to the difference of the ex-ante price of the customer and administered price of the generator. the administered prices determined according to this Manual shall be applied only to the suppliers Ex-Ante price while the Location</u>	The amount associated with bilateral contract quantities are proposed to not be presented as "Line Rental" since the formal concept of line rental is not consistent with the resulting amounts

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
			Marginal Price (LMP) will be the basis for the Ex-Ante price of the customer.	
Computation of Line Rental	4.2.6.2	Where market suspension or intervention is declared in one region only, and the customer in that region has a bilateral contract quantity with the supplier in the normal region, no line rental amount is computed since the allocated settlement amount is inclusive offline rental.	Where market suspension or intervention is declared in one region only, and the customer in that region has a bilateral contract quantity with the supplier in the normal region, the cost associated with that bilateral contract quantity is already included in the administered settlement amount of the customer no-line rental amount is computed since the allocated settlement amount is inclusive of line rental.	The amount associated with bilateral contract quantities are proposed to not be presented as "Line Rental" since the formal concept of line rental is not consistent with the resulting amounts
Application of Market Intervention during Grid Islanding	4.2.7.2	Where market intervention is declared in an island grid, and the generator in that island grid has a bilateral contract quantity with the customer in the part of the grid or region without market intervention, the administered prices determined according to this Manual shall be applied only to the suppliers Ex-Ante price while the Location Marginal Price (LMP) will be the basis for the Ex-Ante price of the customer.	Where market intervention is declared in an island grid, and the generator in that island grid has a bilateral contract quantity with the customer in the part of the grid or region without market intervention, the trading participant that pays for the line rental shall be charged an amount calculated by multiplying the bilateral contract quantity to the difference of the ex-ante price of the customer and administered price of the generator the administered prices determined according to this Manual shall be applied only to the suppliers Ex-Ante price while the Location Marginal Price (LMP) will be the basis for the Ex-Ante price of the customer.	The amount associated with bilateral contract quantities are proposed to not be presented as "Line Rental" since the formal concept of line rental is not consistent with the resulting amounts
Application of Market Intervention during Grid Islanding	4.2.7.2	Where market intervention is declared in an island grid, and the customer in that island grid has a bilateral contract quantity with the supplier in the part of the grid or region without market intervention, no line rental amount is computed since the allocated settlement amount is inclusive of line rental.	Where market intervention is declared in an island grid, and the customer in that island grid has a bilateral contract quantity with the supplier in the part of the grid or region without market intervention, the cost associated with that bilateral contract quantity is already included in the administered settlement amount of the customer no-line rental amount is computed	The amount associated with bilateral contract quantities are proposed to not be presented as "Line Rental" since the formal concept of line rental is not consistent with the resulting amounts

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
REGIONAL APPLICATION OF MARKET SUSPENSION OR INTERVENTION	Appendix A	<p>Where generation quantity is exported from the administered region to then non-administered region, The generator trading amount corresponding to exported quantity ("export trading amount") shall be deducted from the generator total trading amounts that will be allocated and collected from the customers of the administered (i.e., exporting) region. The export trading amount will be collected from the customers of the non-administered (i.e., importing) region.</p> <p>Thus, the settlement amount of customer is allocated by the formula:</p> $SA_{Load-j} = \frac{(\sum_{i=1}^n AP_{Gen-i} \times MQ_{Gen-i}) - (MQ_{HVDC} \times EPP_{NAR})}{\sum_{j=1}^m MQ_{Load-i}} \times MQ_{Load-j}$	<p>since the allocated settlement amount is inclusive of line rental.</p> <p>Where generation quantity is exported from the administered region to the non-administered region, the generator trading amount corresponding to exported quantity ("export trading amount") shall be deducted from the generator total trading amounts that will be allocated and collected from the customers of the administered (i.e., exporting) region. The export trading amount will be collected from the customers of the non-administered (i.e., importing) region.</p> <p>Thus, the settlement amount of customer is allocated by the formula:</p> $SA_{Load-j} = \frac{(\sum_{i=1}^n AP_{Gen-i} \times MQ_{Gen-i}) - (MQ_{HVDC} \times AP_{Gen,Ave})}{\sum_{j=1}^m MQ_{Load-i}} \times MQ_{Load-j}$ <p>Where,</p> <p>AP_{Gen,Ave} = Metered quantity-weighted average price of the administered generators calculated by $\sum (AP_{Gen} \times MQ_{Gen}) / \sum MQ_{Gen}$</p>	Reflects the proposed revision on the settlement amounts of loads from the administered region in Clause 4.2.5.2 (b) in mathematical form
REGIONAL APPLICATION OF MARKET SUSPENSION OR	Appendix A	Where generation quantity is imported from non-administered region, The trading amount corresponding to such quantity ("import trading amount") will be added to the generator total trading amounts that will be allocated to and paid	<u>Moreover, the settlement amount resulting from the price difference between the non-administered and administered regions shall be added to or deducted from the payments of the loads from the non-administered region</u>	Reflects the proposed revision in Clause 4.2.5.2 (c) in mathematical form which provides for the amount that will be added

Handwritten signature

ANNEX A

Proposed Amendments to the Administered Price Determination Methodology (APDM) Manual

Title	Section	Provision	Proposed Amendment	Rationale
INTERVENTION		for by the customers in the administered (i.e., importing) region following the methodology provided for in this Manual.	<p>using the formula:</p> $ISA_{Load,NA-j} = \frac{MQ_{HVDC} \times (EPP_{NAR} - AP_{Gen,Ave})}{\sum_{j=1}^m MQ_{Load,NA-j}} \times MQ_{Load,NA-j}$ <p>Where,</p> <p>ISA = Incremental settlement amount of load from non-administered region due to the price difference of the exported quantity EPP_{NAR} = Ex-Post Price of Non-Administered Region j = Load resources AP_{Gen,Ave} = Metered quantity-weighted average price of the administered generators m = number of load resources with negative meter quantity in the non-administered region MQ_{Load,NA-j} = Metered quantity of load from non-administered region</p> <p>Where generation quantity is imported from non-administered region, The trading amount corresponding to such quantity ("import trading amount") will be added to the generator total trading amounts that will be allocated to and paid for by the customers in the administered (i.e., importing) region following the methodology provided for in this Manual.</p>	or deducted from the payments of loads from the non-administered region

Note: For convenience, please underline and put in bold letters the proposed changes to the WESM Manual.