![Philippine Electricity Market Corporation logo]

Philippine Electricity Market Corporation

WHOLESALE ELECTRICITY SPOT MARKET
RULES CHANGE COMMITTEE

RESOLUTION NO. 2015-06

Proposal for Amendments to the Management of Must Run Units and Must Stop Units (MRU-MSU) Manual Issue 5.0

WHEREAS, on 26 January 2015, the Philippine Electricity Market Corporation (PEMC) submitted to the Rules Change Committee (RCC) its Proposal for Amendments to the Management of Must Run Units and Must Stop Units (MRU-MSU) Manual Issue 5.0;

WHEREAS, the Proposal seeks to address the directives of the Energy Regulatory Commission (ERC) in its Order dated 09 June 2008 in ERC Case No. 2006-007 RC directing PEMC to incorporate the procedures for the calculation of Generation Price Index (GPI), as approved by the ERC;

WHEREAS, during the 97th RCC meeting held on 04 February 2015, PEMC presented its Proposal and upon which, the RCC approved its publication in the WESM website to solicit comments of participants and interested parties;

WHEREAS, on 11 February 2015, the Proposal for Amendments to the MRU-MSU Manual Issue 5.0 was published in the market information website, with notice to participants sent the following day;

WHEREAS, in response to the RCC's call for comments, written submission of comments was received from the Philippine Independent Power Producers Association (PIPPA);

WHEREAS, during the 99th RCC meeting held on 08 April 2015, the RCC gave due course to the Proposal, as well as the comments of PIPPA to update the GPI;

WHEREAS, the RCC, noting that PIPPA did not specify or recommend an alternative pricing mechanism, and likewise noting that the explanation given by the Generator representative that the pricing mechanism being contemplated by PIPPA for MRU payment is similar to the proposed pricing mechanism currently being crafted by PIPPA, agreed all these things will be considered in future discussions once the Generators' Proposals for Amendments to the APDM Manual in relation to the formulation of Nominated Price (NP) and MRU have been settled;

WHEREAS, upon due deliberation on the Proposal and on the comments received relative to the Proposal, approved the Proposal for Amendments to the APDM Manual and agreed on its endorsement to the PEM Board in order to comply with the ERC Order;

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 MRU-MSU Manual Issue 5.0 (ANNEX A), is hereby adopted and approved by the RCC;

RESOLVED FURTHER, that the attached Proposal for Amendments to the MRU-MSU Manual Issue 5.0 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	**Lorreto 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
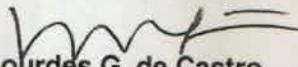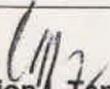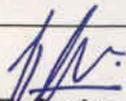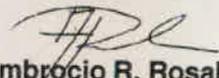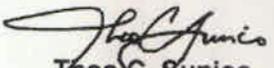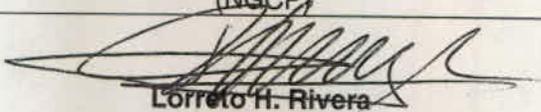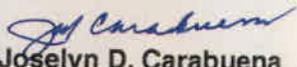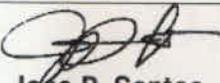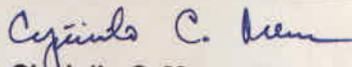
Title	Section	Provision	Proposed Amendment	Rationale
Calculation of Generation Price Index	9.1 a	**a.)** $$GPI = \frac{\sum Payment_{bilateral} + \sum Payment_{spot}}{\sum Quantity_{metered}}$$ Where: $Payment_{\ldots} = \sum BasicCharges + \sum OtherCharges - \sum ApplicableDiscounts$ $Payment_{\ldots} = \sum TradingAmount^{st} + \sum LineRental - \sum SettlementAdjustment$ $Qunatity_{\ldots} = \sum Quantity_{\ldots} + \sum Quantity_{\ldots}$	**a.)** [$$GPI = \frac{\sum Payment_{bilateral} + \sum Payment_{spot}}{\sum Quantity_{metered}}$$ Where: $Payment_{\ldots} = \sum BasicCharges + \sum OtherCharges - \sum ApplicableDiscounts$ $Payment_{\ldots} = \sum TradingAmount^{st} + \sum LineRental - \sum SettlementAdjustment$ $Qunatity_{\ldots} = \sum Quantity_{\ldots} + \sum Quantity_{\ldots}$ **] for deletion** **For Addition:** $$GPI_{h,m} = \frac{\sum_{d=1}^{n} Payment_{bilateral,h,d,m-1} + \sum_{d=1}^{n} Payment_{Spot,h,d,m-1}}{\sum_{d=1}^{n} Quantity_{metered,h,d,m-1}}$$ Where: $GPI_{h,m}$ - Generation Price Index (GPI) for every trading interval h for billing period m Payment$_{bilateral,h,d,m-1}$ - Total bilateral payments for trading interval h of trading day d in the	For clarity reflecting per interval calculation.

Title	Section	Provision	Proposed Amendment	Rationale
			billing period $m-1$ $Payment_{spot,h,d,m-1}$ - Total spot payments for trading interval h of trading day d in the billing period $m-1$ $Quantity_{metered,h,d,m-1}$ - Total generation metered quantity for trading interval h of trading day d in the billing period $m-1$ n - number of trading days in the billing period $m-1$	

Title	Section	Provision	Proposed Amendment	Rationale
	9.1 c	c.) The GPI will be calculated for each billing month as defined in the WESM Rules or in the WESM Billing and Settlements Manual.	c.) The GPI will be calculated for each billing month as defined in the WESM Rules or in the WESM Billing and Settlements Manual. **The GPI will be computed per trading interval per month; thus, there should be twenty-four (24) GPIs per month.**	For clarity
	9.1 d,e,f	**NEW**	d) **Quantities** i. **Quantity**$_{metered,h,d,m-1}$ **refers to the metered quantity used by the Market Operator for settlement of the transactions for the relevant trading interval.** ii. **Quantity**$_{bilateral,h,d,m-1}$ **refers to the bilateral contract quantities (the "BCQ") declared to and used by the Market Operator for settlements for the relevant trading interval.** iii. **Quantity**$_{spot,h,d,m-1}$ **refers to the total metered quantities for the relevant trading interval minus the BCQ declared to the Market**	The proposed changes seek to incorporate the following to describe in detail the procedures for implementing the 6 February 2008 Order, in compliance with the 9 June 2008 Order:

Title	Section	Provision	Proposed Amendment	Rationale
			Operator. e) Payment$_{bilateral,h,d,m-1}$ will be calculated as follows - i. Basic Charges will be calculated by multiplying the BCQ with the applicable time of use (the "TOU") rate for the relevant trading interval. The applicable TOU rate will be hourly TOU rate approved for and as published by the National Power Corporation (the "NPC"). ii. Other Charges will be calculated by multiplying the BCQ with the total applicable adjustments on the NPC-TOU approved by the ERC and as published by the NPC, including but not limited to the deferred accounting adjustments for the Generation Rate Adjustment Mechanism (GRAM), Incremental Currency Exchange Rate	

Title	Section	Provision	Proposed Amendment	Rationale
			Adjustment (ICERA), and benefits to local host communities and other approved adjustments. These may be positive or negative amounts. iii. Applicable Discounts will be calculated by multiplying the BCQ with the amount of all applicable discounts on the NPC-TOU rate as published by the NPC. f) Payment$_{spot,h,d,m-1}$ will be calculated as follows - i. Trading amounts is the total trading amounts (ex-ante and ex-post) for the relevant hour of all customers of the WESM, including direct members as well as indirect members and unregistered customers covered by the Default Wholesale Supply or other arrangements in accordance with the WESM	

Title	Section	Provision	Proposed Amendment	Rationale
			Rules clause 3.13.14 and 3.13.17. ii. Line rental amount refer to the line rental adjustments charged on bilateral contract quantities scheduled through the WESM and which are included in the trading amounts of WESM trading participants in accordance with the WESM Rules clause 3.13.12. iii. Settlement adjustments refer to adjustments on the WESM trading amounts of WESM customers, including but not limited to the net settlement surplus. The net settlement surplus is the difference between the payments by customers and payments to generators for the relevant trading interval in accordance with the WESM Rules clause 3.13.16.	

Title	Section	Provision	Proposed Amendment	Rationale
Calculation of MRU Settlement Amounts	9.3	For every billing period, the Market Operator will calculate the payments to be made to each designated MRU that complied with the dispatch instructions as such by multiplying the applicable GPI with the energy quantities at which that MRU was designated as MRU.	For every billing period, the Market Operator will calculate the payments to be made to each designated MRU that complied with the dispatch instructions as such by multiplying the applicable GPI with the energy quantities **for the relevant trading hour** at which that MRU was designated as MRU.	For clarity