# **RULES CHANGE COMMITTEE**

Proposed Urgent Amendments to WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs, Issue 6 to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation

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**WHEREAS**, the DOE on 23 October 2015 adopted<sup>1</sup> enhancements to WESM design and operations which includes among others the change from a 1-hour dispatch interval to a 5-minute dispatch interval;

WHEREAS, the DOE on 20 March 2017 approved provisions on automatic pricing re-run under the WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs ("CVC Manual"), which provide that such re-pricing assumes shortage pricing at the offer price cap (i.e. currently at PhP32,000 per MWh) during under-generation and excess pricing at offer price floor (i.e. currently at PhP -10,000 per MWh) during over-generation;

WHEREAS, among the preparations made for the implementation of the enhanced market design, on 29 December 2020, the ERC promulgated its decision dated 29 August 2020 on ERC Case No. 2017-042RC ("Decision") approving the Price Determination Methodology (PDM) for the enhanced WESM design and operations;

WHEREAS, the ERC, in its Decision, while acknowledging the importance of having the correct pricing signals and settlement-ready prices in real-time for efficiency and transparency in prices, deemed that prices during under-generation should reflect the cost that the consumers are willing to pay for a continuous supply of electricity, which price is not necessarily the offer price cap (PhP32,000/MWh);

**WHEREAS**, the ERC directed that the existing pricing mechanisms during under-generation and overgeneration should be maintained;

WHEREAS, on 18 May 2021, PEMC submitted the proposed urgent amendment on automatic pricing re-runs seeking to harmonize provisions on automatic pricing re-runs in the WESM Rules and CVC Manual for the enhanced WESM design and operations (EWDO) with the ERC directives to be effective on the commencement of the EWDO on 26 June 2021 ("Go-Live Date");

WHEREAS, following the procedures for processing proposed urgent amendments specified in Section 7.2 of the WESM Manual on Procedures for Changes to the WESM and Retail Rules and Market Manuals ("Rules Change Manual"), the RCC convened on 21 May 2021, coincidentally its 179<sup>th</sup> (Regular) Meeting, to determine if the proposal is urgent based on the criteria set forth in Section 3.1 of the Rules Change Manual, and if so, deliberate on the proposal for endorsement to the PEM Board;

**WHEREAS**, the PEMC presented to the RCC a summary of the proposed changes, as follows:

<sup>1</sup> Department Circular No. 2015-10-0015 dated 23 October 2015





#### RCC-RESO-21-05

Proposed Urgent Amendments to the WESM Manual on Billing and Settlement to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation

Affected Clauses	Proposed Amendment	Rationale
WESM Rules (EWDO): • 3.6.7.2 • 3.6.7.3 • 3.10.5.5	Deletion of shortage pricing (for under-generation) and excess pricing (for over-generation)	Existing pricing mechanisms during under-generation and over- generation should be maintained. Such that, these events shall be treated just like other constraint violations
WESM Manual on CVC- PR (Issue 6): • 5.1.3 • 5.2.2. to 5.2.5 • 5.3.1	Deletion of shortage pricing (for under-generation) and excess pricing (for over-generation)	For consistency with WESM Rules

WHEREAS, following initial discussions, the RCC certified the proposal as urgent since it satisfies the criteria for urgent proposals per Section 3.1 of the Rules Change Manual to facilitate the implementation of any regulation, circular, order or issuance of the DOE or ERC pursuant to the EPIRA;

**WHEREAS**, the RCC approved the proposal, and its endorsement to the PEM Board, providing Proposed Urgent Amendments to the WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs, Issue 6 (CVC-PR);

**NOW THEREFORE,** we, the undersigned, on behalf of the sectors we represent, hereby resolve via electronic communication platforms, as follows:

**RESOLVED**, that the RCC approves the Proposed Urgent Amendments to the WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs, Issue 6 (CVC-PR), attached as Annex A;

**RESOLVED FURTHER,** that the said Proposed Urgent Amendments to the WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs, Issue 6 (CVC-PR), are hereby endorsed to the PEM Board for approval and transmitted to the DOE and ERC for information.

Done this **21**<sup>st</sup> day of **May 2021**, Pasig City.

### RCC-RESO-21-05

Proposed Urgent Amendments to the WESM Manual on Billing and Settlement to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation

Approved by: THE RULES CHANGE COMMITTEE Independent Members: FRANCISCO L.R. CAS MAILA LOURDES G. DE CASTRO Chairperson allennenix **ALLAN C. NERVES** CONCEPCION I. TANGLAO Generation Sector Members: DIXIE ANTHONY R. BANZON CHERRYA. JAVIER Masinloc Power Partners Co. Ltd. Aboitiz Power Corp. (MPPOL) (APC) CARLITO C. CLAUDIO MARK D. HABANA Millennium Energy, Inc./ Panasia Energy, Inc. **Vivant Corporation - Philippines** (MEI/PEI) (Vivant) **Distribution Sector Members:** and las VIRGILIO C. FORTICH, JR. **RYAN S. MORALES** Cebu III Electric Cooperative, Inc. Manila Electric Company (CEBECO III) (MERALCO) **RICARDO G. GUMALAL** NELSON M. DELA CRUZ lligan Light and Power, Inc. Nueva Ecija II Area 1 Electric Cooperative, Inc. (ILPI) (NEECO II – Area 1)

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### RCC-RESO-21-05

Proposed Urgent Amendments to the WESM Manual on Billing and Settlement to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation

Supply Sector Member:
LORRETO H. RIVERA TeaM (Philippines) Energy Corporation (TPEC)
Market Operator Member:
ISIDRO E. CACHO, JR. Independent Electricity Market Operator of the Philippines (IEMOP)
System Operator Member:
AMBROCIO R. ROSALES National Grie Corporation of the Philippines (NGCP)



# A. WESM Rules (EWDO)

Title	Clause	Provision	Proposed Amendment	Rationale		
Automatic Pricing Re- runs	3.6.7.2	The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect: (a) the marginal costs of supplying energy at each node; (b) the marginal costs of supplying reserves; (c) shortage pricing when there is a shortage of supply at a node or regional level; and (d) excess pricing when there is an excess of supply at a node or regional level. Such methodology for shortage pricing and excess pricing shall be approved by the DOE and ERC.	The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect: (a) the marginal costs of supplying energy at each node; <u>and</u> (b) the marginal costs of supplying reserves; (c) shortage pricing when there is a shortage of supply at a node or regional level; and (d) excess pricing when there is an excess of supply at a node or regional level. Such methodology for shortage pricing and excess pricing shall be	Consistent with ERC directives* that the existing pricing mechanisms during under-generation and over- generation should be maintained. Such that, these events shall be treated just like other constraint violations. * ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017- 042RC		
Automotio	2672	The outematic regular of the dispetch	approved by the DOE and ERC.	Consistent with EDC		
Pricing Re- runs	3.0.7.3	<ul> <li>optimization shall use the following changes to the soft constraints that was violated:</li> <li>(a) In case of over-generation and under-generation, the soft constraint</li> </ul>	dispatch optimization shall <u>relax</u> use the following changes to the soft constraints that was violated <u>by a value</u> :	directives* that the existing pricing mechanisms during under-generation and over- generation should be maintained. Such that, these events shall be treated just like other constraint violations.		

Title	Clause	Provision	Proposed Amendment	Rationale	
		shall be relaxed by a value to allow the market dispatch optimization model to find a feasible price; and (b) For all other constraints that were violated, each constraint's requirement shall be corresponding to the resulting non-zero violation variable, including a very small value to allow the market dispatch optimization model to find a feasible price.	<ul> <li>(a) In case of over-generation and under-generation, the soft</li> <li>constraint shall be relaxed by a</li> <li>value to allow the market dispatch optimization model to find a</li> <li>feasible price; and</li> <li>(b) For all other constraints that</li> <li>were violated, each constraint's</li> <li>requirement shall be</li> <li>corresponding to the resulting non- zero violation variable, including a</li> <li>very small value, to allow the market dispatch optimization model to find a feasible price.</li> </ul>	* ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017- 042RC	
Pricing Error Notice	3.10.5.5	3.10.5.5 The procedures developed for the market pricing re-runs shall be designed to produce prices reflecting supply shortages at any nodes where there was load shedding and prices reflecting excess supply where there was excess generation.	3.10.5.5 The procedures developed for the market pricing re-runs shall be designed to produce prices reflecting supply shortages at any nodes where there was load shedding and prices reflecting excess supply where there was excess generation.	Consistent with ERC directives* that the existing pricing mechanisms during under-generation and over- generation should be maintained. Such that, these events shall be treated just like other constraint violations. * ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017- 042RC	



## B. Constraint Violation Coefficients and Pricing Re-runs, Issue 6 (EWDO)

Title	Clause	Provision	Proposed Amendment	Rationale		
Rationale for Automatic Pricing Re-Runs	5.1.3.	The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect: a. the marginal costs of supplying energy at each node; b. the marginal costs of supplying reserves; c. shortage pricing when there is a shortage of supply at a node or regional level; and d. excess pricing when there is an excess of supply at a node or regional level.	The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect: a. the marginal costs of supplying energy at each node; <u>and</u> b. the marginal costs of supplying reserves; c. shortage pricing when there is a shortage of supply at a node or regional level; and d. excess pricing when there is an excess of supply at a node or regional level.	Consistent with the proposed amendment to WESM Rules Clause 3.6.7.2.		
Process for Automatic Pricing Re-Runs	5.2.2. to 5.2.5	5.2.2. In case of over-generation and under-generation, the soft constraint shall be relaxed by a very small value (delta) to allow the market dispatch optimization model to find a feasible price. When the results of the market	5.2.2. In case of over-generation and under-generation, the soft constraint shall be relaxed by a very small value (delta) to allow the market dispatch optimization model to find a feasible price. When the results of the market	Consistent with the proposed amendment to WESM Rules Clauses 3.6.7.3 and 3.10.5.5.		



Title	Clause	Provision	Proposed Amendment	Rationale
		dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage price for under-generation and excess price for over-generation. 5.2.3 xxx 5.2.4 xxx 5.2.5 xxx	dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage price for under-generation and excess price for over-generation. 5.2.3 <u>5.2.2</u> xxx 5.2.4 <u>5.2.3</u> xxx 5.2.5 5.2.4 xxx	
Automatic Pricing Re-Run Parameters	5.3.1	The corresponding constraint relaxation formulas for the constraint violation coefficients during pricing re-runs shall be as provided in Table 2 below: (see next page)	The corresponding constraint relaxation formulas for the constraint violation coefficients during pricing re-runs shall be as provided in Table 2 below: (see next page)	Consistent with the proposed amendment to WESM Rules Clauses 3.6.7.3 and 3.10.5.5.



Provision					Proposed Amendment									
	Order	Constraint Violation Coefficient Name	сус	Violation Variable Value	Delta	Constraint Relaxation during Pricing Re-Run	Re-run Price²	Order	Constraint Violation Coefficient Name	сус	Violation Variable Value	Delta	Constraint Relaxation during Pricing Re-Run	Re-run Price <sup>3</sup>
	<u>xxx</u> 4 <u>xxx</u>	xxx System Energy Balance Constraint	xxx 1,300,000 xxx	xxx x xxx	xxx 0 xxx	xxx delta xxx	xxx Excess Price for over- generatio n Shortage Price for under- generatio n xxx	<u>×</u> 4	XXX System Energy Balance Constraint (Over- generation and under- generation )	xxx 1,300,000	x	α θ <u>0.1</u>	xxx <u>x+</u> delta	xxx EDP AND RP Excose Price for over- generatio Price for Under- generatio Price for
I								x	XXX	ХХХ	Х	Х	XXX	XXX

 <sup>&</sup>lt;sup>2</sup> EDP refers to *nodal energy dispatch price;* and RP refers to *reserve price* <sup>3</sup> EDP refers to *nodal energy dispatch price;* and RP refers to *reserve price*