



## RULES CHANGE COMMITTEE

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

Effective Date : 17 December 2021

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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 over-generation should be maintained;

**WHEREAS**, on 19 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**, in accordance with the procedures for processing urgent amendments<sup>2</sup>, the RCC immediately deliberated the proposal on 21 May 2021 during its 179<sup>th</sup> Regular Meeting and determined that the proposal satisfies the criteria for urgent proposal, and approved to endorse the same, as submitted, to the PEM Board as embodied in the RCC Resolution 2021-05 dated 21 May 2021;

**WHEREAS**, following the WESM Manual on Procedures for Changes to the WESM Rules, Retail Rules and Market Manuals ("Rules Change Manual") Section 7.3 (a), the PEM Board subsequently deliberated and approved the urgent amendment on 26 May 2021 per PEM Board Resolution No. 2021-36-04, as submitted, after which the revised WESM Rules and WESM Manual reflecting the urgent amendments were posted in

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

<sup>2</sup> Section 7.2 of the WESM Manual on Procedures for Changes to the WEM and Retail Rules and Market Manuals

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the PEMC website and took effect on 27 May 2021 for provisional implementation within a period of no more than six (6) months;

**WHEREAS**, on 10 June 2021, the PEM Board submitted its approval of the urgent amendment to DOE for information and was acknowledged thru a letter dated 30 June 2021;

**WHEREAS**, following process for urgent proposals<sup>3</sup>, the PEMC on 12 August 2021 re-submitted to RCC the PEM Board-approved urgent proposed amendments as a general amendment to be processed as such, for final approval and promulgation of the DOE;

**WHEREAS**, as with the original urgent proposal, the summary of the general proposal are as follows:

Affected Clauses	Proposed Amendment	Rationale
WESM Rules (EWDO): <ul style="list-style-type: none"> <li>3.6.7.2</li> <li>3.6.7.3</li> <li>3.10.5.5</li> </ul>	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): <ul style="list-style-type: none"> <li>5.1.3</li> <li>5.2.2. to 5.2.5</li> <li>5.3.1</li> </ul>	Deletion of shortage pricing (for under-generation) and excess pricing (for over-generation)	For consistency with WESM Rules

**WHEREAS**, the RCC initially took up the proposal during its 183<sup>rd</sup> Regular Meeting last 20 August 2021 and approved the same for publication to solicit comments from the stakeholders;

**WHEREAS**, following the 30-working day commenting period from 25 August to 07 October 2021, no comments were received from the WESM Members and stakeholders.;

**WHEREAS**, the RCC deliberated the proposal during its 185<sup>th</sup> Regular Meeting last 15 October 2021, and approved the same for endorsement to PEM Board;

**WHEREAS**, meanwhile, the DOE published on 12 Aug 2021 the DOE Department Circular DOE DC 2021-07-0022 dated 25 June 2021 adopting further amendments to the CVC Manual for the implementation of enhancements to WESM design and operations particularly on the provisions for self-scheduled generation;

**WHEREAS**, in a letter dated 26 August 2021, the RCC requested guidance and instructions from the DOE on the observed inconsistency of DOE DC2021-07-0022 with the ERC's Decision on ERC Case No. 2017-024RC on Price Determination Methodology (PDM) particularly on the pricing mechanism during under-generation and over-generation;

**WHEREAS**, in a letter dated 21 October 2021, the DOE recognized the ERC's Decision and noted that there were urgent amendments approved by PEM Board. With this, the DOE informed the RCC that it will await the PEM Board's endorsement of the general amendments harmonizing the CVC Manual with the ERC's directive;

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**WHEREAS**, during its 186<sup>th</sup> meeting on 19 November 2021, the RCC finalized the proposal and approved for submission to PEM Board;

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

**RESOLVED**, that RCC approved the Proposed General Amendments to WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation attached as Annex A;

**RESOLVED FURTHER**, that the said Proposed General Amendments to WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs to Harmonize with ERC Directives on Automatic Pricing Re-runs for Under-generation and Over-generation, are hereby endorsed to the PEM Board for approval and for submission to DOE for consideration.



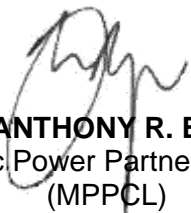




Done this 17<sup>th</sup> day of **December 2021**, *via* Microsoft Teams.

<sup>3</sup> In relation to WESM Rules Clause 8.5.4 (b), the full implementation of the proposed amendments will be from Go-Live Date of EWDO until six (6) months or 26 December 2021.

On 15 October 2021, through RCC Resolution 2021-17, the RCC requested the PEM Board for the extension of Effectivity of Urgent Amendments for EWDO Implementation, including the proposed urgent amendments to the CVC-PR Manual approved by the PEM Board on 26 May 2021. The PEM Board approved the request, which extends the effectivity for another six (6) months from expiry or until 26 June 2022.



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Approved by: <b>THE RULES CHANGE COMMITTEE</b>	
Independent Members:	
 <b>ALLAN C. NERVES</b> Chairperson	<b>CONCEPCION I. TANGLAO</b>
 <b>JESUSITO G. MORALLOS</b>	<b>(vacant)</b>
Generation Sector Members:	
 <b>DIXIE ANTHONY R. BANZON</b> Masinloc Power Partners Co. Ltd. (MPPCL)	 <b>CHERRY A. JAVIER</b> Aboitiz Power Corp. (APC)
 <b>CARLITO C. CLAUDIO</b> Millennium Energy, Inc./ Panasia Energy, Inc. (MEI/PEI)	<b>MARK D. HABANA</b> Vivant Corporation - Philippines (Vivant)
Distribution Sector Members:	
<b>VIRGILIO C. FORTICH, JR.</b> Cebu III Electric Cooperative, Inc. (CEBECO III)	 <b>RYAN S. MORALES</b> Manila Electric Company (MERALCO)
<b>RICARDO G. GUMALAL</b> Iligan Light and Power, Inc. (ILPI)	 <b>NELSON M. DELA CRUZ</b> Nueva Ecija II Area 1 Electric Cooperative, Inc. (NEECO II – Area 1)



Proposed General Amendments to WESM Rules and WESM Manual on Constraint Violation Coefficients and Pricing Re-runs 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 Grid Corporation of the Philippines  
(NGCP)



## A. WESM Rules

Title	Clause	Provision	Proposed Amendment	Rationale
Automatic Pricing Re-runs	3.6.7.2	<p>The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect:</p> <ul style="list-style-type: none"> <li>(a) the marginal costs of supplying energy at each node;</li> <li>(b) the marginal costs of supplying reserves;</li> <li>(c) shortage pricing when there is a shortage of supply at a node or regional level; and</li> <li>(d) excess pricing when there is an excess of supply at a node or regional level.</li> </ul> <p>Such methodology for shortage pricing and excess pricing shall be approved by the DOE and ERC.</p>	<p>The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect:</p> <ul style="list-style-type: none"> <li>(a) the marginal costs of supplying energy at each node; <b>and</b></li> <li>(b) the marginal costs of supplying reserves;</li> <li><del>(c) shortage pricing when there is a shortage of supply at a node or regional level; and</del></li> <li><del>(d) excess pricing when there is an excess of supply at a node or regional level.</del></li> </ul> <p><del>Such methodology for shortage pricing and excess pricing shall be approved by the DOE and ERC.</del></p>	<p>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.</p> <p>* ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017-042RC</p>
Automatic Pricing Re-runs	3.6.7.3	<p>The automatic re-run of the dispatch optimization shall use the following changes to the soft constraints that was violated:</p> <ul style="list-style-type: none"> <li>(a) In case of over-generation and under-generation, the soft constraint shall be relaxed by a value to allow the market dispatch optimization model to find a feasible price; and</li> <li>(b) For all other constraints that were violated, each constraint's requirement shall be corresponding to the resulting</li> </ul>	<p>The automatic re-run of the dispatch optimization shall <b>relax</b> use the <del>following changes to the soft constraints that was violated</del> <b>by a value:</b></p> <ul style="list-style-type: none"> <li><del>(a) In case of over-generation and under-generation, the soft constraint shall be relaxed by a value to allow the market dispatch optimization model to find a feasible price; and</del></li> <li><del>(b) For all other constraints that were violated, each constraint's requirement</del></li> </ul>	<p>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.</p> <p>* ERC Decision dated 20 August 2020 (and promulgated on 29</p>

Title	Clause	Provision	Proposed Amendment	Rationale
		non-zero violation variable, including a very small value to allow the market dispatch optimization model to find a feasible price.	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.	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.	<del>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.</del>	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. WESM Manual on Constraint Violation Coefficients and Pricing Re-runs**

Title	Clause	Provision	Proposed Amendment	Rationale
Rationale for Automatic Pricing Re-Runs	5.1.3.	<p>The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect:</p> <ul style="list-style-type: none"> <li>a. the marginal costs of supplying energy at each node;</li> <li>b. the marginal costs of supplying reserves;</li> <li>c. shortage pricing when there is a shortage of supply at a node or regional level; and</li> <li>d. excess pricing when there is an excess of supply at a node or regional level.</li> </ul>	<p>The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect:</p> <ul style="list-style-type: none"> <li>a. the marginal costs of supplying energy at each node;</li> <li><b>and</b></li> <li>b. the marginal costs of supplying reserves;</li> <li><del>c. — shortage pricing when there is a shortage of supply at a node or regional level; and</del></li> <li><del>d. — excess pricing when there is an excess of supply at a node or regional level.</del></li> </ul>	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	<p>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 dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage</p>	<p><del>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 dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage</del></p>	Consistent with the proposed amendment to WESM Rules Clauses 3.6.7.3 and 3.10.5.5.



Title	Clause	Provision	Proposed Amendment	Rationale
		price for under-generation and excess price for over-generation.  5.2.3 xxx 5.2.4 xxx 5.2.5 xxx	<del>price for under-generation and excess price for over-generation.</del>  <del>5.2.3</del> <b>5.2.2</b> xxx <del>5.2.4</del> <b>5.2.3</b> xxx <del>5.2.5</del> <b>5.2.4</b> 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	CVC	Violation Variable Value	Delta	Constraint Relaxation during Pricing Re-Run	Re-run Price <sup>3</sup>	Order	Constraint Violation Coefficient Name	CVC	Violation Variable Value	Delta	Constraint Relaxation during Pricing Re-Run	Re-run Price <sup>4</sup>
xxx	xxx	xxx	xxx	xxx	xxx	xxx	x	xxx	xxx	x	x	xxx	xxx
4	System Energy Balance Constraint	1,300,000	x	0	delta	Excess Price for over-generation	4	System Energy Balance Constraint ( <u>Over-generation and under-generation</u> )	1,300,000	x	0 <u>0.1</u>	<u>x</u> +delta	<u>EDP AND RP</u> Excess Price for over-generation
						Shortage Price for under-generation							Shortage Price for under-generation
xxx	xxx	xxx	xxx	xxx	xxx	xxx	x	xxx	xxx	x	x	xxx	xxx

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

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