



WHOLESALE ELECTRICITY SPOT MARKET RULES CHANGE COMMITTEE

RESOLUTION NO. 2020-12

Proposed Amendments to the WESM Rules and WESM Manual on Management of Must-Run and Must-Stop Units regarding Settlement of Displaced Generators

WHEREAS, the DOE promulgated in 2014 and 2015¹ two (2) proposed amendments to the WESM Rules and WESM Manual on Management of Must-Run and Must-Stop Units (“MRU-MSU Manual”) approving the compensation of Displaced Generators by Must-Stop Units;

WHEREAS, a displaced generator (DG) is defined under the WESM Rules as “a generating unit identified and instructed by the *System Operator* in an out of merit dispatch to reduce the provision of energy specified in its *Real Time Dispatch* instruction exclusively caused by excess generation due to non-compliance of generators to dispatch instructions...”, with such non-compliant generators referred to as Must-Stop Units (MSU);

WHEREAS, for the foregoing DOE-approved amendments to be implemented, PEMC filed for approval of the ERC the proposed compensation mechanism for DGs on 04 August 2016 which was docketed as ERC Case No. 2016-159RC;

WHEREAS, as part of the preparations towards the implementation of the enhanced market design, PEMC filed before the ERC on 17 May 2017 a new Price Determination Methodology (PDM)² which provides for, among others, a shortened dispatch interval and ex-ante only pricing, essentially superseding the DG compensation mechanism previously filed with the ERC in 2016;

WHEREAS, PEMC consequently withdrew on 07 March 2018 its 2016 ERC application on the settlement of DGs (ERC Case No. 2016-159RC) since this

¹ DOE Department Circular Nos. DC2014-10-0021 (dated 24 October 2014) and DC2015-11-0016 (dated 12 November 2015).

² Docketed as ERC Case No. 2017-042RC.

methodology relies on ex-post prices that will no longer be used in the new PDM for the enhanced market design regime;

WHEREAS, the DOE likewise promulgated Department Circular No. 2018-04-0007 on 28 March 2018 approving changes to the WESM Rules and WESM Manual on Dispatch Protocol (“DP Manual”) for enhanced market design which removed MSUs and DGs since the shortened dispatch interval (1) would significantly minimize the occurrence of MSUs and DGs, and (2) makes the monitoring and identification of MSUs and DGs operationally impractical;

WHEREAS, having recognized the impact of PEMC’s 2017 ERC application regarding the new PDM and the DOE’s promulgation of DC2018-04-0007, the ERC issued an Order on 17 April 2018 dismissing PEMC’s 2016 application as it has already become moot;

WHEREAS, the DOE thereafter directed PEMC³ to make appropriate changes to the WESM Rules and the relevant Market Manuals for consistency with the foregoing ERC Order;

WHEREAS, in view of the DOE’s directive, PEMC submitted to the Rules Change Committee on 18 February 2020 proposed revisions to the MRU-MSU Manual Issue 8.0 (version for current market design) and the WESM Rules (version for enhanced market design) which sought to amend:

- 1) MRU-MSU Manual Issue 8.0, to clarify that the settlement methodology for Displaced Generators, as stated in Section 10 in the current version of the WESM Manual on Management of Must-Run and Must-Stop Units, shall be effective only until commercial operations of the enhanced market design; and
- 2) WESM Rules, to remove the terms ‘must-stop unit’ and ‘displaced generators’ and all references thereto in the version of the WESM Rules for enhanced market design

WHEREAS, following the commenting period from 26 February 2020 to 17 April 2020, inputs were received from the IEMOP, Aboitiz Power, SPC Power Corp./SPC Island Power Corp., and Alsons Power;

WHEREAS, the RCC deliberated on the proposal on 24 April 2020 during its 164th Meeting, taking into consideration the comments received and the proponent’s response;

³ DOE letters to PEMC dated 10 December 2018 and 29 August 2019

WHEREAS, the main issue deliberated was IEMOP's suggestion to delete the entire Section 10 (*Settlement of Displaced Generators*) of the MRU-MSU Manual Issue 8.0 considering the following:

- 1) for consistency with the ERC Order and the DOE's subsequent directive;
and
- 2) DG settlement mechanism is not implementable since it is operationally difficult to identify the MSUs who will compensate the DGs.

WHEREAS, the RCC noted PEMC's justification that retaining Section 10 would maintain the basis the generators could use in claiming for compensation through avenues outside the WESM (e.g., ERC), pending the implementation of the enhanced market design;

WHEREAS, with a vote of 12 in favor of deleting Section 10, the RCC adopted IEMOP's proposed changes to the MRU-MSU Manual Issue 8.0, and adopted PEMC's proposed changes to the WESM Rules;

WHEREAS, during the 165th RCC Meeting on 15 May 2020, the RCC further reviewed the proposal and agreed to delete the terms 'Displaced Generator' and 'Must-Stop Units' in the WESM Rules for the current market design and MRU-MSU Manual Issue 8.0 due to the deletion of Section 10;

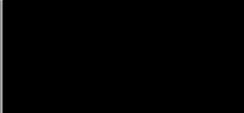
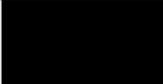
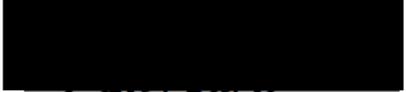
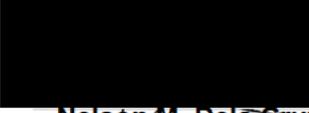
WHEREAS, with no other matters left for discussion, the RCC approved the proposal, as amended, and its endorsement to the PEM Board;

NOW THEREFORE, we, the undersigned, on behalf of the sectors we represent, hereby resolve as follows:

RESOLVED, that the RCC approves the Proposed Amendments to the WESM Rules and WESM Manual on Management of Must-Run and Must-Stop Units regarding the Settlement of Displaced Generators (attached as Annexes A and B) to take effect in the current and enhanced market design regimes;

RESOLVED FURTHER, that the said Proposed Amendments to the WESM Rules and WESM Manual on Management of Must-Run and Must-Stop Units regarding the Settlement of Displaced Generators are hereby endorsed to the PEM Board for approval.

Done this 15 May 2020, Pasig City.

Governed by: THE RULES CHANGE COMMITTEE	
Independent Members:	
 Chairperson	
	 Concepcion I. Tanglao
Generation Sector Members:	
 Dixie Anthony R. Banzon Masinloc Power Partners Co. Ltd. (MPPCL)	 Cherry A. Javier Aboitiz Power Corp. (APC)
 Carlito C. Claudio Millennium Energy, Inc./ Panasia Energy, Inc. (MEI/PEI)	 Mark D. Habana Vivant Corporation - Philippines (Vivant)
Distribution Sector Members:	
 Virgilio C. Fortich, Jr. Cebu III Electric Cooperative, Inc. (CEBECO III)	 Ryan S. Morales Manila Electric Company (MERALCO)
 Ricardo G. Gumalal Iligan Light and Power, Inc. (ILPI)	 Nelson M. Dela Cruz Nueva Ecija II Area 1 Electric Cooperative, Inc. (NEECO II – Area 1)



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:
 Ambrósio R. Rosales National Grid Corporation of the Philippines (NGCP)



WESM Rules (as amended per DOE DC2019-12-0017 dated 04 Dec 2019; for current market design)				
Title	Clause	Provision	Proposed Amendment	Rationale
Over-riding Constraints	3.5.13.1	<p>xxx</p> <p>The <i>System Operator</i>, in consultation with the <i>Market Operator</i> and the <i>Trading Participants</i>, shall develop the criteria and procedures for dispatch of generating units that are required to run as a result of the imposition or relaxation of constraints stated in the preceding paragraph, and the manner for compensating said units. (As amended by DOE DC NO.2006-01-0001 and further amended by DOE DC No. 2006-05-0006 dated 5 May 2006)</p> <p>The <i>System Operator</i> shall advise the <i>Market Operator</i> of the actions it has taken in relation to the foregoing, including but not limited to information necessary for the proper settlement of affected <i>generating units</i>, and the <i>Market Operator</i> shall <i>publish</i> the said information no later than one (1) week from the relevant <i>trading day</i>. For proper settlement of <i>must-run units</i> and <i>must-stop units</i>, <i>Trading Participants</i> shall review the information and notify the <i>Market Operator</i> of any discrepancies no later than two (2) weeks from the date of <i>publication</i>, otherwise the information contained in the</p>	<p>xxx</p> <p>The <i>System Operator</i>, in consultation with the <i>Market Operator</i> and the <i>Trading Participants</i>, shall develop the criteria and procedures for dispatch of generating units that are required to run as a result of the imposition or relaxation of constraints stated in the preceding paragraph, and the manner for compensating said units. (As amended by DOE DC NO.2006-01-0001 and further amended by DOE DC No. 2006-05-0006 dated 5 May 2006)</p> <p>The <i>System Operator</i> shall advise the <i>Market Operator</i> of the actions it has taken in relation to the foregoing, including but not limited to information necessary for the proper settlement of affected <i>generating units</i>, and the <i>Market Operator</i> shall <i>publish</i> the said information no later than one (1) week from the relevant <i>trading day</i>. For proper settlement of <i>must-run units</i> and must-stop units, <i>Trading Participants</i> shall review the information and notify the <i>Market Operator</i> of any discrepancies no later than two (2) weeks from the date of <i>publication</i>, otherwise the information</p>	<p>For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.</p>

WESM Rules (as amended per DOE DC2019-12-0017 dated 04 Dec 2019; for current market design)				
Title	Clause	Provision	Proposed Amendment	Rationale
		report shall be deemed final for use in the settlement of <i>must-run units</i> and <i>must-stop units</i> . (As amended by DOE DC NO.2015-11-0016 dated 12 November 2015) xxx	contained in the report shall be deemed final for use in the settlement of <i>must-run units</i> and <i>must-stop units</i> . (As amended by DOE DC NO.2015-11-0016 dated 12 November 2015) xxx	
Settlement Amounts of Trading Participants	3.13.14.3	The <i>Market Operator</i> shall develop and implement, subject to approval by the ERC, the appropriate pricing and settlement methodology for compensation of trading participants whose generating units are designated as <i>Must-Run Units</i> or identified as Displaced Generators, and the corresponding recovery mechanism for the same. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	The <i>Market Operator</i> shall develop and implement, subject to approval by the ERC, the appropriate pricing and settlement methodology for compensation of trading participants whose generating units are designated as <i>Must-Run Units</i> or identified as Displaced Generators , and the corresponding recovery mechanism for the same. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Glossary		Displaced Generator. A generating unit identified and instructed by the <i>System Operator</i> in an <i>Out of Merit Dispatch</i> to reduce the provision of energy specified in its <i>Real Time Dispatch</i> instruction exclusively caused by excess generation due to non-compliance of generators to dispatch instructions and use of reactive support reserve. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	Displaced Generator. A generating unit identified and instructed by the System Operator in an Out of Merit Dispatch to reduce the provision of energy specified in its Real Time Dispatch instruction exclusively caused by excess generation due to non-compliance of generators to dispatch instructions and use of reactive support reserve. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.

WESM Rules (as amended per DOE DC2019-12-0017 dated 04 Dec 2019; for current market design)				
Title	Clause	Provision	Proposed Amendment	Rationale
Glossary		Must- Stop Unit (MSU). A generating unit identified and instructed by the <i>System Operator</i> to reduce the provision of energy due to its non compliance of the <i>Dispatch Schedule</i> to address or prevent possible threat to the System Security requirements of the Grid. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	Must- Stop Unit (MSU). A generating unit identified and instructed by the <i>System Operator</i> to reduce the provision of energy due to its non compliance of the <i>Dispatch Schedule</i> to address or prevent possible threat to the System Security requirements of the Grid. (As amended by DOE DC No.2014-10-0021 dated 24 October 2014)	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.



WESM Rules (as amended per DOE DC2019-12-0017 dated 04 Dec 2019; for enhanced market design)				
Title	Clause	Provision	Proposed Amendment	Rationale
Dispatch Conformance Standards	3.8.5.6	In cases when a <i>generating unit</i> was identified as a <i>Must-Stop Unit</i> , the <i>System Operator</i> shall include such in the Dispatch Deviation Report.	In cases when a <i>generating unit</i> was identified as a <i>Must-Stop Unit</i> <u>does not comply with its <i>dispatch schedule</i></u> , the <i>System Operator</i> shall include such in the Dispatch Deviation Report.	<ul style="list-style-type: none"> For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order. To ensure that the System Operator shall document non-compliant generating units in its regular Report. This is consistent with Section 14.4.2 of the Dispatch Protocol Issue 13.1.
Glossary		Must-Stop Unit (MSU). A generating unit identified and instructed by the <i>System Operator</i> to reduce the provision of energy due to its non compliance of the <i>Dispatch Schedule</i> to address or prevent possible threat to the System Security requirements of the Grid.	Must-Stop Unit (MSU). A generating unit identified and instructed by the <i>System Operator</i> to reduce the provision of energy due to its non compliance of the <i>Dispatch Schedule</i> to address or prevent possible threat to the System Security requirements of the Grid.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
Manual Title		Management of Must-Run And Must-Stop Units Issue 8.0	Management of Must-Run And Must-Stop Units Issue 8.0 <u>9.0</u>	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Introduction	1.0	In Section 6.6.1 of the WESM Rules, the System Operator was mandated to develop and periodically update the system security and reliability guidelines in consultation with WESM participants and the Market Operator. Part of this guideline is the introduction of Must-Run Units (MRUs) and nomination of MRUs by the System Operator whether scheduled or on real-time basis to address the system security aspect of the grid. Likewise, to address system security and reliability of the grid, the use of Must Stop Units (MSU) was also introduced to tag certain generator/s for the non-conformity to dispatch instructions as issued by the System Operator. This document discusses the criteria used in designating MRUs during scheduling and dispatch. It also discusses the manner of settlement or compensation of MRUs. xxx	In Section 6.6.1 of the WESM Rules, the System Operator was mandated to develop and periodically update the system security and reliability guidelines in consultation with WESM participants and the Market Operator. Part of this guideline is the introduction of Must-Run Units (MRUs) and nomination of MRUs by the System Operator whether scheduled or on real-time basis to address the system security aspect of the grid. Likewise, to address system security and reliability of the grid, the use of Must Stop Units (MSU) was also introduced to tag certain generator/s for the non-conformity to dispatch instructions as issued by the System Operator. This document discusses the criteria used in designating MRUs during scheduling and dispatch. It also discusses the manner of settlement or compensation of MRUs. xxx	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Objective	2.3	This document is intended to –	This document is intended to –	For consistency with ERC Order dismissing ERC Case

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
		xxx Introduce the concept of Must-Stop Units and Displaced Generators and the procedures for their treatment and settlement.	xxx Introduce the concept of Must-Stop Units and Displaced Generators and the procedures for their treatment and settlement.	No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Definition of Terms	4.4	Displaced Generator - a generating unit identified and instructed by the System Operator in an Out of Merit Dispatch to reduce the provision of energy specified in its Real-Time Dispatch instruction exclusively caused by excess generation due to non-compliance of other generators to dispatch instructions.	Displaced Generator - a generating unit identified and instructed by the System Operator in an Out of Merit Dispatch to reduce the provision of energy specified in its Real-Time Dispatch instruction exclusively caused by excess generation due to non-compliance of other generators to dispatch instructions.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Definition of Terms	4.5	4.5 Must-Run Unit (MRU) – xxx 4.5.1 Scheduled MRU – xxx 4.5.2 Real Time MRU – xxx xxx	4.5- 4.4. Must-Run Unit (MRU) – xxx 4.5.1 4.4.1 Scheduled MRU – xxx 4.5.2 4.4.2 Real Time MRU – xxx xxx	Re-numbering with deletion of original Section 4.4.
Definition of Terms	4.6	4.6 Must-Stop Unit (MSU) – a generating unit identified and instructed by the System Operator to reduce the provision of energy due to its non-compliance of the Dispatch Schedule to address or prevent possible threat to the System Security requirements of the Grid.	4.6 Must-Stop Unit (MSU) – a generating unit identified and instructed by the System Operator to reduce the provision of energy due to its non-compliance of the Dispatch Schedule to address or prevent possible threat to the System Security requirements of the Grid.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
Definition of Terms	4.7 4.8 4.9 4.10 4.11	4.7 Out of Merit Dispatch – xxx 4.8 System Security – xxx 4.9 System Security and Reliability Guidelines – xxx 4.10 System Test – xxx 4.11 WESM Merit Order Table (WMOT) – xxx	4.7 <u>4.5</u> Out of Merit Dispatch – xxx 4.8 <u>4.6</u> System Security – xxx 4.9 <u>4.7</u> System Security and Reliability Guidelines – xxx 4.10 <u>4.8</u> System Test – xxx 4.11 <u>4.9</u> WESM Merit Order Table (WMOT) – xxx	Re-numbering with deletion of original Sections 4.4 and 4.6.
Responsibilities	5.5	The System Operator shall be responsible for monitoring and submitting the necessary information in the Dispatch Discrepancy Report to the Market Operator for purposes of the settlement amount of MRUs and Displaced Generators. The Market Operator shall publish the same information in the WESM website after one week. All information related to the use and designation of MRUs and MSUs are contained in the Dispatch Discrepancy Report which shall contain the following information as the minimum: <ul style="list-style-type: none"> Trading Date and interval concerned 	The System Operator shall be responsible for monitoring and submitting the necessary information in the Dispatch Discrepancy Report to the Market Operator for purposes of the settlement amount of MRUs and Displaced Generators . The Market Operator shall publish the same information in the WESM website after one week. All information related to the use and designation of MRUs and MSUs are contained in the Dispatch Discrepancy Report which shall contain the following information as the minimum: <ul style="list-style-type: none"> Trading Date and interval concerned 	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
		<ul style="list-style-type: none"> Criteria used for the designation of the MRU/MSU Short description of the issue being addressed (e.g. frequency breached x Hz) Loading of scheduled Ancillary Services 	<ul style="list-style-type: none"> Criteria used for the designation of the MRU/MSU Short description of the issue being addressed (e.g. frequency breached x Hz) Loading of scheduled Ancillary Services 	
Responsibilities	5.6	The Market Operator shall be responsible for implementing the procedures on the settlement of MRUs and Displaced Generators.	The Market Operator shall be responsible for implementing the procedures on the settlement of MRUs and Displaced Generators.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Considerations and Criteria for Selection of Must Run Units	7.1	The System Operator shall select and designate the generating unit that will run as an MRU or will be tagged as MSU for any relevant trading interval, in accordance with the criteria set forth in this Manual.	The System Operator shall select and designate the generating unit that will run as an MRU or will be tagged as MSU for any relevant trading interval, in accordance with the criteria set forth in this Manual.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
Scheduling and Dispatch Procedures	8.1	The Generating unit/s identified and instructed by the System Operator as MRUs or tagged as MSUs or displaced generators shall be based on the security assessment conducted by the System Operator. The MRU plants utilized by the System Operator shall be reported to the Market Operator for MRU settlement.	The Generating unit/s identified and instructed by the System Operator as MRUs or tagged as MSUs or displaced generators shall be based on the security assessment conducted by the System Operator. The MRU plants utilized by the System Operator shall be reported to the Market Operator for MRU settlement.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
Settlement of Displaced Generators	10.0	Generating plants that do not follow the instructions of the System Operator to reduce their target loading for a particular trading interval and continue to generate shall be tagged as MSUs and shall pay the displaced Generators, if any during the said interval. A list of displaced plants shall be generated by the Market Operator from the Dispatch Deviation Report provided by the System Operator. Displaced plants will be identified using the WMOT in the interval where an MSU was tagged by the System Operator. The Market Operator will facilitate the process of payment to the Displaced Generators by the corresponding MSUs in accordance with the formula stated in this Manual. Any adjustment in the settlement shall be included in the final billing statement.	Generating plants that do not follow the instructions of the System Operator to reduce their target loading for a particular trading interval and continue to generate shall be tagged as MSUs and shall pay the displaced Generators, if any during the said interval. A list of displaced plants shall be generated by the Market Operator from the Dispatch Deviation Report provided by the System Operator. Displaced plants will be identified using the WMOT in the interval where an MSU was tagged by the System Operator. The Market Operator will facilitate the process of payment to the Displaced Generators by the corresponding MSUs in accordance with the formula stated in this Manual. Any adjustment in the settlement shall be included in the final billing statement.	For consistency with ERC Order dismissing ERC Case No. 2016-159RC and subsequent DOE directives resulting from said ERC Order.
	10.1	10.1 Calculation of Amounts due to Displaced Generator/s	10.1 Calculation of Amounts due to Displaced Generator/s	
	10.2	xxx	xxx	
	10.3	10.2 Settlement of Amounts Due to Displaced Generators	10.2 Settlement of Amounts Due to Displaced Generators	

WESM Manual on Must-Run and Must-Stop Units Issue 8.0 (for current market design)				
Title	Section	Provision	Proposed Amendment	Rationale
		xxx 10.3 Settlement of Amounts due to Displaced Generators	xxx 10.3 Settlement of Amounts due to Displaced Generators	
Market Re-run	11.0	11.0 Market Re-run xxx	11.0 <u>10.0</u> Market Re-run xxx	Re-numbering due to deletion of original Section 10