

Republic of the Philippines
DEPARTMENT OF ENERGY

DEPARTMENT CIRCULAR NO. DC 2014-10-0021

ADOPTING FURTHER AMENDMENTS TO THE WESM RULES
(Provisions for Must-Run Units)

WHEREAS, Section 37 of the Electric Power Industry Reform Act (EPIRA) provides that the DOE, jointly with the electric power industry participants, shall establish the Wholesale Electricity Spot Market (WESM) and formulate the detailed rules governing the operations thereof;

WHEREAS, on 28 June 2002, the DOE, upon the joint endorsement of the electric power industry participants, promulgated the WESM Rules through Department Circular No. 2002-06-003;

WHEREAS, any changes, amendments, and modifications to the WESM Rules shall be undertaken in accordance with the provisions of Chapter 8 thereof;

WHEREAS, on 14 May 2013, the DOE issued policy directives to the Philippine Electricity Market Corporation (PEMC) and the Rules Change Committee (RCC) in order to address the various concerns on the proposed amendments to the Manual on the Management of Must Run Units (MRU);

WHEREAS, the RCC during its 74th- 77th Meetings (15 May 2013, 05 June 2013, 03 July 2013, and 07 August 2013) continuously identified the tasks that needed to be undertaken, discussed and deliberated on the proposed amendments following the DOE directives relative to the utilization of MRU;

WHEREAS, on 04 September 2013, the RCC during its 78th Meeting once again deliberated on the proposal, and after determining that several other WESM Market Manuals will be affected, directed its sub-committee to review and draft proposals on the said Market Manuals;

WHEREAS, on 02 October 2013, the RCC during its 79th Meeting discussed the Proposed Amendments to the Philippine Grid Code (PGC) concerning MRU and the Discussion Paper and Overview of the Proposed Amendments to the WESM Rules and Various Market Manuals affected by the MRU proposal as crafted by the sub-committee;

WHEREAS, the RCC in its letter to the DOE dated 09 October 2013 endorsed the RCC's Proposed Amendment to the PGC relative to MRU, which was endorsed thereafter by the DOE to the Energy and Regulatory Commission (ERC) and the Grid Management Committee for their consideration;

WHEREAS, on 06 November 2013, the RCC during its 80th Meeting discussed and noted the National Grid Corporation of the Philippines' (NGCP) letter stating that it poses no objections to the recommendations of the DOE particularly on the directive to account the MRU cost under the Ancillary Service of the System Operator, however, it shall await a

separate DOE directives to NGCP in consideration of the required regulatory processes before its implementation;

WHEREAS, the RCC during its 81st – 83rd Meetings (04 December 2013, 08 January 2014 and 05 February 2014) further reviewed and deliberated on the proposals, which include the affected various Market Manuals:

1. Management of Must Run Units;
2. Dispatch Protocol;
3. Administered Price Determination Methodology;
4. Management of Procedure for Excess Generation; and
5. System Security and Reliability Guidelines;

WHEREAS, on 02 April 2014, the RCC in its 86th Meeting approved the publication of the proposed amendments to the WESM Rules and the abovementioned various Market Manuals in the WESM Website to solicit comments from market participants and other interested parties;

WHEREAS, the RCC gave due course to the comments received and further reviewed and deliberated on the proposals and recommendations during its 90th – 91st Meetings, respectively held on 06 August 2014 and 03 September 2014;

WHEREAS, on 10 September 2014, the RCC in its 92nd Meeting deliberated further the proposals, and after giving due course to the matter, finalized and approved the Proposed Amendments to the WESM Rules and WESM Market Manuals on the Management of Must Run Units and Dispatch Protocol relative to MRUs for endorsement to the PEM Board;

WHEREAS, on 29 September 2014, after due evaluation and deliberation, the PEM Board has resolved to approve for endorsement to the DOE the above stated RCC proposed amendments to the WESM Rules;

WHEREAS, on 10 October 2014, the above stated amendments to the WESM Rules were submitted to the DOE for final approval, in compliance with Chapter 8 of the WESM Rules;

WHEREAS, the DOE thoroughly reviewed the PEM Board-approved amendments to the WESM Rules and deemed it consistent with the objectives of the WESM Rules;

NOW THEREFORE, pursuant to its authority under the WESM Rules, the DOE hereby adopts, issues, and promulgates the following amendment to the WESM Rules:

Section 1. Amendments to the WESM Rules.

- (a) Clause 3.5.13.1 under Over-riding Constraints is amended to read –

“3.5.13.1 Subject to Clause 3.5.13.3, the *System Operator* may require the *Market Operator* to impose constraints on the power flow, energy generation of a specific facility in the Grid to address system security threat, to mitigate the effects of a system emergency, or to address the need to dispatch generating units to comply with systems, regulatory and commercial tests requirements. The *System Operator* may also relax existing constraints or system requirements on power flows, energy generation and reserves if the *Market*

Operator is unable to produce a feasible dispatch schedule."

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- (b) Clause 3.8.2.1 under Responsibilities of the System Operator is amended to read -

"3.8.2.1 During each *trading interval*, the *System Operator* shall use its reasonable endeavors to:

- (a) Implement the *dispatch* targets determined by the *Market Operator*;
- (b) Maintain system security consistent with the requirements of the *Grid Code*;
- (c) Implement load shedding, if necessary, as provided by Clause 3.9;
- (d) Dispatch *Constrain-on* or *Constrain-off* generators or *Must-Run Units* if all available frequency regulation and contingency reserves are exhausted during a trading interval. The *System Operator* may also dispatch generators as *Must-Run Units* in specific grid areas which have become isolated from the rest of the grid and in which the *Market Operator* cannot determine the generator schedules;
- (e) In relation to (d) above, the *System Operator* shall incorporate to its Ancillary Service Procurement Plan *Must-Run Units* as an additional type of *Ancillary Service*. For this purpose, the criteria and procedures developed under Clause 3.5.13 shall be revised accordingly; and
- (f) Intervene, where necessary, as provided by Clauses 6.3 and 6.5."

- (c) Clause 3.8.2.2 under Responsibilities of the System Operator is amended to read -

"3.8.2.2 After each *Trading Interval*, in accordance with the *Timetable*, the *System Operator* shall advise the *Market Operator* of:

- (a) Situations in which it became necessary for dispatch instructions to deviate from the dispatch targets determined by the *Market Operator* during the *trading interval* which may include the dispatch of the *Constrain-on* or *Constraint-off* generators or *Must-Run Units*;
- (b) *Load Shedding* or other directions issued by the *System Operator* during the *Trading Interval*;

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- (f) Operational irregularities arising during the trading interval including but not limited to any circumstances in which there was *prima facie* evidence of a failure to follow dispatch instructions.

The *System Operator* shall likewise provide a dispatch deviation report to the *Market Operator*, in accordance with the *Timetable*, detailing among others the circumstances and dispatch levels of units that were *Constrained-on* or *Constrained-off* or put on must-run during a *Trading Interval*."

- (d) Clause 3.8.6 under Deviations from the Ramp Rate is amended to read -

"3.8.6 Deviations from the Ramp Rate

If *Trading Participants* in some part of the *Power System* deviate in aggregate from the assumed *Linear Ramp Rate* for any reason or as a result of any cause including the initiation of *Load Shedding* under Clause 3.9.3, these deviations shall be dealt with by the *System Operator*, utilizing the *Reserves*, or other *Ancillary Services* scheduled to deal with such circumstances, in accordance with Clause 3.3.

Trading Participants are required to comply with linear ramping in any trading interval; otherwise, the *Market Operator* or the *System Operator* shall report the generator to the *Market Surveillance Committee*."

- (e) Clause 3.8.8 under Sanction of Trading Participants is amended to read -

3.8.8 Sanction of Trading Participants

Any *Trading Participant* who consistently fails to use its reasonable endeavors to act in accordance with *Dispatch* instructions issued under Clause 3.8.3, or who breaches the *Dispatch Tolerance* standards published under Clause 3.8.7.2, may be liable of a sanction imposed under Clause 7.2.

Trading Participants that are not compliant to the *Dispatch Schedule* or linear ramping assumptions that have been identified by the *System Operator* to cause the constraining-off of other generating units shall compensate the *Displaced Generator or Generators* in accordance with the mechanism to be developed by the *Market Operator* under Clause 3.13.14.3."

- (f) Clause 3.9.8 under Management Procedures for Excess Generation is amended to read -

"3.9.8 Management Procedures for Excess Generation

3.9.8.1 Should either the *Dispatch Optimization*, or any *Market Projection*, indicate *Excess Generation* at any *Node*, the *Market Operator* shall advise the *System Operator* that it may be necessary to require some *Generating Systems* to shut down.

3.9.8.2 Where necessary to shut down *Generating Systems* under Clause 3.9.8.1, the *System Operator* and the *Market Operator* shall manage all aspects of *Dispatch*

and pricing in accordance with the procedures to be developed by the *System Operator* and the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*. The procedures shall also take into account the occurrence of excess generation during a *trading interval* when the *System Operator* has exhausted its *Ancillary Services* to address the excess generation.

3.9.8.3 During a *Trading Interval*, if *Excess Generation* is imminent or is detected in the *Power System* by the *System Operator* in accordance with the *Grid Code* and it is established that the *Excess Generation* is being caused by a *Generating System* that is not following its dispatch schedule or observing a linear ramp rate, then the *Generation Company* representing the *Generating System* in the market may be liable of a sanction imposed under Clause 7.2. The *Generation Company* representing the *Generating System* that is not following its *Dispatch Schedule* or observing linear ramp rate, however, shall compensate other *Generation System* that has been constrained-off by the *System Operator*. Such conditions shall also be considered in the procedures to be developed under Clause 3.9.8.2."

- (g) Clause 3.13.14 under Settlement Amounts for Trading Participants is amended to read -

"3.13.14 Settlement Amounts for Trading Participants

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3.13.14.3 The *Market Operator* 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 *Must-Run Units* or identified as *Displaced Generators*, and the corresponding recovery mechanism for the same."

- (h) Clause 6.2.1.2 under Preparation and Responses is amended to read -

"6.2.1.2 Where *Intervention* is warranted when a grid or portion of the grid is in extreme state condition emergency as established in the *Grid Code* arising from:

- (a) An emergency;
- (b) A threat to system security; or
- (c) An event of force majeure;"

- (i) Clause 6.7.2 under Force majeure event is amended to read -

"6.7.2 Force majeure event

Events of *force majeure* shall include:

- (1) Major network trouble that caused partial or system-wide blackout;
- (2) Market system hardware or software failure that makes it impossible to receive or process market offer/bid information or produce market schedules due to erroneous real-time status input data or dispatch the system in accordance with the *WESM Rules*; and
- (3) Any other event, circumstance or occurrence in nature of, or similar in effect to any of the foregoing."

(j) Glossary Chapter 11 is amended to read -

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"Constrain-off. In respect of a generating unit the output of that generating unit is re-dispatched by the *System Operator* below its *Real-Time Dispatch* schedule in accordance with the *WESM Merit Order Table*.

Constrain-on. In respect of a generating unit, the output of that generating unit is re-dispatched by the *System Operator* above its *Real-Time Dispatch* schedule in accordance with the *WESM Merit Order Table*.

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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.

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Must-Run Unit (MRU). A generating unit identified and instructed, on real time or scheduled basis, by the *System Operator* to either a) come on-line, or b) provide additional energy on a particular *Trading Interval* but the dispatch of which is said to be Out of Merit, to address *System Security* requirements. For clarity, MRU shall be utilized only after the *System Operator* has exhausted all available *Ancillary Services*. MRUs are classified as follows:

- a. Scheduled MRU - MRU designated by the *System Operator* before the *trading interval* and included in the *Real Time Dispatch* schedule through the imposition of Security Limit as defined in the *WESM Dispatch Protocol Manual*.
- b. Real Time MRU - MRU designated by the *System Operator* within a *trading interval*.

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.

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Out of Merit Dispatch- Dispatch instructions issued by the *System Operator* that is not in accordance with the *WESM Merit Order Table* to address System Security.

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WESM Merit Order Table (WMOT) - for purposes of dispatch protocol under the WESM, defined based on the Grid Code with an addition of unscheduled generating units arranged based on price offers; the WMOT is based on a single market.

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Section 2. Pricing and Settlement Methodology. In relation to WESM Rules Clause 3.13.14.3, the Philippine Electricity Market Corporation (PEMC) is hereby directed to file a petition before the Energy Regulatory Commission (ERC) for approval of the pricing and settlement methodology and the corresponding recovery mechanism for the utilization of MRU based on the PEM Board approval.

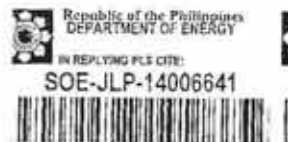
Section 3. Review of Ancillary Service Procurement Plan. The National Grid Corporation of the Philippines (NGCP) pursuant to WESM Rules Clause 3.8.2.1(e) shall expedite the review of its Ancillary Service Procurement Plan (ASPP) and the corresponding recovery mechanism to account the MRU cost under the Ancillary Service of the System Operator. The changes in the accounting and charging of the MRU cost from the market transaction to the Ancillary Charges of NGCP properly reflect the true cost of electricity in the WESM. Thereafter, NGCP shall file an application with the ERC for consideration.

Section 4. Separability Clause. If for any reason, any section or provision of this Circular is declared unconstitutional or invalid, such parts not affected shall remain valid and subsisting.

Section 5. Effectivity. This Circular shall take into effect fifteen (15) days from its publication in at least two (2) newspapers of general circulation and shall remain in effect until otherwise revoked.

Issued this ____ October 2014 at the DOE, Energy Center, Rizal Drive, Bonifacio Global City, Taguig City, Metro Manila.


CARLOS JERICO L. PETILLA
Secretary



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