



Republic of the Philippines
DEPARTMENT OF ENERGY

DEPARTMENT CIRCULAR NO. DC 2016-01-0002

ADOPTING FURTHER AMENDMENTS TO THE WESM RULES
(Provisions for the Must Dispatch and Priority Dispatch Generating Units)

WHEREAS, Sections 30 and 37(f) of the Electric Power Industry Reform Act (EPIRA) provides that the Department of Energy (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, jointly with the electric power industry participants, promulgated the WESM Rules through Department Circular No. DC2002-06-0003;

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

WHEREAS, Section 5 of the Republic Act No. 9513, otherwise known as the Renewable Energy Act of 2008 (RE Act) mandates the DOE as the lead agency to implement the provisions of the RE Act, while Section 37 of EPIRA empowers the DOE to supervise the restructuring of the electric power industry, in addition to its existing powers and functions;

WHEREAS, on 20 March 2015, the DOE promulgated the framework for the implementation of Must Dispatch and Priority Dispatch Renewable Energy Resources in the WESM as part of its mandate to implement the provisions of the RE Act through Department Circular No. 2015-03-0001 entitled "Promulgating the Framework for the Implementation of Must Dispatch and Priority Dispatch of Renewable Energy Resources in the Wholesale Electricity Spot Market;"

WHEREAS, on 29 May 2015, the Philippine Electricity Market Corporation (PEMC) submitted to the Rules Change Committee (RCC) its proposed amendments to the WESM Rules on Preferential Dispatch and FIT-All Collection Implementation in compliance with the DOE Department Circular No. DC2015-03-0001;

WHEREAS, on 03 June 2015, the RCC during its 100th RCC Meeting discussed with PEMC the said proposal, which thereafter approved its posting in the WESM website to solicit comments from market participants and other interested parties;

WHEREAS, on 05 August 2015, the RCC during its 103rd RCC Meeting deliberated on the proposal giving due course to the comments received from several parties, which thereafter approved the revised proposal for endorsement to the PEM Board;

WHEREAS, on 28 August 2015, after due evaluation and deliberation, the PEM Board during its 108th PEM Board Meeting approved for endorsement to the DOE the above stated RCC proposed amendments to the WESM Rules;

WHEREAS, on 07 September 2015, 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; and

WHEREAS, the DOE found the abovementioned PEM Board-approved amendments to the WESM Rules consistent with the objectives of the WESM.

NOW THEREFORE, pursuant to its authority under the EPIRA, RE Act and WESM Rules, the DOE hereby adopts, issues, and promulgates the following amendments to the WESM Rules:

Section 1. Amendments to the WESM Rules.

- (a) Clause 2.3.1.2 under Generation Company is amended to read -

"2.3.1.2 To register as a WESM Member, a Generation Company shall:

(a) Classify each of the generating units which form part of the generating system it owns, operates or controls or from which it otherwise sources electricity as either a:

- (i) scheduled generating unit; or*
- (ii) non-scheduled generating unit; or*
- (iii) must dispatch generating unit; or*
- (iv) priority dispatch generating unit;*

xxx xxx xxxx"

- (b) Clause 2.3.1.3 under Generation Company is amended to read -

"2.3.1.3 Subject to Clauses 2.3.1.5 and 2.3.1.6, a generating unit or a group of generating units connected at a common connection point with a nameplate rating or a combined nameplate rating of greater than or equal to one tenth of one percent (> 0.1%) of the peak load in a particular reserve region shall be classified as a scheduled generating unit."

- (c) Clause 2.3.1.4 under Generation Company is amended to read -

"2.3.1.4 Subject to Clauses 2.3.1.5 and 2.3.1.6, a generating unit or a group of generating units connected at a common connection point with a nameplate rating or a combined nameplate rating of less than one tenth of one percent (< 0.1%) of the peak load in a particular reserve region, or less than ten percent (< 10%) of the size of interconnection facilities, whichever is lower, shall be classified as a non-scheduled generating unit, but may at its option be classified as a scheduled generating unit."

- (d) Clause 2.3.1.5 under Generation Company is amended to read -

"2.3.1.5 A generating unit or group of generating units connected at a common connection point that is intermittent renewable energy resource-based, whether or not under the Feed-In Tariff system, such as wind, solar, run-of-river hydro or ocean energy with the corresponding DOE certification shall be classified as a must dispatch generating unit, but may at its option be classified as a

scheduled generating unit or a a non-scheduled generating unit subject to Clause 2.3.1.4."

- (e) New provision inserted as Clause 2.3.1.6 under Generation Company, to read –

"2.3.1.6 A generating unit or group of generating units connected at a common connection point that uses biomass as fuel, that is under the Feed-In Tariff system, with the corresponding Feed-In Tariff Certificate of Compliance shall be classified as a priority dispatch generating unit, but may at its option be classified as a scheduled generating unit or a a non-scheduled generating unit subject to Clause 2.3.1.4."

- (f) Original Clause 2.3.1.6 under Generation Company is renumbered and amended accordingly to read –

"2.3.1.7 A Generation Company is taken to be a Scheduled Generation Company only so far as its activities relate to any scheduled generating unit."

- (g) Original Clause 2.3.1.7 under Generation Company is renumbered and amended accordingly to read –

"2.3.1.8 A Generation Company is required to operate scheduled generating units and priority dispatch generating units in accordance with the scheduling and dispatch procedures described in Chapter 3, within the dispatch tolerances specified in accordance with Clause 3.8.7."

- (h) Clause 2.3.3.5 under Trading Participant is amended to read –

"2.3.3.5 Prior to registration of a Trading Participant in respect of a scheduled generating unit or a priority dispatch generating unit or scheduled load facility, an Intending WESM Member may seek a ruling from the System Operator with respect to the dispatch tolerances to be applied."

- (i) Clause 2.3.3.8 under Trading Participant is amended to read –

"2.3.3.8 A Generation Company may appeal to the PEM Board in respect of a ruling provided under Clauses 2.3.3.5, 2.3.3.6 or 2.3.3.7 that is relevant to that person or entity."

- (j) New provision added as Clause 3.5.3.7 under System Operator Data, to read –

"3.5.3.7 The System Operator shall submit to the Market Operator a variable renewable energy aggregated generation forecast for each of the next twenty-four (24) trading intervals and update the same once every trading interval in accordance with the relevant Market Manuals and the relevant provisions of the Grid Code."

- (k) New provision added as Clause 3.5.3.8 under System Operator Data, to read –

"3.5.3.8 The *System Operator* shall submit to each *must dispatch generating unit* its evaluated schedule in consideration of actual system conditions including, but not limited to, ancillary services schedules and transmission line constraints."

- (l) New provision added as Clause 3.5.3.9 under System Operator Data, to read -

"3.5.3.9 The *System Operator* shall submit to the *Market Operator*, forecasts on the *loading levels* of *must dispatch generating units* in accordance with the relevant *Market Manuals*."

- (m) Clause 3.5.4.2 under Load Forecasting is amended to read -

"3.5.4.2 Each *net load forecast* shall be prepared in such a way as to represent the *net load* to be met by *generation* from *scheduled generating units*, *must dispatch generating units*, *priority dispatch generating units*, and *non-scheduled generating units* including losses occurring outside the system represented by the *market network model*, but excluding any *scheduled load*."

- (n) Clause 3.5.5.1 under Generation Offers and Data is amended to read -

"3.5.5.1 Each *Scheduled Generation Company* including *Generation Companies* with *bilateral contracts* shall submit a *standing generation offer* for each of its *scheduled generating units* for each *trading interval* in each *trading day* of the week in accordance with the *timetable*. The *standing generation offer* shall apply until revised or updated by the *Scheduled Generation Company*."

- (o) Clause 3.5.5.4 under Generation Offers and Data is amended to read -

"3.5.5.4 Each *Non-Scheduled Generation Company* shall submit a *standing nomination of loading levels* for each of its *non-scheduled generating units* for each *trading interval* in each *trading day* of the week in accordance with the *timetable*. The *standing nomination of loading levels* shall apply until revised or updated by the *Non-Scheduled Generation Company*."

- (p) Clause 3.5.5.5 under Generation Offers and Data is amended to read -

"3.5.5.5 *Generation Companies* shall provide to the *Market Operator* and the *System Operator* *standing projected outputs* in respect of their *must dispatch generating units* and *priority dispatch generating units* for each *trading interval* in each *trading day* of the week in accordance with the relevant *Market Manuals* and provisions of the *Grid Code*. The *standing projected outputs* shall apply until revised or updated by the relevant *Generation Company*."

- (q) New provision added as Clause 3.5.5.6 under Generation Offers and Data, to read -

"3.5.5.6 A *Trading Participant* who fails to submit *projected outputs* for its *must dispatch generating unit* or *priority dispatch generating unit* as provided under Clause 3.5.5.5 may be liable for sanctions imposed under Clause 7.2."

- (r) New provision added as Clause 3.5.5.7 under Generation Offers and Data, to read –
- “3.5.5.7 Each *Generation Company* shall submit check data to be used by the *Market Operator*, in accordance with the relevant *Market Manuals*, to assist in determining the validity of any *projected output* submitted in respect of a *must dispatch generating unit* or a *priority dispatch generating unit* under Clause 3.5.5.5.”
- (s) New provision added as Clause 3.5.5.8 under Generation Offers and Data, to read –
- “3.5.5.8 *Must dispatch generating units* shall comply with forecast accuracy standards, in respect of their *projected outputs* submitted under Clause 3.5.5.5, consistent with the *Grid Code*.”
- (t) New provision added as Clause 3.5.5.9 under Generation Offers and Data, to read –
- “3.5.5.9 The *Market Operator* shall review annually the forecast accuracy standards complied with by *must dispatch generating units* in accordance with Clause 3.5.5.8.”
- (u) New provision added as Clause 3.5.5.10 under Generation Offers and Data, to read –
- “3.5.5.10 A *Trading Participant* who fails to meet the requisite forecast accuracy standards set out in accordance with Clause 3.5.5.8 in respect of *projected outputs* for a *must dispatch generating unit* submitted under Clause 3.5.5.5 may be liable for sanctions imposed under Clause 7.2”
- (v) New provision added as Clause 3.5.5.11 under Generation Offers and Data, to read –
- “3.5.5.11 The *Market Operator* shall report to the *PEM Board* and the *DOE* the monthly and annual compliance of each *must dispatch generating unit* to the forecast accuracy standards with respect to its *projected outputs*.”
- (w) Clause 3.5.7.2 under Generation Company Reserve Offers is amended to read –
- “3.5.7.2 When applicable, subject to Clause 3.3.4.2, each *scheduled generator* registered as an *Ancillary Services Provider* in respect of a *reserve facility* in a particular *reserve region* shall submit a standing *reserve offer* for each of its relevant *reserve facilities* in respect of that *reserve region* for each *trading interval* for each day of the week in accordance with the *timetable*. The standing *reserve offer* shall apply until revised or updated by the *scheduled generator* registered as an *Ancillary Services Provider*.”

- (x) Clause 3.5.9.1 under Revision of Standing Offers/Bids is amended to read –

“3.5.9.1 A standing *generation offer*, a standing *reserve offer*, a standing nomination of *loading levels*, a standing *projected output*, or a standing *demand bid* for any *trading interval* in any day of the week may be revised by the relevant *Generation Company* or *Customer* in accordance with the *timetable*.”
- (y) Clause 3.5.9.2 under Revision of Standing Offers/Bids is amended to read –

“3.5.9.2 A standing *generation offer*, a standing *reserve offer*, a standing nomination of *loading levels*, a standing *projected output*, or a standing *demand bid* which is revised under Clause 3.5.9.1:

xxx xxx xxx”
- (z) Clause 3.5.10 Initial Setting of Market Offers/Bids is amended to read –

“3.5.10 Initial Setting of Market Offers/Bids
When the *Market Operator* updates a *market projection* under Clause 3.7, the *standing offers*, standing nomination of *loading levels*, standing *projected outputs*, and *standing bids* shall be effective in the absence of revised *market offers*, nomination of *loading levels*, *projected outputs*, and *market bids* for the corresponding *trading interval* and day of the week.”
- (aa) Clause 3.5.11 Revision of Market Offers/Bids is amended to read –

“3.5.11 Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs”
- (bb) Clause 3.5.11.1 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is amended to read –

“3.5.11.1 Each scheduled *Trading Participant* which has submitted standing offers or bids may revise any of its *market offers* or *market bids* for any *trading interval* in any trading day of the current week-ahead market horizon in accordance with the *timetable*, and subject to Clause 3.5.11.4 and each revised market offer or market bid submitted shall provide the information set out in Appendix A1.”
- (cc) Clause 3.5.11.2 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is amended to read –

“3.5.11.2 Each *Generation Company* which has submitted a nomination of *loading levels* for its *non-scheduled generating units* shall revise its nomination of *loading levels* if it reasonably expects that any of its anticipated *loading levels* will differ materially from those previously submitted.”
- (dd) New provision added as Clause 3.5.11.3 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs, to read –

"3.5.11.3 Each *Generation Company* which has submitted *projected outputs* for its *must dispatch generating units* or *priority dispatch generating units* shall revise its *projected outputs* if it reasonably expects that any of its *projected outputs* will differ materially from those previously submitted."

- (ee) Original Clause 3.5.11.3 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered and amended to read –

"3.5.11.4 In accordance with the *timetable*, a revised *market offer* or *market bid* submitted under Clause 3.5.11.1, a revised nomination of *loading level* submitted under Clause 3.5.11.2, or a revised *projected output* submitted under Clause 3.5.11.3 shall take effect the next time a *dispatch, pricing or day-ahead projection* run is initiated."

- (ff) Original Clause 3.5.11.4 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered as Clause 3.5.11.5 and amended accordingly to read –

"3.5.11.5 *Market bids or market offers* for any *trading interval* may be revised by *Trading Participants* prior to gate closure if they no longer represent a reasonable estimate of:

- (a) The expected availability of the relevant *generating unit or scheduled load* for that *trading interval*; or
- (b) The demand bids or offers likely to apply for the real time dispatch optimization of that *trading interval*."

- (gg) Original Clause 3.5.11.5 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered as Clause 3.5.11.6 and amended accordingly to read –

"3.5.11.6 In submitting *market bids or market offers* for any *trading interval*, *Trading Participants* shall also take into account the following:

- (a) The time remaining until the occurrence of the relevant *trading interval* involved; and
- (b) Provision of reasons or circumstances whenever the submitted *market bids or market offers* are cancelled or are less than the registered capacity of its *facility or generating unit*."

- (hh) Original Clause 3.5.11.6 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered and amended accordingly to read –

"3.5.11.7 *Trading Participants* shall immediately advise the *System Operator* and *Market Operator* of any circumstances which threaten a significant probability of material adverse change in the state of their facilities in any *trading interval* of any trading day in the current *week-ahead market horizon*."

After the occurrence of the significant event referred to above, the *Trading Participant* shall submit a written report to the *Market Operator* with supporting data immediately within the following trading day."

- (ii) Original Clause 3.5.11.7 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered and amended accordingly to read –

"3.5.11.8 Prior to the spot market commencement date, the *System Operator*, in consultation with *WESM Members*, shall publish a non-exhaustive list of events that will be deemed to be or to cause a material adverse change in circumstances for the purposes of Clause 3.5.11.7."

- (jj) Original Clause 3.5.11.8 under Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs is renumbered and amended accordingly to read –

"3.5.11.9 Each *market offer*, nomination of *loading level*, *projected output*, or *market bid* for a particular *trading interval* is deemed to stand with effect from the time it is initiated under Clause 3.5.10 or revised under Clause 3.5.11 and will be used in preparing all *market forecasts*, *dispatch* targets or prices for that *trading interval*, unless and until a valid revision to the *market offer*, nomination of *loading level*, *projected output*, or *market bid* is accepted by the *Market Operator*."

- (kk) Clause 3.5.12 Confirmation of Receipt of Valid Offers and Bids is amended to read –

"3.5.12 Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs"

- (ll) Clause 3.5.12.1 under Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs is amended to read –

"3.5.12.1 To be valid, *generation offers*, *reserve offers*, nomination of *loading levels*, *projected outputs* or *demand bids* shall be submitted by the relevant *Trading Participant*:

- (a) in accordance with Clause 3.5.1;
- (b) in accordance with the *timetable*; and
- (c) consistent with the check data submitted by the *Trading Participant* under Clauses 3.5.5.3, 3.5.5.7, 3.5.6.3, and 3.5.7.4 as appropriate."

- (mm) Clause 3.5.12.2 under Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs is amended to read –

"3.5.12.2 The *Market Operator* shall send to each *Trading Participant* from whom it has received a valid *generation offer*, valid nomination of *loading level*, valid *reserve offer*, valid *demand bid* or valid *projected output*, an electronic confirmation of receipt and acceptance of that *generation offer*, nomination of

loading level, reserve offer, demand bid or projected output in accordance with the timetable prescribed in the relevant Market Manuals."

- (nn) Clause 3.5.12.3 under Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs is amended to read -

"3.5.12.3 If a Trading Participant does not receive confirmation of receipt under Clause 3.5.12.2, from the Market Operator, the Trading Participant shall contact the Market Operator to determine whether or not the generation offer, nomination of loading level, reserve offer, demand bid, or projected output was received."

- (oo) Clause 3.5.12.4 under Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs is amended to read -

"3.5.12.4 If the generation offer, reserve offer, demand bid, or projected output is invalid, the Market Operator shall promptly inform the Trading Participant to resubmit a corrected generation offer, reserve offer, demand bid or projected output in accordance with Clause 3.5.11."

- (pp) Clause 3.6.1.4 under Model Definition is amended to read -

"3.6.1.4 In formulating the market dispatch optimization model, the Market Operator and System Operator shall ensure that the dispatch for each trading interval is made subject to:

- (a) Constraints representing limits on generation offers, demand bids, nomination of loading levels, projected outputs, and, when applicable, reserve offers as specified by Trading Participants in accordance with Clause 3.5, except to the extent that as they may be relaxed in accordance with Clause 3.5.13;*

xxx xxx xxx"

- (qq) Clause 3.6.1.5 under Model Definition is amended to read -

"3.6.1.5 The market dispatch optimization model shall be designed so that, subject to the approximations and adjustments provided for by Clause 3.6.4:

- (a) It will produce an optimal dispatch given the objective defined by Clause 3.6.1.3, and the constraint structure defined by Clause 3.6.1.4, and specifying dispatch targets for each scheduled generating unit, non-scheduled generating unit, must dispatch generating unit, priority dispatch generating unit, scheduled load and reserve facility;*

xxx xxx xxx"

- (rr) New provision added as Clause 3.6.1.6 under Model Definition, to read -

"3.6.1.6 The Market Operator shall include each non-scheduled generating unit, must dispatch generating unit and priority dispatch generating unit in its market dispatch optimization model as a price taker - that is, the generating unit is deemed to be available to run at the level specified in its nomination of

loading level or projected output submitted in accordance with Clause 3.5.5 regardless of the prevailing market clearing price but subject to Clause 3.6.1.7.”

- (ss) New provision added as Clause 3.6.1.7 under Model Definition, to read –

“3.6.1.7 The *Market Operator* may restrict the *dispatch* target of a *non-scheduled generating unit*, *must dispatch generating unit* or a *priority dispatch generating unit* in relation to a potential system security contingency but only insofar as the constraint forms part of the output of the *market dispatch optimization model* and is in accordance with the hierarchy provided in Clause 3.6.1.8.”

- (tt) New provision added as Clause 3.6.1.8 under Model Definition, to read –

“3.6.1.8 When restricting *dispatch* targets under Clause 3.6.1.7, the *market dispatch optimization model* shall consider the following hierarchy when a combination of the groups are to be restricted:

- (a) *market offers of scheduled generating units* beyond its minimum
- (b) *non-scheduled generating units*
- (c) *priority dispatch generating units*
- (d) *must dispatch generating units*
- (e) *minimum stable load of scheduled generating units*”

- (uu) Clause 3.7.3.1 under Preparation of Market Projections is amended to read –

3.7.3.1 Each *market projection* shall take into consideration:

xxx xxx xxx

- (e) The nomination of *loading levels* for each *non-scheduled generating unit* and the *projected output* for each *must dispatch generating unit* and *priority dispatch generating units* submitted under Clause 3.5.5; and

xxx xxx xxx”

- (vv) Clause 3.7.4.1 under Published Information is amended to read –

“3.7.4.1 Based on the information referred to in Clause 3.7.3, each *market projection* published by the *Market Operator* in accordance with the *timetable* specified in the relevant *Market Manuals* shall contain the following information for each *trading interval* in the period covered by the *market projection*:

xxx xxx xxx

- (d) Projected aggregate dispatch of *scheduled generating units*, *must dispatch generating units*, *priority dispatch generating units*, *non-scheduled generating units*, and *scheduled load* at each *market network node*;

xxx xxx xxx”

- (ww) Clause 3.8.1 under Responsibilities of the Market Operator is amended to read –

“3.8.1 Responsibilities of the Market Operator

Prior to commencement of each trading interval, the *Market Operator* shall, in consultation with the *Grid Operator*, and in accordance with the timetable prescribed in the relevant *Market Manuals*:

xxx xxx xxx

- (e) Use the *market dispatch optimization model* to determine the target *loading level* in MW for each *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit*, *non-scheduled generating unit*, *scheduled load* and *reserve facility* for the end of that *trading interval* using the latest data from the *System Operator* and *Trading Participants*;

xxx xxx xxx

- (g) Send to all *Trading Participants* a *dispatch schedule* that contains *target loading levels* in respect of their *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit* and *non-scheduled generating units* calculated under Clause 3.8.1(e) for each *trading interval* prior to the commencement of that *trading interval* in accordance with the relevant *Market Manuals*; and

- (h) Ensure that the *dispatch schedule* issued to a *must dispatch generating unit* or *priority dispatch generating unit* includes the information on whether or not the scheduled output of the *generating unit* has been restricted in accordance with Clause 3.6.1.7.”

- (xx) New provisions added under Clause 3.8.2.2 under Responsibilities of the System Operator, to read –

“3.8.2.2 After each *trading interval*, in accordance with the *timetable* prescribed in the relevant *Market Manuals*, the *System Operator* shall advise the *Market Operator* of:

xxx xxx xxx

- (g) The following information in respect of *must dispatch generating units* and *priority dispatch generating units*:

- (i) any output restrictions imposed by the *System Operator* or *Market Operator* on *must dispatch generating units* and *priority dispatch generating units*;
- (ii) the compliance of those units with those output restrictions;
- (iii) the compliance of *must dispatch generating units* and *priority dispatch generating units* with the other operating parameters imposed by the *Grid Code*; and
- (iv) any other information prescribed in the relevant *Market Manuals*.”

- (yy) New provision added as Clause 3.8.2.3 under Responsibilities of the System Operator, to read –
- "3.8.2.3 Before each trading interval, in accordance with the timetable prescribed in the relevant Market Manuals, the System Operator shall submit to the Market Operator the variable renewable energy aggregated generation forecast for each interconnected system it operates in accordance with the Grid Code."*
- (zz) Clause 3.8.3 Communication of Target Loading Levels is amended to read –
- "3.8.3 System Operator Implementation of Real-Time Dispatch"*
- (aaa) Clause 3.8.3.1 under System Operator Implementation of Real-Time Dispatch is added and amended to read –
- "3.8.3.1 The System Operator and Trading Participants shall communicate with each other with regard to the target loading levels for each trading interval prior to the commencement of that trading interval in accordance with the timetable and consistent with the Grid Code."*
- (bbb) New provision added as Clause 3.8.3.2 under System Operator Implementation of Real-Time Dispatch, to read –
- "3.8.3.2 All scheduled generating units and priority dispatch generating units shall follow all instructions from the System Operator, in accordance with the Grid Code, the WESM Rules and pertinent Market Manuals."*
- (ccc) New provision added as Clause 3.8.3.3 under System Operator Implementation of Real-Time Dispatch, to read –
- "3.8.3.3 Subject to Clause 3.8.3.4, if, in real-time, the available generation from a must dispatch generating unit differs from the available generation assumed in the dispatch schedule provided to the System Operator, the System Operator shall allow the must dispatch generating unit to generate at its maximum available output, and, if all available frequency regulation is exhausted during a trading interval, shall adjust the dispatch of other generating units, to compensate as required in accordance with relevant Market Manuals."*
- (ddd) New provision added as Clause 3.8.3.4 under System Operator Implementation of Real-Time Dispatch, to read –
- "3.8.3.4 The System Operator shall instruct a must dispatch generating unit or a priority dispatch generating unit to restrict its output or constrain its ramp rate to a level specified by the System Operator, but only while the grid is not operating in normal state, in accordance with the Grid Code and the relevant Market Manuals."*
- (eee) New provision added as Clause 3.8.3.5 under System Operator Implementation of Real-Time Dispatch, to read –

"3.8.3.5 If the *System Operator* has instructed a *must dispatch generating unit* or a *priority dispatch generating unit* to restrict its output, the *System Operator* shall instruct the *generating unit* to remove the restriction as soon as practicable after the actual or potential system security issue has been resolved."

- (fff) Clause 3.8.4 under Scheduling and Dispatch Implementation is renumbered and amended to read -

"3.8.4 Dispatched Trading Participants"

- (ggg) Clause 3.8.4.1 under Dispatched Trading Participants is added and amended to read -

"3.8.4.1 *Scheduled generating units* and *priority dispatch generating units* who are dispatched shall use reasonable endeavors to achieve a linear *ramp rate* over the *trading interval* to reach the target loading level by the end of that *trading interval* and within the *dispatch tolerances* specified in Clause 3.8.7 and those *Trading Participants* should not be required to operate in any different fashion unless required to:

- (a) Respond in accordance with reserve or ancillary service contracts; or
- (b) Respond to a direction in accordance with Clauses 6.3 and 6.5."

- (hhh) New provision is added as Clause 3.8.4.2 under Dispatched Trading Participants, to read -

"3.8.4.2 A *priority dispatch generating unit* shall follow the *dispatch schedule* issued by the *Market Operator*, unless otherwise instructed by the *System Operator* under Clause 3.8.3."

- (iii) New provision is added as Clause 3.8.4.3 under Dispatched Trading Participants, to read -

"3.8.4.3 If the *projected output* of a *must dispatch generating unit* has been restricted, as communicated in accordance with Clause 3.8.1(h), the *must dispatch generating unit* shall ensure its output does not exceed the value included in the *dispatch schedule*."

- (jjj) New provision is added as Clause 3.8.4.4 under Dispatched Trading Participants, to read -

"3.8.4.4 A *must dispatch generating unit* shall generate at its *maximum available output* at all times, unless the *Market Operator* or *System Operator* has instructed the *generating unit* to restrict output under Clauses 3.8.1(h) or 3.8.3.4."

- (kkk) New provision is added as Clause 3.8.4.4 under Dispatched Trading Participants, to read -

"3.8.4.4 A *must dispatch generating unit* shall generate at its *maximum available output* at all times, unless the *Market Operator* or *System Operator* has instructed the *generating unit* to restrict output under Clauses 3.8.1(h) or 3.8.3.4."

(lll) Clause 3.8.7.1 under Dispatch Tolerances is amended to read -

"3.8.7.1 Dispatch tolerances shall be set to allow limits on the extent to which scheduled generating units, and priority dispatch generating units may deviate from dispatch targets issued by the System Operator."

(mmm) Clause 3.8.7.2 under Dispatch Tolerances is amended to read -

"3.8.7.2 The Market Operator shall maintain and publish dispatch tolerances standards developed by the System Operator for each type of plant, and location, in accordance with Clause 3.8.7, the Grid Code, and the Distribution Code."

(nnn) Clause 3.8.8 under Scheduling and Dispatch Implementation is renumbered and amended to read -

"3.8.8 Sanctions of Trading Participants"

(ooo) Clause 3.8.8.1 under Sanctions of Trading Participants is added and amended to read -

"3.8.8.1 Any Trading Participant who consistently fails to use its reasonable endeavors to act in accordance with dispatch schedules issued under Clause 3.8.1(g), dispatch instructions issued by the System Operator, 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."

(ppp) New provision is added as Clause 3.8.8.2 under Sanctions of Trading Participants, to read -

"3.8.8.2 A Trading Participant that fails to comply with a directive from the System Operator issued under Chapter 6 of these WESM Rules, the relevant Market Manuals, and the Philippine Grid Code in respect to its must dispatch generating unit may be liable for sanctions imposed under Clause 7.2."

(qqq) New provisions are included under Clause 3.10.6 under Determination of Market Prices and is amended to read -

"3.10.6 Determination of Ex-Post Nodal Energy Price

xxx xxx xxx

(d) *The real-time instantaneous injection at the end of that trading interval of non-scheduled generating units in place of their nomination of loading levels;*

(e) *The real-time instantaneous injection at the end of that trading interval of must dispatch generating units and priority dispatch generating units in place of their projected outputs;*

- (f) A market network configuration and network state which the Market Operator, in consultation with the *System Operator*, in its reasonable opinion determines to best represent network conditions pertaining for the duration of the *trading interval*, as provided for by the procedures developed under Clause 3.10.7; and
 - (g) Any relevant constraints recommended by the *System Operator* to represent system security conditions or actual generation performance over the *trading interval*, as provided for by the procedures developed under Clause 3.10.7."
- (rrr) Clause 3.10.7 under Determination of Market Prices is amended to read -

"3.10.7 Procedures for Ex-Post Nodal Energy Price

The *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall develop and publish the procedures to be employed in Clauses 3.10.6 (d), (e), (f), and (g) in establishing the real-time instantaneous injection of *non-scheduled generating units, must dispatch generating units, and priority dispatch generating units*, network configuration and other constraints to be assumed for the determination of *ex-post nodal energy prices* for circumstances in which power system conditions materially change during the *trading interval*, with a view to ensuring that:

- (a) Consistency is maintained between the market network configuration and state determined in accordance with Clause 3.10.6 (f), any constraints determined in accordance with Clause 3.10.6 (g), the unrestrained net loads measured or estimated for each market network node in accordance with Clause 3.10.6 (c), and the real-time instantaneous injection of *non-scheduled generating units, must dispatch generating units, and priority dispatch generating units* in accordance with Clauses 3.10.6 (d) and (e); and
- (b) The ex-post prices produced in accordance with Clause 3.10.6, properly and fairly represent conditions at the end of the trading interval."

- (sss) Clause 3.11.1.3 under Market Information is amended to read -

"3.11.1.3 Each *trading day*, in accordance with the timetable, the *Market Operator* shall publish:

- (a) The *dispatch schedule* for each *scheduled generating unit, must dispatch generating unit, priority dispatch generating unit, non-scheduled generating unit* and *scheduled load* in each *trading interval* for the previous *trading day*; and

xxx xxx xxx"

- (ttt) Clause 5.3.2 under Confidentiality is amended to read -

"5.3.2 Exceptions

Subject to Clause 5.3.3.1, this Clause 5.3 does not prevent:

- (a) The disclosure of information (confidential or otherwise) between anyone or more of the following:
 - (1) The ERC and the DOE;
 - (2) The System Operator;

xxx xxx xxx

- (j) The disclosure of (i) settlement amounts unpaid by the end of the month, and (ii) the specific WESM Member that failed to pay the settlement amounts; and
- (k) The disclosure of settlement information of Feed-In Tariff-Eligible generating units to TRANSCO pursuant to the FIT-All Guidelines.”

(uuu) Glossary Chapter 11 is amended to include the following definition of terms–

“Dispatch Schedule. The target loading levels in MW for each *scheduled generating unit, must dispatch generating unit, priority dispatch generating unit, non-scheduled generating unit, scheduled load and reserve facility* for the end of that trading interval, determined by the Market Operator through the use of a market dispatch optimization model in accordance with Clause 3.8.1.

Feed-In Tariff Certificate of Compliance. Refers to the certificate secured from the ERC before commercial operation of eligible RE plants that authorizes it to engage in the operation of a renewable energy power plant facility used to generate electricity pursuant to the Feed-In Tariff Rules and the Feed-In Tariff –Allowance (FIT-All) Guidelines.

Feed-In Tariff Rules. Annex A of ERC Resolution No 16, Series of 2010, Resolution adopting the Feed-In Tariff Rules, promulgated pursuant to the Renewable Energy Act.

Feed-In Tariff Allowance (FIT-All) Guidelines. Resolution No. 24, Series of 2013 issued by the ERC adopting the Guidelines on the Collection of the FIT-All and the Disbursement of the FIT-All Fund.

Feed-In Tariff (FIT)-Eligible Renewable Energy (RE) Plant. A *Generating Unit* or *Generating System* in respect of which ERC has issued, in accordance with the *Feed- In Tariff Rules*, a certificate of compliance authorizing the *Generating Unit* to operate as a FIT-eligible RE plant.

Feed-In Tariff System (FIT) System. Program established under the Renewable Energy Act to accelerate the development of emerging renewable energy resources whose mechanisms are provided by the Feed-In Tariff Rules.

Intermittent Renewable Energy Resource. A *Renewable Energy Resource* specified in Section 20 of the *Renewable Energy Act*, those being: wind energy, solar energy, run-of-river hydro, ocean energy or any other *Renewable Energy Resource* designated as such by the DOE.

Maximum Available Output. The highest MW generation output that a *must dispatch generating unit* is capable of producing at each instant given the instantaneous and intermittent characteristics of the *Renewable Energy Resource* which fuels the *Generating Unit*.

Must Dispatch. Preference to intermittent RE-based plants, whether or not under *FIT system*, such as wind, solar, run-of-river hydro, or ocean energy, in the dispatch schedule whenever generation is available pursuant to Section 20 of the *Renewable Energy Act*.

Must Dispatch Generating Unit. A *Generating Unit* or *Generating System* so designated by the *Market Operator* under Clause 2.3.1.5 and is provided *Must Dispatch*.

Net Load Forecast. A *forecast*, prepared by the *Market Operator* in accordance with the procedures to be developed under Clause 3.5.4, of the load, to be matched, along with any *scheduled load*, by generation from *scheduled generating units*, *non-scheduled generating units*, *must dispatch generating units*, and *priority dispatch generating units*.

Normal Operating State. The operating state defined in Section 7.2.1.1 of the *Grid Code*.

Priority Dispatch. Preference to biomass plants under the Feed-In Tariff *System* in the dispatch schedule pursuant to Section 7 of the *Renewable Energy Act*.

Priority Dispatch Generating Unit. A *generating unit* or *Generating System* so designated by the *Market Operator* under Clause 2.3.1.5 and is provided *Priority Dispatch*.

Projected Output. The loading level nominated by a generation company for its *must dispatch generating units* or *priority dispatch generating units* indicating the forecasted output of its *must dispatch generating unit* or *priority dispatch generating unit* at the end of a *trading interval*.

Renewable Energy Act. Republic Act No. 9513: An Act Promoting the Development, Utilization and Commercialization of the Renewable Energy Resources and for Other Purposes.

Renewable Energy Resource. An energy resource as defined in Section 4 (uu) of the *Renewable Energy Act*.

Variable Renewable Energy (VRE) Aggregated Generation Forecast. A short term forecast, performed by the *System Operator*, covering at least the following twenty-four (24) hours, of the total aggregated generation expected to be produced by *Generation Companies* that is authorized by the ERC to operate wind farms and photovoltaic generation systems in each interconnected system as defined under the *Grid Code*."

(vvv) The term *NRE Generating Unit with Intermittent Energy Resource* and its corresponding definition in the Glossary is hereby deleted.

(www) Appendix A1.1 is amended to read -

“A1.1 Generation Offer

Generation offers:

(a) Shall include the location of the *connection point* and relevant *market network node*;

xxx xxx xxx

(g) Shall include maximum up/down *ramp rates*; and

(h) Shall include an operating range (upper and lower limit).”

(xxx) Appendix A1.2 is amended to read -

“Regulation reserve offers from *Generation Companies* shall consist of:

xxx xxx xxx

(d) A minimum block size of one (1) MW; and

(e) Monotonically increasing prices starting from zero for the first offer block, which shall correspond to the mandatory *reserve* capability required from that *Generation Company* under its connection agreement.

Contingency *reserve offers* from *Generation Companies* shall consist of:

xxx xxx xxx

(e) Monotonically increasing prices starting from zero to the first offer block, which shall correspond to the mandatory *reserve* capability required from that *Generation Company* under its connection agreement; and

(f) Operating range (upper and lower limit).

Contingency *reserve offers* from Customers shall consist of:

(a) A maximum response level for the relevant *reserve category* (MW);

(b) A maximum proportion of the forecast/*scheduled load*, which maybe interrupted;

(c) Up to three (3) *reserve offer* blocks (MW/block);

(d) A minimum block size of one (1) MW; and

(e) Monotonically increasing prices. ”

Section 2. Review of the Market Manuals. Pursuant to the DOE Circular No. DC2015-03-0001 entitled “*Promulgating the Framework for the Implementation of Must Dispatch and Priority Dispatch of Renewable Energy Resources in the Wholesale Electricity Spot Market*,” the Philippine Electricity Market Corporation (PEMC) shall review and facilitate necessary amendments to

DC2016-01-0002 - Amendments to WESM Rules (Provisions for the Must Dispatch and Priority Dispatch Generating Units)

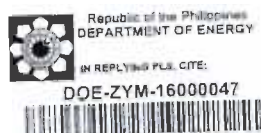
the related Market Manuals to ensure consistency with the WESM Rules and the policy framework for the integration of Must Dispatch and Priority Dispatch Generating Units in the WESM.

Section 3. 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 4. Effectivity. This Circular shall take effect upon publication in at least two (2) newspapers of general circulation and shall remain in effect until otherwise revoked.

Issued this ____ January 2016 at the DOE, Energy Center, Rizal Drive, Bonifacio Global City, Taguig City, Metro Manila.


ZENAIDA Y. MONSADA
Secretary



JAN 12 2016