

DEPARTMENT CIRCULAR NO. DC 2015 - 03 - 0001

m

PROMULGATING THE FRAMEWORK FOR THE IMPLEMENTATION OF MUST DISPATCH AND PRIORITY DISPATCH OF RENEWABLE ENERGY RESOURCES IN THE WHOLESALE ELECTRICITY SPOT MARKET

WHEREAS, under Section 2 of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA), it is the declared policy of the State to among others, promote the utilization of indigenous and new and renewable energy resources in power generation in order to reduce dependence on imported energy, and ensure the quality, reliability, security and affordability of the supply of electric power;

WHEREAS, Section 37 of EPIRA mandates the Department of Energy (DOE) to encourage private sector investments and broaden the ownership base in the electric power industry and promote the development of indigenous and renewable energy resources;

WHEREAS, Section 2 of Republic Act No. 9513, otherwise known as the Renewable Energy Act of 2008 (RE Act), declares as a policy of the State to:

- (a) Accelerate the exploration and development of renewable energy resources such as, but not limited to, biomass, solar, wind, hydro, geothermal and ocean energy resources, including hybrid systems, to achieve energy self-reliance, through the adoption of sustainable energy development strategies to reduce the country's dependence on fossil fuels and thereby minimize the country's exposure to price fluctuations in the international markets, the effects of which spiral down to almost all sectors of the economy;
- (b) Increase the utilization of renewable energy by institutionalizing the development of national and local capabilities in the use of renewable energy systems, and promoting its efficient and cost-effective commercial application by providing fiscal and non-fiscal incentives; and
- (c) Encourage the development and utilization of renewable energy resources as tools to effectively prevent or reduce harmful emissions and thereby balance the goals of economic growth and development with the protection of health and the environment;

WHEREAS, Section 5 of the 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, Section 7 of the RE Act provides for a feed-in tariff (FIT) system for electricity produced from wind, solar, ocean, run-of-river hydropower and biomass to accelerate the development of emerging renewable energy resources;

WHEREAS, Section 20 of the RE Act allows qualified and registered RE generating units with intermittent RE resources to be considered as "Must Dispatch" based on available energy and shall enjoy the benefit of priority dispatch;

WHEREAS, the implementation of the Must Dispatch and Priority Dispatch requires guidelines that will ensure maximum injection of intermittent and FIT-eligible generation while maintaining system security at all times;

WHEREAS, the DOE spearheaded public consultations and focused group discussions on the Guidelines for the Integration of Renewable Energy in the Wholesale Electricity Spot Market (WESM) in the following areas with the corresponding dates:

AREA	DATE
PEMC Offices, Ortigas Center, Pasig	06 March 2014
Bacolod City	04 April 2014
Mandaluyong City	11 April 2014

NOW, THEREFORE, for and in consideration of the foregoing premises, the DOE hereby declares the herein framework for the implementation of Must Dispatch and Priority Dispatch of RE resources in the WESM:

PART 1. GENERAL PROVISIONS

Section 1. Scope and Application. This Circular shall apply to all agencies and entities named herein and all electric power industry participants in the country.

Section 2. Purposes. This Circular is being issued to:

- (a) Define Must Dispatch and Priority Dispatch pursuant to the RE Act including the highlevel process for the qualification, certification, and registration of generating units designated as must dispatch and priority dispatch (collectively referred to as Preferential Dispatch Generating Units), and
- (b) Provide the framework for the integration in the WESM of Preferential Dispatch Generating Units consistent with the goals of the EPIRA and the RE Act.

Section 3. Statement of Policy. Pursuant to the RE Act, intermittent RE resources including FIT-eligible generation shall be allowed to maximize injection to the grid while:

- (a) Maintaining system security at all times;
- (b) Maintaining economically efficient short-run dispatch of energy and ancillary services;
 and

(c) Holding WESM participants to account for what they are able to control.

Section 4. Definition of Must Dispatch and Priority Dispatch. The terms as used in this Circular shall have their respective meanings as follows:

- (a) "Must Dispatch" is facilitated in the WESM by qualified and registered intermittent RE-based plants, whether or not under FIT system, such as wind, solar, run-of-river hydro, or ocean energy, according to the preference in the dispatch schedule whenever generation is available. The enjoyment of Must Dispatch by intermittent RE-based plants is based on the difficulty to precisely predict the availability of RE resource thereby making the energy generated variable and irregular and the availability of resource inherently uncontrollable pursuant to Section 20 of the RE Act.
- (b) "Priority Dispatch" means giving preference to biomass plants, under the FIT system, in the dispatch schedule pursuant to Section 7 of the RE Act.

PART 2. QUALIFICATION AND REGISTRATION OF PREFERENTIAL DISPATCH GENERATING UNITS

Section 5. Qualification and Registration of Preferential Dispatch Generating Units. Pursuant to Section 26 of the RE Act, the DOE shall issue certifications to qualified RE developers who are entitled to avail of the incentives under the RE Act. Such certification together with the Certificate of Compliance (COC) issued by the Energy Regulatory Commission (ERC) for generating facilities availing of preferential dispatch shall be used for purposes of registration in the WESM.

PART 3. RESPONSIBILITIES OF THE PHILIPPINE ELECTRICITY MARKET CORPORATION (PEMC), THE NATIONAL GRID CORPORATION OF THE PHILIPPINES (NGCP) AND DISTRIBUTION UTILITIES

To ensure the efficient and effective scheduling and dispatching of the Preferential Dispatch Generating Units, the PEMC, the NGCP, and Distribution Utilities shall have the following general mandate in the implementation of this Circular:

Section 6. Responsibilities of PEMC.

- (a) Undertake the necessary amendments in the WESM Rules and pertinent Market Manuals to implement Must Dispatch and Priority Dispatch of eligible renewable energy plants in the WESM;
- Formulate the procedures on the qualification and registration of Preferential Dispatch Generating Units in the WESM;
- (c) Monitor the compliance of intermittent RE generation companies on the submission of projected output for each of its generating units pursuant to the WESM Rules and on the approved forecast accuracy standards consistent with the Philippine Grid Code (PGC). The annual compliance of the RE generation companies' facilities on the forecast accuracy standards shall be reported by PEMC to the PEM Board and the DOE;

- (d) Conduct information campaigns on the implementation of Must Dispatch and Priority Dispatch in the WESM; and
- (e) Jointly with the NGCP, implement technical mitigation measures and improvements in the system in order to ensure safety and reliability of electricity transmission.

Section 7. Responsibilities of NGCP.

- (a) Determine, through technical and economic analysis, the maximum penetration limit of intermittent RE-based power plants or Must Dispatch generating units to the grid, in consultation with stakeholders;
- (b) Ensure maximum dispatch of generation from intermittent RE plants in accordance with the PGC, and subject to the availability of sufficient operating reserves. Towards this end, NGCP is enjoined to obtain sufficient operating reserves at all times.
- (c) Jointly with the PEMC, implement technical mitigation measures and improvements in the system in order to ensure safety and reliability of electricity transmission;
- (d) Require and witness the conduct of technical tests to ensure generators' compliance with the performance standards as prescribed in the PGC;
- (e) Produce and submit to the PEMC the RE aggregated generation forecast for each interconnected system it operates. These forecasts shall cover at least 24 hours and will be updated with the periodicity which the NGCP considers suitable but, at least, once every trading period as indicated in the WESM Rules;
- (f) Endeavor to operate the Must Dispatch generating units in free active power production control mode. However, if the NGCP considers it necessary for redispatch in order to maintain the security and reliability of the grid, the NGCP may instruct intermittent REbased generators to change the Active Power or immediate disconnection of their generators as prescribed in the PGC;
- (g) Submit to PEMC an operational report including all instructions issued to the generators which resulted in a change in the active power production; and
- (h) Determine and incorporate in the Transmission Development Plan the necessary upgrading of its transmission facilities to ensure non-discriminatory access of all gridconnected Preferential Dispatch Generating Units.

For this purpose, intermittent RE resources is defined under Section 20 of the RE Act and also referred to as intermittent RE-based power plants or Must Dispatch generating units which include variable RE resources or VRE as described in the revised PGC.

Section 8. Responsibilities of Distribution Utilities.

- Determine and incorporate in the Distribution Development Plan the necessary upgrading of its distribution facilities to ensure non-discriminatory access of all embedded Preferential Dispatch Generating Units; and
- Ensure that embedded Preferential Dispatch Generating Units shall be given priority to inject into the distribution network.

Section 9. Compliance to WESM Rules. All Preferential Dispatch Generating Units shall strictly comply with:

- (a) The submission of projected output for each of its generating units for each trading interval in each trading day of the week in accordance with the timetable;
- (b) The revision of projected output for any trading interval, if they no longer represent a reasonable estimate of: (i) the expected availability of the relevant generating unit for that trading interval; or (ii) the offers likely to apply for the real time dispatch optimization of that trading interval; and
- (c) Other relevant provisions of the WESM Rules and its Market Manuals that may be established or revised in relation to the provisions of preferential dispatch.

Section 10. Dispatch Prioritization. Jointly and in consultation with the WESM Members, the PEMC and the NGCP shall update the Dispatch Protocol established in the WESM Rules and its Market Manuals to consider the following hierarchy of dispatch schedule and implementation:

- (a) Minimum stable load or Pmin of all Conventional Generating Units;
- (b) Must-Dispatch Generating Units;
- (c) Priority Dispatch Generating Units;
- (d) Non-scheduled Generating Units; and
- (e) Scheduled Generating Units;

Notwithstanding the aforementioned hierarchy, the NGCP shall always consider technical parameters and limitations of the transmission facilities giving priority to the reliability and security of the Grid during its dispatch implementation. In case the Preferential Dispatch Generating Units are connected to a common constrained transmission facility, the following hierarchy of scheduling and dispatch shall be implemented:

- (a) Preferential Dispatch Generating Units under commissioning and testing; and
- (b) Pro-rated sharing based on available transmission capacity and Day-Ahead Generation Forecast of all Preferential Dispatch Generating Units.

PART 4. TRANSITORY PROVISIONS

Section 11. Interim Protocol. Taking into account line limitations and loading at the different NGCP substations, the PEMC and the NGCP shall develop the interim protocol for the dispatch of Preferential Dispatch Generating Units to address prioritization of the existing and upcoming operation of new wind power projects. The Interim Protocol shall be submitted to the DOE within ten (10) days from the effectivity of this Circular.

PART 5. FINAL PROVISIONS

Section 12. Imposition of Fines and Penalties. All Preferential Dispatch Generating Units shall comply with the WESM Rules and Market Manuals and failure of which shall subject them to the investigation process under the WESM Rules.

Any violation of this Circular, including the failure to abide by the framework defined herein, shall be subject to administrative fines and penalties to be developed by the DOE pursuant to Section 36 of the RE Act.

Section 13. Regulatory Support. The ERC shall ensure the provision of support in the regulatory requirements particularly in the promulgation of the amended PGC and PDC for consistency with the RE Act and the EPIRA.

Section 14. Retroactive Effect. Consistent with Section 20 of the RE Act, the effects of the incorporated guidelines for the Must Dispatch and Priority Dispatch in the WESM Rules shall retroact to the date of the effectivity of the RE Act insofar as the intended incentives given to the Preferential Dispatch Generating Units are concerned.

Section 15. Amendatory Clause. The provisions of other department circulars which are inconsistent with the provisions of this Circular are hereby repealed, amended or modified accordingly.

Section 16. Separability Clause. If, for any reason, any section or provision of this Circular is declared unconstitutional or invalid, such parts not affected shall remain in full force and effect.

Section 17. Effectivity. This Circular shall take effect immediately upon publication in two (2) newspapers of general circulation and will remain in effect until otherwise revoked by the DOE.

Issued this _____ March 2015 at the DOE, Energy Center, Rizal Drive, Bonifacio Global City, Taguig City, Metro Manila.

CARLOS JERICHO L. PETILLA,
Secretary

Republic of the Philippines DEPARTMENT OF ENERGY

SOE-JLP-15001721

MAR 20 2015