



Republic of the Philippines  
**DEPARTMENT OF ENERGY**

DEPARTMENT CIRCULAR NO. DC 2015-10-0015  
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**PROVIDING POLICIES FOR FURTHER ENHANCEMENT OF THE  
WHOLESALE ELECTRICITY SPOT MARKET (WESM) DESIGN AND OPERATIONS**

**WHEREAS**, Sections 37 and 30 of the Electric Power Industry Reform Act of 2001 (EPIRA) mandates the Department of Energy (DOE) to supervise the restructuring of the electricity industry and to establish the Wholesale Electricity Spot Market (WESM), respectively;

**WHEREAS**, Section 3(a), Rule 9 of the EPIRA Implementing Rules and Regulations (EPIRA IRR), further mandates the DOE to organize and establish the appropriate market design and governance structure of the WESM;

**WHEREAS**, the DOE, jointly with the electric power industry participants, formulated the detailed rules governing the operations of the WESM and subsequently, the DOE promulgated the WESM Rules on 28 June 2002 through Department Circular No. 2002-06-003;

**WHEREAS**, on 18 November 2003, through the initiative of the DOE, the Philippine Electricity Market Corporation (PEMC) was incorporated to manage, govern, and administer an efficient, competitive, transparent, and reliable market for the wholesale and purchase of electricity and ancillary services in the Philippines, in accordance with the EPIRA;

**WHEREAS**, in March 2008, the DOE created the Special WESM Rules Review Committee, tasked to review the WESM Rules and identify the weaknesses and operational concerns of the WESM that require enhancements in the areas of market design and systems upgrading to include removal of Pmin constraints, immediate conduct of market re-runs, minimize workflow stoppages in the Market Management System (MMS) or software failures, and rationalize dispatch of must-run units among others;

**WHEREAS**, in accordance with the WESM Rules, the reports of the Independent Market Operations Audit undertaken in 2010, 2011 and 2012 identified several market design and implementation issues, undermining the efficiency of the WESM;

**WHEREAS**, the PEMC, to address the issues identified in the said Audits, commissioned an independent consultant in April 2013 to undertake a WESM Design Study with reports submitted to the DOE comprising of three phases, namely: Phase 1 WESM issues and recommendations; Phase 2 Specific issues on the trading and dispatch interval; and Phase 3 Advise on the Day-Ahead Market;

**WHEREAS**, on 18 November 2013, the results of the WESM Design Study were subjected to public consultation with the electric power industry participants and other concerned stakeholders to discuss the recommendations and to solicit the suggestions and comments;

**WHEREAS**, the WESM Design Study was finalized in January 2014, incorporating the comments of the various stakeholders and was submitted to the DOE for consideration;

**WHEREAS**, the Technical Working Group (TWG) on the MMS Migration and Enhancement Project that was created by the DOE on 15 January 2010, recommended the procurement of a new MMS to ensure the reliability of the WESM operations and to implement the recommendations specified in the WESM Design Study;

**WHEREAS**, the DOE, after thorough review of the WESM Design Study and the recommendations and proposed changes to market operations, deemed that appropriate and reasonable changes be implemented consistent with the objectives of the WESM Rules as well as to incorporate the said changes to the new MMS;

**NOW, THEREFORE**, for and in consideration of the foregoing premises, the DOE, consistent with its mandate under the EPIRA, hereby declares the following:

**Section 1. Guiding Principles.** Any changes in the WESM design and operations shall be in accordance with the following principles:

- a) Gross pool market, where generator trading participants offer their maximum available capacity for central scheduling and dispatch, ensures system security and a level-playing field among generators;
- b) Net settlement, where bilateral contract quantities are settled outside the WESM;
- c) Co-optimized energy and reserves, where the provision of energy and reserves are jointly optimized in the Market Dispatch Optimization Model (MDOM);
- d) Self-commitment, where trading participants are responsible for the management of their technical operations, unit commitment decisions and other market risks through submission of offers to the WESM;
- e) Prices are governed, as far as practicable, by commercial and market forces, and pricing errors and extremely high and low prices are mitigated;
- f) Trading participants are provided with regularly updated information on projected prices, dispatch and other market outcomes to ensure they can make informed commercial and technical decisions; and
- g) Other guiding principles that may be issued by the DOE insofar as these principles are consistent with the objectives of the EPIRA.

**Section 2. Adoption of the Enhancements to WESM Design and Operations.** Consistent with the Guiding Principles in Section 1 herein, the following enhancements in WESM design and operations are hereby adopted:

- a) Removal of Pmin constraint in the MDOM;
- b) Shorter trading and dispatch interval of five (5)-minute;
- c) Ex-ante pricing only for every five (5)-minute trading and dispatch interval;
- d) One (1)-hour settlement interval for settlement purposes based on weighted average of the five (5)-minute ex-ante prices;
- e) Automated pricing corrections;
- f) Mandatory integration of Distribution Utilities' sub-transmission network, which materially affect dispatch schedules and prices in the WESM, into the Market Network Model (MNM);

- g) Changing the values and priorities of some of the Constraint Violation Coefficients (CVCs), including the corresponding values thereof taking into consideration the imminent implementation of the WESM Reserve Market;
- h) Imposition of WESM offer cap and floor for energy and reserve as determined through joint study by the DOE, Energy Regulatory Commission (ERC) and PEMC;
- i) Implementation of hourly Day-Ahead Projection (DAP) with sensitivities and Hour-Ahead Dispatch (HAD);
- j) Implementation of nodal-based short-term demand forecasting;
- k) Enhanced training of WESM participants; and
- l) Any other enhancements as may be deemed necessary and issued by the DOE.

**Section 3. Responsibilities of the Philippine Electricity Market Corporation (PEMC).**

To ensure the timely completion of the directives set forth in this Circular, PEMC is directed to:

- a) Submit to the Rules Change Committee (RCC), copy furnished the DOE, the proposed changes to the WESM Rules and Market Manuals, which are necessary for the implementation of the enhancements to WESM design and operations;
- b) Secure the ERC's approval of any changes to the Price Determination Methodology, as may be necessary and consistent with the amended WESM Rules;
- c) Ensure upgrading of the MMS and other systems necessary to implement the enhancements of the WESM design and operations as stated herein;
- d) Develop dispatch conformance standard jointly with National Grid Corporation of the Philippines (NGCP) for consideration in the amendment of the WESM Rules and Market Manuals;
- e) Conduct information, education and communication campaign and trainings for the benefit of WESM members and relevant agencies; and
- f) Perform such other initiatives as may be directed by the DOE, which are deemed necessary for the needed improvement of WESM operations.

**Section 4. Responsibilities of National Grid Corporation of the Philippines (NGCP).**

As the System Operator, NGCP is hereby directed to:

- a) Enhance associated interface necessary between PEMC and NGCP including but not limited to the Energy Management System (EMS) and Supervisory Control and Data Acquisition (SCADA);
- b) Develop dispatch conformance standards jointly with PEMC for consideration in the amendment of the WESM Rules and Market Manuals;
- c) Enhance testing procedures and certification process for ancillary services to be traded in the WESM;
- d) Enhance procedures for dispatch of energy and ancillary services to implement the MO dispatch schedules based on the amended WESM Rules; and
- e) Perform such other initiatives as may be directed by the DOE, which are deemed necessary for the needed improvement of WESM operations.

**Section 5. Responsibilities of WESM Members.** To ensure the smooth implementation of the directives set forth in this Circular, all WESM Members are hereby directed to:

- a) Ensure readiness, full compliance and to be accountable to the required internal systems and procedures, as applicable, to accommodate the changes in WESM design and operations;

- b) Comply with the submission of necessary information and data as may be required by the DOE, ERC, PEMC and NGCP in order to effectively carry out the provisions of this Circular; and
- c) Participate in the rules change proceedings, information campaigns, and trainings.

**Section 6. Regulatory Support.** For the proper implementation of the policies set herein, the ERC is hereby enjoined to promulgate guidelines and undertake such necessary action to support the parties affected herein and enhance and implement the necessary technical and operation standards, to ensure a competitive market.

**Section 7. Interpretation of Terms.** For the avoidance of doubt or confusion, all other terms used in this Circular will have the same definition as provided for under the WESM Rules and its Market Manuals.

**Section 8. 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 9. Repealing Clause.** Except insofar as may be manifestly inconsistent herewith, nothing in this Circular shall be construed as to repeal any of the mechanisms already existing or responsibilities already provided for under existing rules.

**Section 10. Penalty Clause.** Failure of any mandated entities to comply with their obligations set forth under this Circular shall be subject to the imposition of fines and penalties by the ERC and, as so required to protect the public interest, may result in deregistration, suspension, or revocation of licenses and authorizations.

**Section 11. Effectivity.** This Circular shall take into effect fifteen (15) days from its publication and shall remain in effect until otherwise revoked.

Issued at Energy Center, Rizal Drive, Bonifacio Global City, Taguig City.



  
**ZENAIDA Y. MONSADA**  
Secretary

October 23, 2015