



---

# DOE DEPARTMENT CIRCULAR

**“DECLARING THE LAUNCH OF THE  
WHOLESALE ELECTRICITY SPOT MARKET IN MINDANAO”**

**Eduardo B. Fernandez**

**Public Consultation WESM Mindanao**



# MARKET DEVELOPMENT



- On-going development of the New Market Management System by the PEMC pursuant to the enhancement WESM design policy stipulated in Department Circular No. 2016-10-0014 already considers the operationalization of the electricity market in Mindanao;
- Mindanao has experienced excess generation supply in 2016 with the entry of 748 MW of new generation capacity and expected to increase further by 993 MW in 2017;
- WESM will provide a venue for efficient scheduling, dispatch and settlement of energy withdrawal and injections in the Mindanao Grid;
- The feasibility of interconnecting Mindanao to the Luzon-Visayas grids is being studied by the National Grid Corporation of the Philippines as part of the infrastructure support for the establishment of the WESM in Mindanao;
- Focused group discussions were held on the following dates and venues to discuss the preparation towards the launch of the WESM in Mindanao:

4 November 2015	<b>Grand Regal Hotel, Davao City</b>
5 November 2015	
9 November 2015	<b>N Hotel, Cagayan De Oro City</b>
10 November 2015	
14 December 2015	<b>Greenleaf Hotel, General Santos City</b>
15 December 2015	



# BENEFITS OF WESM TO THE MINDANAO GRID



## Technical Benefits

### RE-DISPATCH PROTOCOLS

- Established protocols enable prompt reaction to real-time changes in supply and demand conditions

### CONGESTION MANAGEMENT

- Plants are automatically scheduled to address congestion
- Customers whose contracted generations were affected by congestion will not be curtailed

### MUST-RUN UNITS

- WESM allows for the dispatch of generation capacities to address system security issues such as low voltage conditions

### FACILITATION OF CENTRAL DISPATCH

- Inclusion of embedded generators in the WESM allows for better monitoring and accounting of capacities in the grid for central dispatch



# BENEFITS OF WESM TO THE MINDANAO GRID



## Commercial Benefits

### ECONOMIC DISPATCH

- Optimal dispatch of generating plants based on offers

### NET SETTLEMENT

- Consumption and generation beyond contracts are settled at market prices

### ALTERNATIVE SOURCE OF ENERGY

- Customers may purchase from the WESM to cover its requirements instead of through bilateral contracts



# BENEFITS OF WESM TO THE MINDANAO GRID



## Commercial Benefits

### SHORT-TERM REQUIREMENTS

- Sudden but temporary increase in demand may be sourced through the WESM

### SHARING OF CONTRACTED CAPACITIES

- Customers with excess contracted capacities can share those capacities through the WESM and receive compensation

### DEFAULT OFF-TAKER

- New generation capacities can immediately contribute to the supply of electricity in the Mindanao Grid by selling to the WESM
- Variable energy resources may sell energy beyond contracts when output rapidly increases



# BENEFITS OF WESM TO THE MINDANAO GRID



## Auxiliary Benefits

### TRANSPARENCY

- The WESM provides for a centralized repository of information on power system operations
- Data such as demand, supply, market prices are published in real-time

### COMPETITION

- Economic dispatch fosters competition and encourages cost-effective production of electricity

### ACCOUNTABILITY

- WESM Rules and Manuals clearly defines the roles and obligations of each stakeholder
- Systems are in place to ensure compliance of the stakeholders



## SECTION 1. Launch of the WESM in Mindanao



The DOE hereby declares the launch of the WESM in the Mindanao grid on 26 June 2017 (hereinafter referred to as the “Launch Date”). The commencement of the commercial operations of the WESM in Mindanao (hereinafter referred to as the “Commercial Operation Date”) shall be subject to the fulfilment of criteria set forth in Section 2 below. PEMC shall **submit a certification** to the DOE on the status of the criteria at least **fifteen (15) calendar days prior to the Launch Date**. Upon the receipt of the said certification, the DOE shall determine its **acceptability and sufficiency** and shall determine the Commercial Operation Date.

All provisions of the **WESM Rules, Market Manuals** as amended, as well as the **pricing methodology** shall **apply** to the WESM in Mindanao. Prior to the establishment of the physical infrastructure connecting the Mindanao grid to the Luzon-Visayas grids, prices and dispatch schedules for Mindanao shall be **separate**.



## SECTION 2. Criteria for Commencement of Full Commercial Operations



The WESM in Mindanao will have commenced full commercial operations on the date declared by the DOE that the following **criteria have been complied with**:

1. All systems and procedures including all interfaces with the participants and service providers necessary for the operation of the WESM in the Mindanao grid **are in place** and pursuant with the requirements set under the WESM Rules;
2. The **Trial Operations Program** (TOP) was implemented **successfully** commencing on 26 February 2017 with the System Operator and on 26 March 2017 with the Market Participants;
3. The forecasting, scheduling, dispatch, pricing, metering, and settlement processes of the WESM are **fully operational** in the Mindanao grid;
4. **Training programs** shall **have been conducted** for the WESM Mindanao Trading Participants;
5. The price determination methodology for the enhanced WESM design has been **approved by the ERC** and duly published; and
6. The Market Dispatch Optimization Model (MDOM) has been **certified as compliant** with the WESM Rules by an independent auditor.





## SECTION 3. Transition Arrangements on the Dispatch of Capacities and Nomination of Demand



The National Grid Corporation of the Philippines shall continue to implement the existing dispatch protocol as indicated in the attached Annex A, for the system operations in the Mindanao grid during the preparations for the integration of Mindanao to the WESM.



## SECTION 4. Mandatory Registration in the WESM



Consistent with WESM Rules Clause 2.2.4.2, upon the effectivity of this Circular, **all** electric power industry participants in Mindanao shall be considered **WESM members** and are therefore enjoined to submit registration documents in the WESM to ensure proper **accounting of supply and demand** in the Mindanao grid specifically during the TOP and the Launch Date. In the registration of WESM members in Mindanao, PEMC shall give due regard to the documents submitted as IMEM registration that may be deemed applicable.

All **embedded generators** (a) with installed capacity of **five (5) MW and above** and (b) those with installed capacity below 5 MW that have a contract outside its host distribution utility, which intends **to sell to the WESM**, or inject power to the grid shall likewise be registered in the market and shall be required to submit the necessary information to assist the Market Operator in providing optimal dispatch schedule and pricing in the market. **Embedded generators** with installed capacity below 5 MW and do not fall under the above conditions may register in the WESM on a voluntary basis.



## SECTION 5. Trial Operations



PEMC, as the Market Operator, shall **conduct TOP** with the Mindanao WESM participants and System Operator **to ensure their readiness** for the WESM commercial operations. Such trial operations shall include a limited live dispatch operation (LLDO), which shall involve the implementation by the System Operator of the dispatch schedules generated by the WESM Market Management System (MMS) but **without financial settlement**. For this purpose,

- 5.1 PEMC shall prepare the detailed guidelines for the TOP;
- 5.2 Generators are mandated to participate in the TOP and limited live dispatch operations (LLDO);
- 5.3 PEMC shall **submit a readiness assessment** to the DOE at fifteen **(15) days before the Launch Date** as provided in Section 1 hereof.



## SECTION 6. Termination of the Interim Mindanao Electricity Market

---



The DOE's declaration of the commencement of the full commercial operation of the WESM in Mindanao shall **automatically terminate** the implementation of the IMEM.



## SECTION 7. Additional Responsibilities of the Market Operator



The Philippine Electricity Market Corporation as the **Market Operator** for the WESM in Mindanao shall **undertake** the following additional responsibilities:

- 7.1 Ensure **completion of the New Market Management System** for the timely commercial operation of the WESM in Mindanao;
- 7.2 Coordinate with the WESM Governance Committees on the **preparation and updating** of rules, conduct of studies and audits necessary for the efficient integration of the WESM in Mindanao;
- 7.3 Coordinate with the System Operator and other WESM Mindanao Participants for the **preparation and completion of procedures** necessary for the efficient operation of the WESM in Mindanao;
- 7.4 Secure relevant information and data needed from the System Operator and WESM Mindanao Participants for the **development of the market network model** for the WESM in Mindanao;
- 7.5 Ensure **readiness and availability** of relevant **interfaces** with the System Operator and WESM Mindanao Participants for seamless workflow during the trial runs and the actual market operations;



## SECTION 7. Additional Responsibilities of the Market Operator



The Philippine Electricity Market Corporation as the Market Operator for the WESM in Mindanao shall undertake the following additional responsibilities:

- 7.6 Seek **recovery with the ERC** of just and prudent costs incurred in the implementation of this policy;
- 7.7 Participate in all fora, conduct of trainings and other activities for the smooth integration of Mindanao to the WESM; and
- 7.8 Assist in all activities relating to the integration of the Mindanao in the WESM, as may be necessary, or, as may be directed by the DOE.



## SECTION 8. Responsibilities of the National Grid Corp. of the Philippines



The National Grid Corporation of the Philippines as the System Operator, Transmission Network Service Provider and WESM Metering Service Provider shall:

- 8.1 Coordinate with the Market Operator for the **preparation and completion of procedures** necessary for the efficient operation of the WESM Mindanao;
- 8.2 Provide to the Market Operator necessary information and data relevant to the **development of the market network model** for the WESM Mindanao;
- 8.3 Ensure the **readiness and robustness of all its transmission networks and related facilities** such as to comply with systems security requirements and other processes to allow non-discriminatory access and optimal dispatch of generating facilities in Mindanao;
- 8.4 Ensure the **readiness of all metering facilities** in accordance with the WESM Rules;
- 8.5 Ensure readiness and availability of relevant interfaces with the Market Operator for seamless workflow during the trial runs and the actual market operations;
- 8.6 Complete the Visayas Mindanao interconnection by December 2020 to ensure the integration of Mindanao WESM into the Philippine WESM.
- 8.7 Participate in all fora, conduct of trainings and other activities for the smooth integration of Mindanao the WESM Mindanao; and
- 8.8 Assist in all activities relating to the integration of Mindanao in the WESM, as may be necessary, or, as may be directed by the DOE.



## SECTION 9. Responsibilities of Electric Power Industry Participants in Mindanao



All Mindanao WESM Members are enjoined:

- 9.1 To **cooperate** and fully comply with the guidelines for **trial operations**, and the instructions of PEMC or the System Operator relating to the implementation of WESM Mindanao;
- 9.2 **Provide necessary data and information** relevant to the development of the market network model for the WESM in Mindanao;
- 9.3 Ensure availability of necessary infrastructure such as **Market Participants' Interface** and WESM **compliant metering installations**, among others;
- 9.4 Seek recovery with the Energy Regulatory Commission of just and prudent costs incurred in the implementation of this policy;
- 9.5 Participate in all fora, conduct of trainings and other activities for the smooth integration of Mindanao to the WESM; and
- 9.6 Assist in all activities relating to the integration of Mindanao in the WESM, as may be necessary, or, as may be directed by the DOE.





## SECTION 10. Responsibilities of Mindanao Electric Cooperatives



All Electric Cooperatives in Mindanao are enjoined to support implementation and comply with the enforcement of this Circular. Towards this end, the Mindanao ECs shall:

- 10.1 **Register** with the Market Operator and **submit** all required data and documents as may be determined including but not limited to distribution system configuration and establishment of a Market Participant Interface (MPI);
- 10.2 **Coordinate** with the National Electrification Administration on any required assistance to ensure readiness in the new market environment, including, but not limited to securing the prudential guarantees and seeking regulatory approvals for the recovery of the same;
- 10.3 **Comply** with all technical and documentary requirements of the System Operator including but not limited to distribution system configuration;
- 10.4 Participate in all activities prior to the Launch Date including but not limited to TOP, trainings, consultations and other fora that may be organized for the successful establishment of Mindanao WESM;
- 10.5 Ensure compliance to key performance standards and **updating of outstanding balances** with power providers and work out as necessary a special payment arrangements to address the same;



## SECTION 10. Responsibilities of Mindanao Electric Cooperatives



All Electric Cooperatives in Mindanao are enjoined to support implementation and comply with the enforcement of this Circular. Towards this end, the Mindanao ECs shall:

- 10.6 In coordination with the DOE, NEA and PEMC, **conduct information, education and communication (IEC) campaign** to its member consumers on the benefits and potential changes the establishment of WESM may brought upon the EC operations and the consumers in general;
- 10.7 Assist in all activities relating to the integration of Mindanao in the WESM, as may be necessary, or, as may be directed by the DOE.



## SECTION 11. Responsibility of the National Electrification Administration



The National Electrification Administration shall ensure that all Mindanao electric cooperatives are technically and financially prepared to operate under the deregulated electricity market, consistent with its mandate under section 58 of the EPIRA. Towards this end, the NEA shall undertake the following:

- 11.1 Assist the ECs in securing sufficient amount of prudential guarantees and filing with the ERC on the recovery of the same;
- 11.2 Pursue completion of initiatives undertaken in line with DOE Circular No. DC2012-06-0007 entitled “*Directing the National Electrification Administration to Develop a Mechanism for Ensuring the Adequacy of and Compliance by the Electric Cooperatives with the Prescribed Prudential Requirements in the Wholesale Electricity Spot Market and Spearhead the Collective Petition Thereof for the Approval of the Energy Regulatory Commission*” for the recovery of prudential requirements needed by the ECs;
- 11.3 Provide guidance to ECs in the transition to the new market environment and ensure timely compliance of the ECs to all requisites for their successful registration in the WESM;



## SECTION 11. Responsibility of the National Electrification Administration



The National Electrification Administration shall ensure that all Mindanao electric cooperatives are technically and financially prepared to operate under the deregulated electricity market, consistent with its mandate under section 58 of the EPIRA. Towards this end, the NEA shall undertake the following:

- 11.4 In coordination with the DOE and PEMC, conduct information, education and communication (IEC) campaign to the ECs on the benefits and potential changes the establishment of WESM may brought upon the EC operations and the consumers in general;
- 11.5 Assist in all activities relating to the integration of Mindanao in the WESM, as may be necessary, or, as may be directed by the DOE.



---

## **SECTION 12. Regulatory Support.**

The ERC shall ensure the provision of support in the regulatory requirements and approvals consistent with the policies set forth under this Circular and in accordance with existing laws and procedures.

## **SECTION 13. Repealing Clause.**

Except insofar as may be expressly manifested as inconsistent herewith, nothing in this Circular shall be construed as to repeal any of the mechanisms already existing or responsibilities provided for under existing rules.

## **SECTION 14. Separability Clause.**

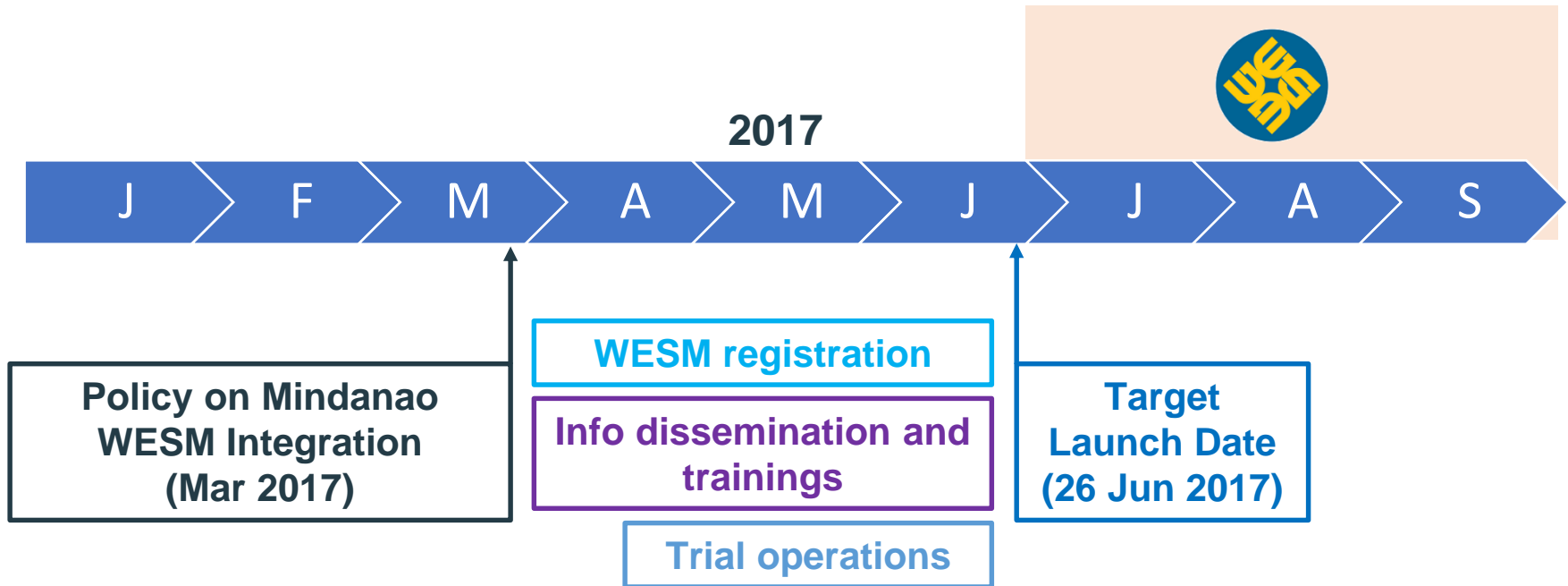
If for any reason, any section or provision of this Circular is declared unconstitutional or invalid, such parts not affected shall remain valid and subsisting.

## **SECTION 15. 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.



# INDICATIVE TIMELINE



pmdd.wesm@gmail.com

capongcol@yahoo.com

ixconde@gmail.com

ningski\_baltazar@yahoo.com

mara.esquilona@gmail.com

kahsiruma@gmail.com

edoe2013@gmail.com

**THANK YOU**

