2nd THEMATIC MULTI-SECORAL MEETING ON POWER

11 August 2015
Cervantes Hall, Discovery Primea,
Ayala Ave., Makati City
What is WESM?

Electric Power Industry Structure
MONOPOLY (Pre-EPIRA)

- Generation – NPC, IPPs (IPPs – wholesale contract with NPC and some distribution companies)
- Transmission – NPC
- Distribution and Supply – distribution utilities, electric cooperatives, NPC

Establishment of the WESM

IPPs

NPC

DU

EC

Direct

DU

Customers
What is WESM?

Establishment of the WESM

Electric Power Industry Structure
NEW STRUCTURE - EPIRA

- Competitive generation
- Regulated transmission and distribution
- Open access to high voltage wires
- Open access to distribution networks
- Wholesale electricity spot market (WESM)
- Competitive retail market
What is WESM?

- The wholesale electricity spot market (WESM) is a venue for trading electricity as a commodity.

- The WESM was created by virtue of Section 30 of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act (EPIRA) of 2001.

- WESM is where the generators sell their excess capacities not covered by contracts and where the customers buy additional capacities on top of their contracts.
• EPIRA Section 30 further provides that, "The market shall provide the mechanism for identifying and setting the price of actual variations from the quantities transacted under contracts between sellers and purchasers of electricity."

• WESM aims to establish a competitive, efficient, transparent and reliable market for electricity (WESM Rules Section 1.2.5)

• WESM operates in Luzon and Visayas.
What is WESM?

- WESM provides another option for sourcing electricity requirements or selling capacities, other than through bilateral contracts.

- Only spot transactions are calculated based on the WESM prices and schedule.

- Contractual transactions are settled outside of the WESM by the counterparties based on their contract price.

For the July 2015 billing period, spot transactions account for 9%. 
Who are the WESM Stakeholders?

- Philippine Electricity Market Corporation (PEMC)
- National Grid Corporation of the Philippines (NGCP)
- Department of Energy (DOE)
- Energy Regulatory Commission (ERC)
- Power Generation Companies (GENCOs)
- Distribution Utilities (DUs)
- Directly Connected Customers
Who are the WESM Stakeholders in the WESM?

• Philippine Electricity Market Corporation (PEMC) acts as the Market Operator (MO) that administers the operation of the WESM. PEMC also serves as the governance arm of the WESM.

• PEMC is a non-stock, non-profit, private corporation incorporated in November 2003 upon the initiative of the DOE with representatives from the various sectors of the electric power industry to be the interim governance arm of the WESM.
Who are the WESM Stakeholders in the WESM?

- Generation Company is authorized by the ERC to operate facilities used in the generation of electricity. ERC issues a Certificate of Compliance (COC).

- A generating company may have power plants that are:
  - Natural gas
  - Geothermal
  - Hydro
  - Coal
  - Diesel/Oil
  - Biomass
  - Wind
  - Solar
Who are the WESM Stakeholders in the WESM?

- Customers defined under the WESM Rules as a person or entity that engages in activity of purchasing electricity supplied through transmission or distribution system.

- Customers in the WESM may be:
  - Distribution Utilities
  - Directly-connected customers (Bulk customers)
How is Electricity Traded in the WESM?

Generators submit online hourly energy offers thru the Market Management System (MMS).

Offers are submitted by accessing the Market Participant Interface of the MMS through the Generator’s computers installed with digital certificates.

PEMC, the Market Operator (MO), matches the offers of generators with the demand of customers thru the MMS.

Prices of electricity traded in the WESM are determined based on the ERC-approved Price Determination Methodology.
WESM rates are driven by market forces including demand conditions.

Total Demand (August 3, 2015)

[Graph showing total demand in Megawatts from 1 to 24 hours with peak demand around 11:00 to 12:00.]
How is Electricity Traded in the WESM?

WESM encourages competition and efficiency in the scheduling of generators to be dispatched.

Market Clearing Price
Marginal Plant

Price (P/MWh) vs. Quantity (MW)
How are Dispatch Schedules Implemented?

The MO submits the resulting dispatch schedules to NGCP, the System Operator (SO), for central dispatch.

Electricity is produced (generators) / consumed (customers).

The DUs, participating in the WESM as wholesale customers, distribute electricity to the end-users.
How Do WESM Rates Affect Electricity Bills?

WESM rates are part of generation charge billed by distribution utilities to their customers.

EPIRA Section 23:
A DU shall have the obligation to supply electricity in the least cost manner to its captive market, subject to the collection of retail rate duly approved by the ERC.
How Do WESM Rates Affect Electricity Bills?

**Generation**

- **Generation Charge**
  - Power Act
  - Sub Total

**Blended Rate**
What are the Benefits of WESM?

- Encourages competition in the generation sector
- Promotes transparency and accurate information on electricity costs
- Provides signals for investment opportunities
**What is RCOA?**

RCOA was implemented by virtue of Section 31 of R.A. No. 9136 (EPIRA) of 2001.

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<thead>
<tr>
<th>Retail Competition</th>
<th>Open Access</th>
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<tr>
<td>refers to the provision of electricity to a Contestable Market by Suppliers through Open Access*</td>
<td>refers to the system of allowing any qualified Person the use of transmission, and/or Distribution System and associated facilities subject to the payment of transmission and/or distribution retail wheeling rates duly approved by the ERC.**</td>
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<th>Contestable Market</th>
<th>Captive Market</th>
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<tr>
<td>refers to the electricity end-users who have a choice of a supplier of electricity, as may be determined by the ERC in accordance with EPIRA.</td>
<td>refers to the electricity end-users who do not have a choice of a supplier of electricity, as may be determined by the ERC in accordance with EPIRA.</td>
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* (EPIRA IRR Rule 4 (vvv))  
** (EPIRA IRR Rule 4 (hhh))
What is RCOA?

Retail Competition

Transmission

Spot Payment

Generation Charges

Distribution

Spot Payment

Generation Charges

Customers

Power Generation Companies (GENCos)

Suppliers

Retail Competition

Transact in the WESM

DU Charges

Contestable Customers

END USERS

Wholesale Electricity Spot Market
For inquiries, you may contact:

helpdesk@wesm.ph
THANK YOU!