



**Wholesale Electricity  
Spot Market**

# **FGD on RCOA for Contestable Customers**

# Topic Outline

1. Fundamentals of Electricity

2. Overview of the WESM

3. Introduction to RCOA

4. About the Contestable Customers

5. Retail Supply Contracts



**Wholesale Electricity  
Spot Market**

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# Fundamentals of Electricity

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# What are the basic properties of Electricity?

**Electricity cannot be economically stored in large quantities.**

- All electricity has to be generated when needed.
- Demand for electricity over the day is highly variable.

**Electricity takes the path of least resistance.**

- Physical flow of electricity cannot be traced. Thus, it is not physically possible to determine or even direct where the electricity generated by one power plant goes.

*Sally Hunt: Making Competition Work in Electricity (2002)*

# What are the basic properties of Electricity?

**Transmission of power over the network is subject to a complex series of physical interactions.**

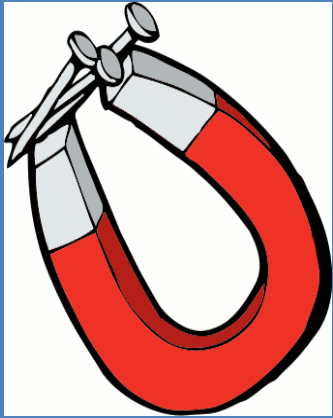
- What happens in one part of the system affects conditions elsewhere in the system.
- Ancillary services are necessary to ensure system reliability and security.

**Electric field travels at the speed of light.**

- Each second, output has to be precisely matched to use.
- Electricity being generated at any given time equals actual demand and transmission losses.

*Sally Hunt: Making Competition Work in Electricity (2002)*

# How is electricity being produced?



Magnet



Conductor

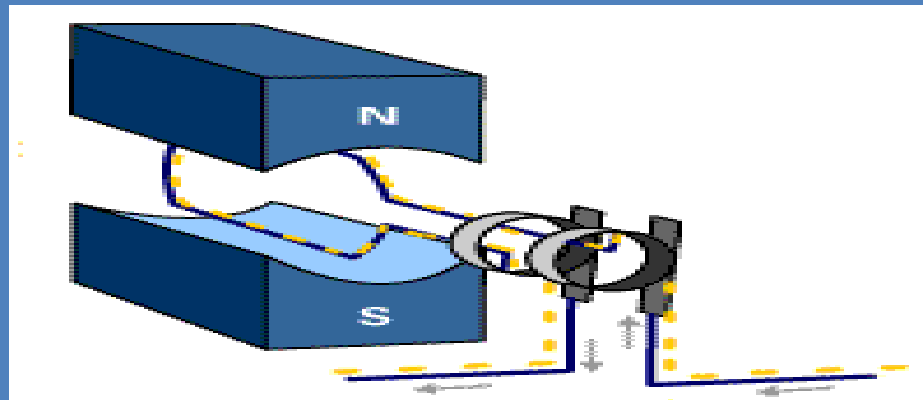


Motion

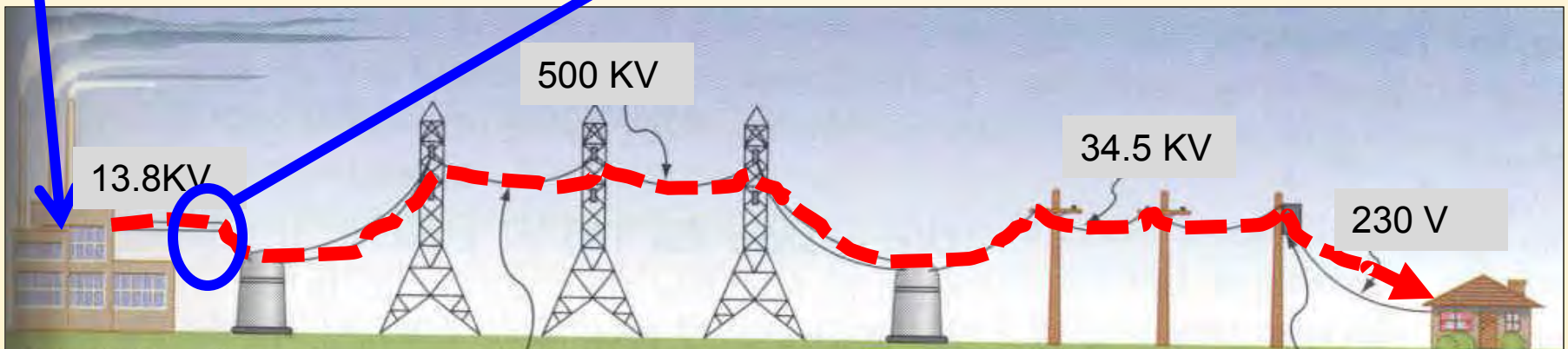
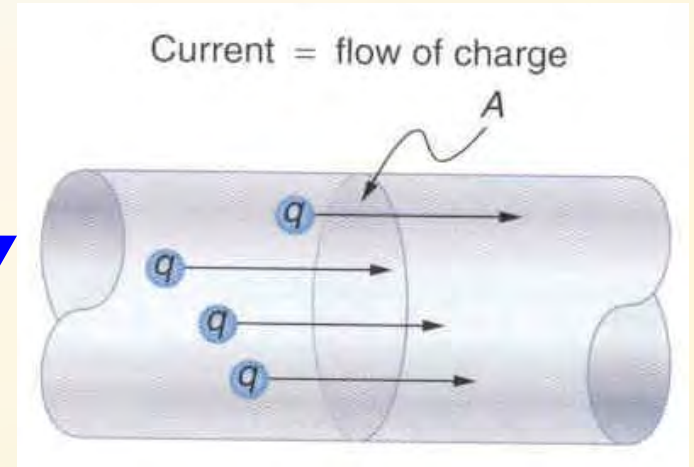
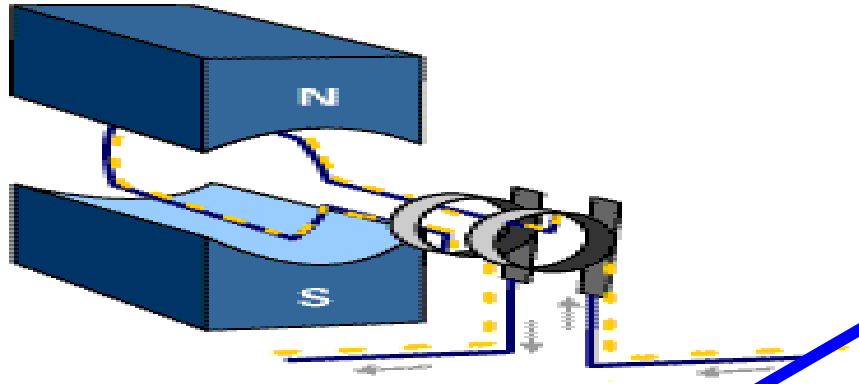


Electricity

## Electricity Production



# How is electricity being transmitted?



GENERATION

TRANSMISSION SYSTEM

DISTRIBUTION SYSTEM

END USER

# How is Electricity quantified and measured?

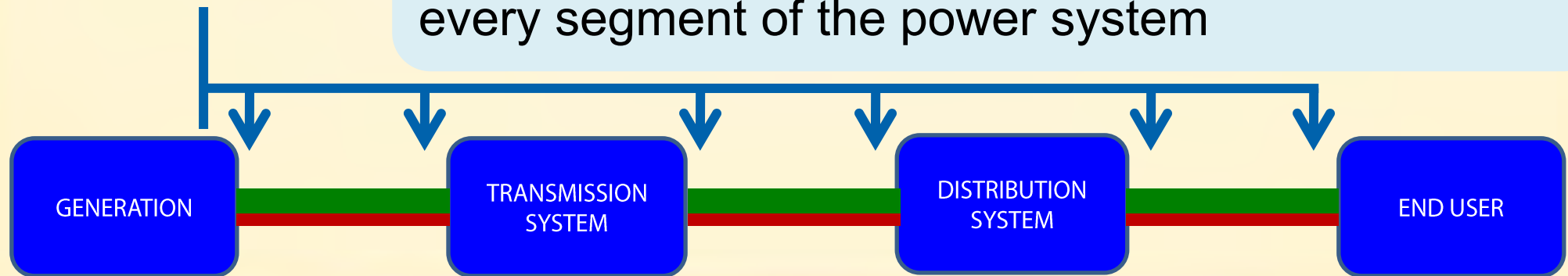
## Electricity Meter



Electric Energy is measured in terms of **MEGAWATT-hours, (MWh)**

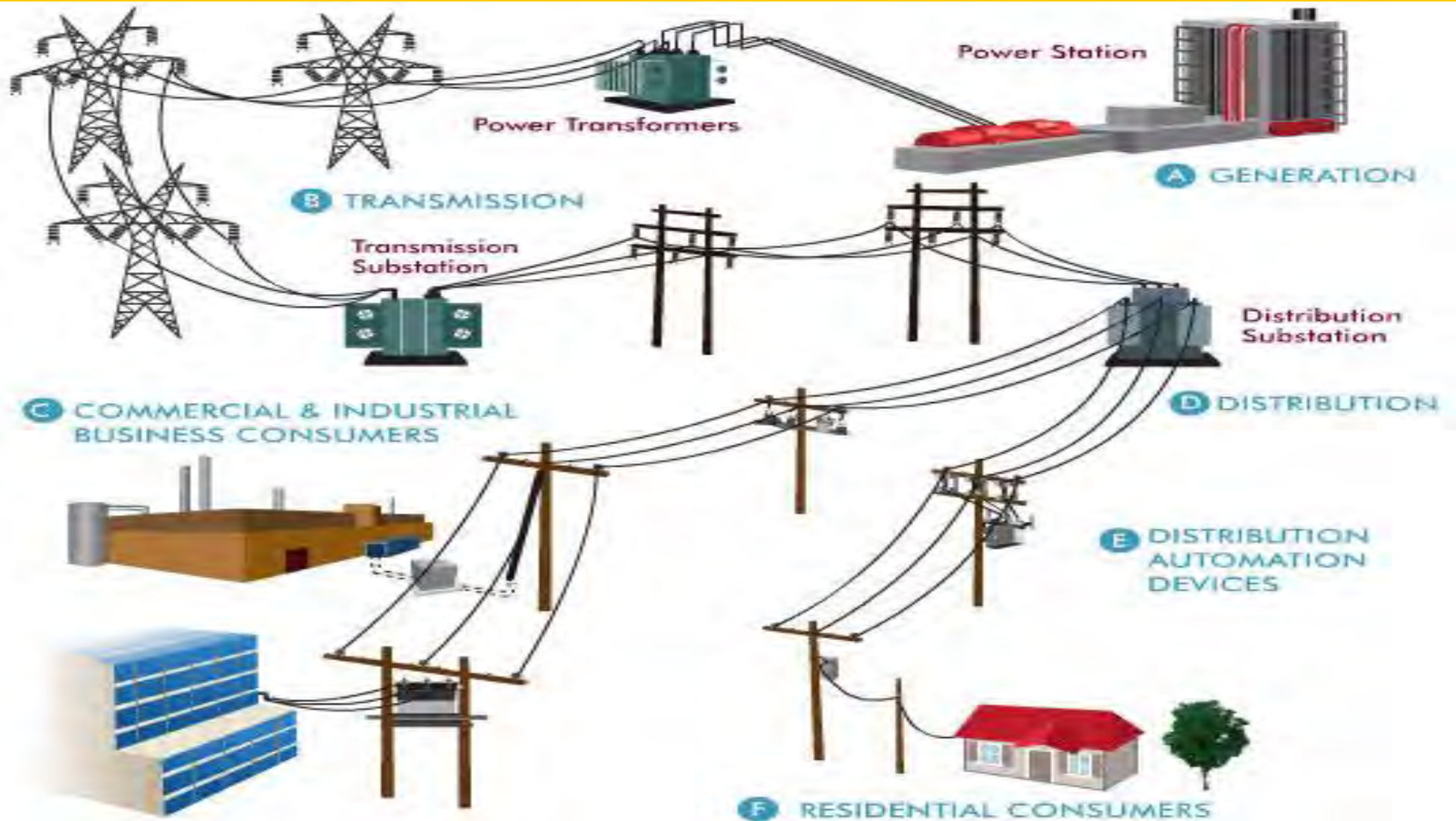
**Electricity Meter** is a device that measures Electric Energy and Demand

Electricity Meter shall be installed at defined locations to measure the amount of power utilized in every segment of the power system

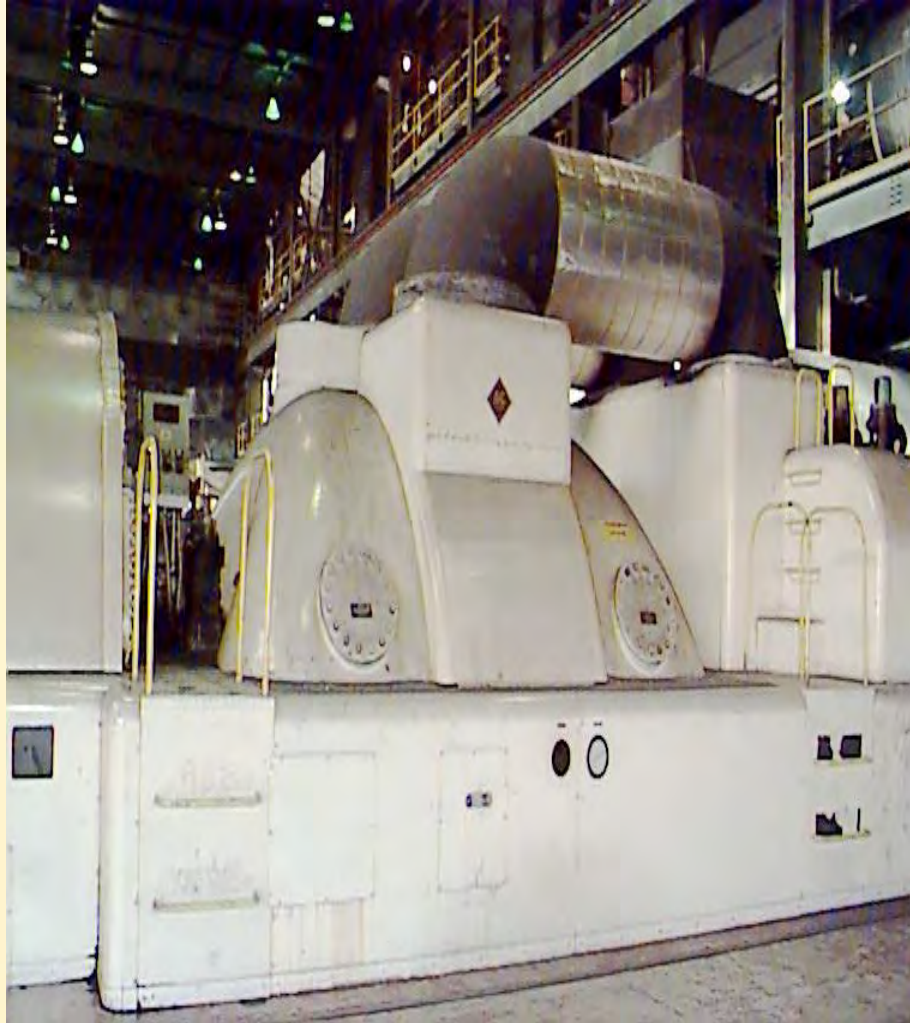




# What are the components of Power System?



# Power System Component - Generation



Generation of electric power, a business affected with public interest, shall be competitive and open.

Power generation shall not be considered a public utility operation. For this purpose, any person or entity engaged or which shall engage in power generation and supply of electricity shall not be required to secure a national franchise.

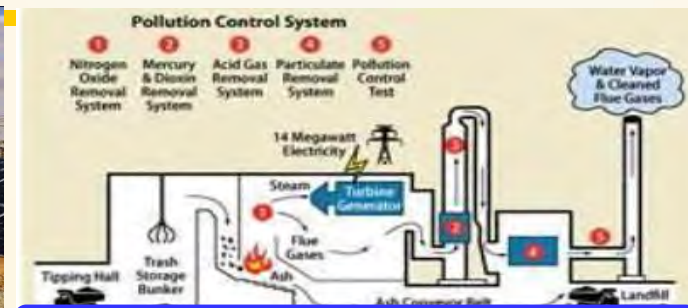
**EPIRA Sec 6**

**Generator** is a machine that converts mechanical energy to electrical energy through electromagnetic induction. A source of electricity.

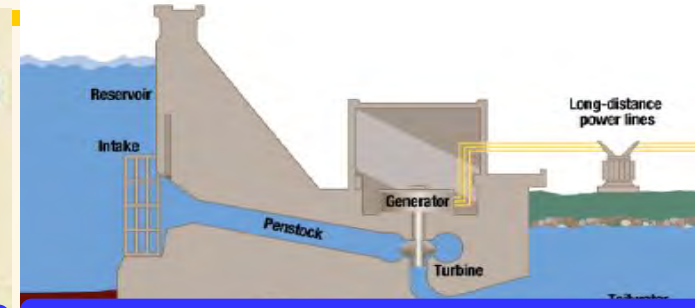
# What are the types of Generator Resources?



SOLAR



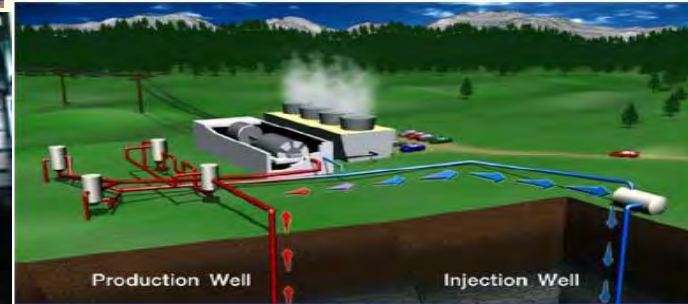
BIOMASS



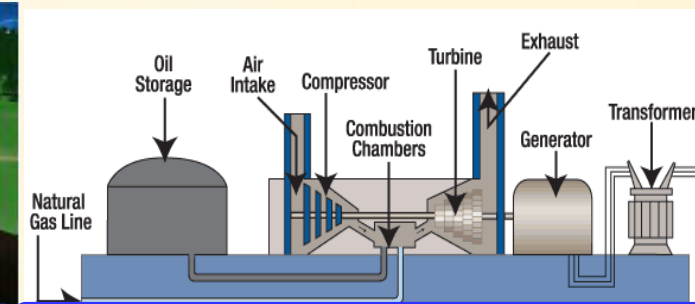
HYDROELECTRIC



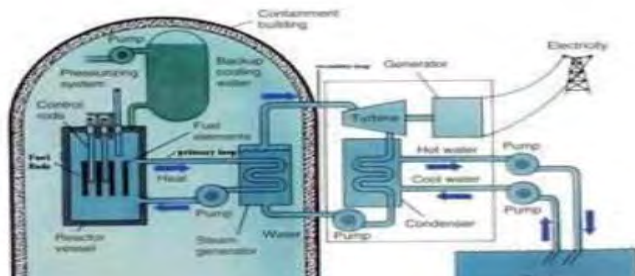
DIESEL



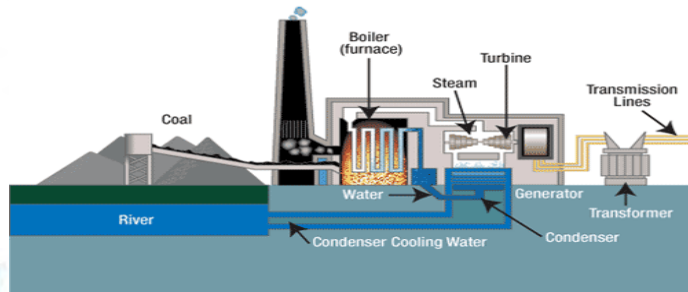
GEOHERMAL



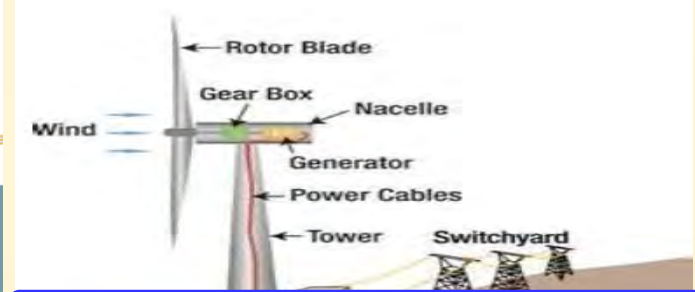
NATURAL GAS



NUCLEAR



COAL



WIND

# Power System Component - Transmission



NATIONAL GRID CORPORATION  
OF THE PHILIPPINES

## TRANSMISSION SYSTEM

Carries the power from generating station by stepping up the voltage (to minimize power loss) to distribution system

NGCP is the concessionaire of the National Transmission Corporation

NGCP as the System Operator shall provide open and non-discriminatory access to its transmission system to all electricity users

NGCP as the System Operator shall ensure and maintain the reliability, adequacy, security, stability and integrity of the nationwide electrical grid in accordance Grid Code

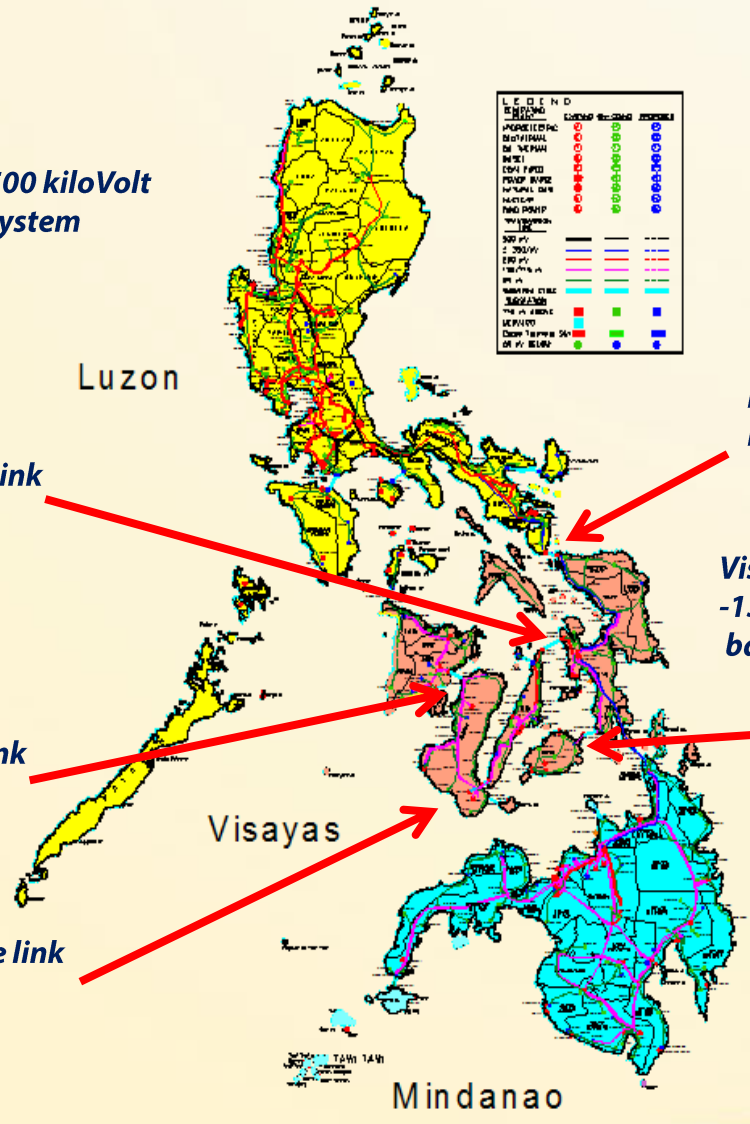
# Philippine Transmission System

**Luzon: 230 kiloVolt and 500 kiloVolt backbone transmission System**

**-Leyte-Cebu AC submarine cable link  
-(2x200 MW)**

**-Negros-Panay AC submarine cable link  
-(100 MW)**

**-Cebu-Negros AC submarine cable link  
-(2x100 MW)**



**Leyte-Luzon HVDC link: Interconnects Luzon and Visayas Transmission System**

**Visayas:  
-138 kiloVolt and 230 kiloVolt (Cebu Only) backbone transmission System**

**-Leyte-Bohol AC submarine cable link  
(100 MW)**

**Mindanao:  
138 kiloVolt and 230 kiloVolt backbone transmission System**

# Power System Component - Distribution



A distribution system's network carries electricity from the transmission system and delivers it to consumers.

## A DU shall:

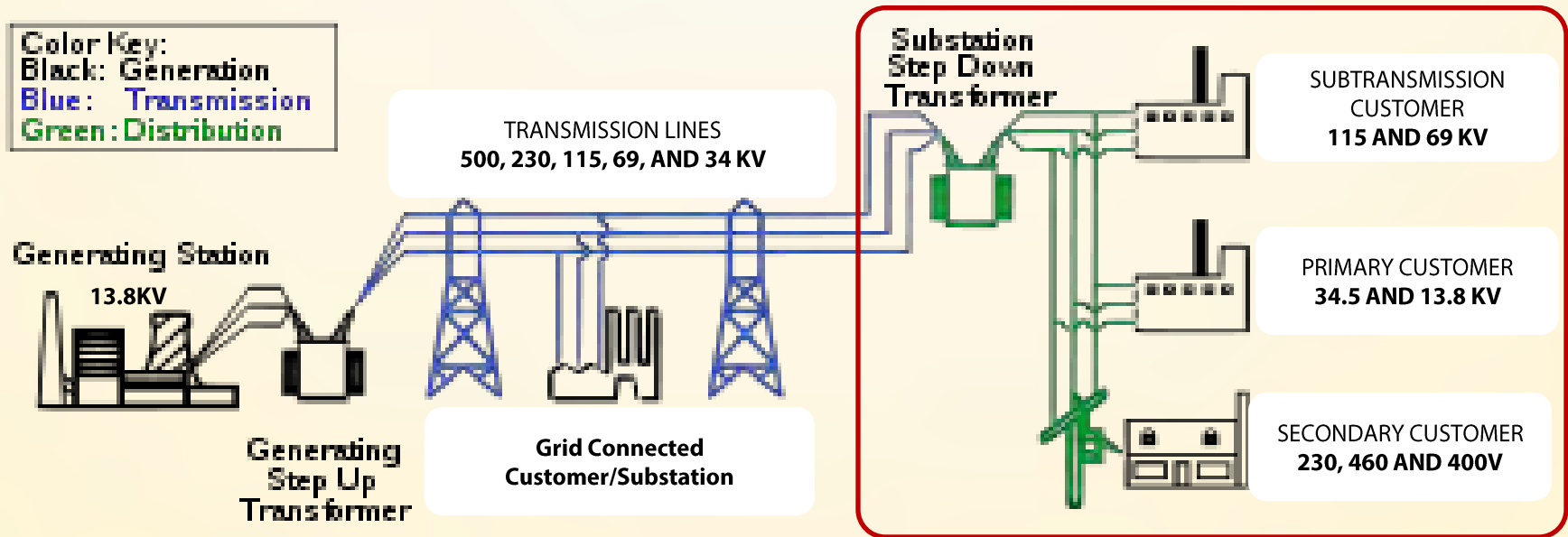
Be entitled to impose and **collect distribution wheeling charges** and **connection fees** from such end-users as approved by the ERC.

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.

Improve efficiencies, reliability of service, reduction of costs and compliance to the performance standards.

Submit to the ERC a statement of their compliance with the technical specifications prescribed in the Distribution Code and the performance standards.

# Distribution System



- ✓ The distribution system begins at the sub-station where power is delivered by overhead transmission lines and stepped down by transformers.
- ✓ In some cases, it sources its power from embedded generating station
- ✓ It serves electricity end users such as Industrial, Commercial and Residential Customers



# Sample Unbundled Rates

Service Info

Service ID Number : 788488102-3  
 Rate : Residential  
 Contract in the name of : JUAN DE LA CRUZ  
 Service Address : 123 MAGANDA ST., KAMI VILLAGE  
 PASIG CITY  
 METRO MANILA

Billing Info

Bill Date : 12 NOV 2007  
 Billing Period : 12 OCT 2007 to 12 NOV 2007  
 Due Date : 21 NOV 2007  
 Total kWh : 877  
 Total Current Amount : P 8,176.90

**Monthly electricity bill breakdown:**

BILL SUBGROUP	SUBTOTAL	PERCENTAGE
Generation	3,656.91	44.7%
Transmission	803.60	9.8%
System Loss	630.12	7.7%
<b>Distribution (Meralco)</b>	<b>2,137.96</b>	<b>26.1%</b>
Subsidies	99.19	1.2%
Government Taxes	814.21	10.0%
Universal Charges	34.90	0.4%
Other Charges	0.00	0.0%
<b>Total</b>	<b>8,176.90</b>	<b>100.0%</b>

monthly electricity consumption chart

For authorized collecting agents

Account Name: JUAN DE LA CRUZ  
 Billing Address: 123 MAGANDA ST., KAMI VILLAGE, PASIG CITY, METRO MANILA

Service ID No. (EIN): 788488102-3  
 ATM / Phone Reference No.: 0 788488102 3 11128  
 Meralco Reference No.: 0 788488102 3 071112 8 071126 09  
 Total Current Amount: P 8,176.90

## MAHALAGANG IMPORMASYON TUNGKOL SA INYONG GENERATION CHARGES

Inaprobahan na ng Energy Regulatory Commission (ERC) ang Automatic Generation Rate Adjustment (AGRA) mechanism. Simula ngayong Hulyo, ang Generation Charges ay magpapakitla na ng aktwal na halaga ng pag-generate ng kuryente.

Ang buwanang adjustment sa generation charge ay base sa mga pagbabago sa presyo ng kuryente mula sa generation companies tulad ng National Power Corporation (NPC), Independent Power Producers (IPP) at Wholesale Electricity Spot Market (WESM).

Ang Meralco ay hindi kikita sa adjustment na ito. Ito ay para sa mga generation companies na nakalahad sa itaas.

Ang Generation Charge para sa buwan ng Hulyo ay P5.6764/kWh.

## Generation Charge

This is the cost associated with DUs purchase of power, from its suppliers

## Transmission Charge

The cost of delivery of electricity from generators, to the distribution system

## System Loss

This refers to the cost-recovery of power lost due to technical and non-technical system losses.

## Distribution Charge

This refers to the cost of developing, constructing, operating and maintaining the distribution system

## Subsidies

Lifeline Discount or Lifeline Subsidy is a socialized pricing mechanism to benefit marginalized/low-income captive market customers.

## Government Taxes

Local Franchise Tax is levied by provinces and cities for businesses enjoying a franchise, and paid to such local government units.

## Universal Charges

This is a charge imposed on all electricity end users which includes the missionary electrification and environmental charges.





**Wholesale Electricity  
Spot Market**

# Overview of the WESM

# What is WESM?

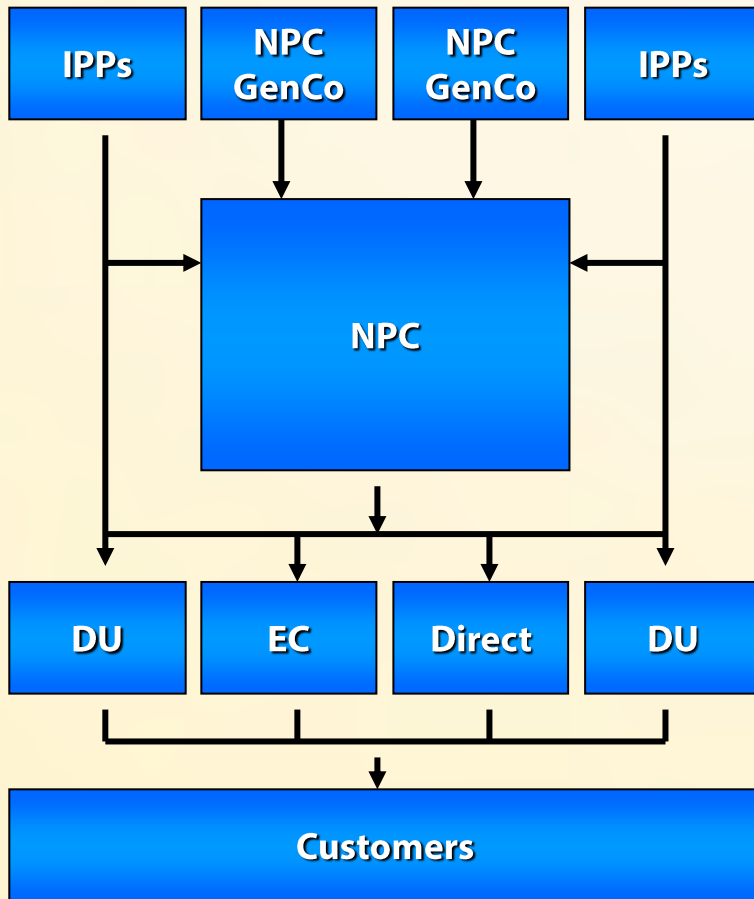
## Wholesale Electricity Spot Market (WESM)

**WESM** is a venue for trading electricity as a commodity

**WESM** serves as a clearing house to reflect the economic value of electricity for a particular period, as indicated by the "spot price"

**WESM** uses the concept of a "pool" where all electricity output from generators are centrally coordinated

# The Electric Power Industry Structure without WESM MONOPOLY (Pre-EPIRA)



## Generation

- NPC, IPPs (*IPPs - wholesale contract with NPC and some distribution companies*)

## Transmission

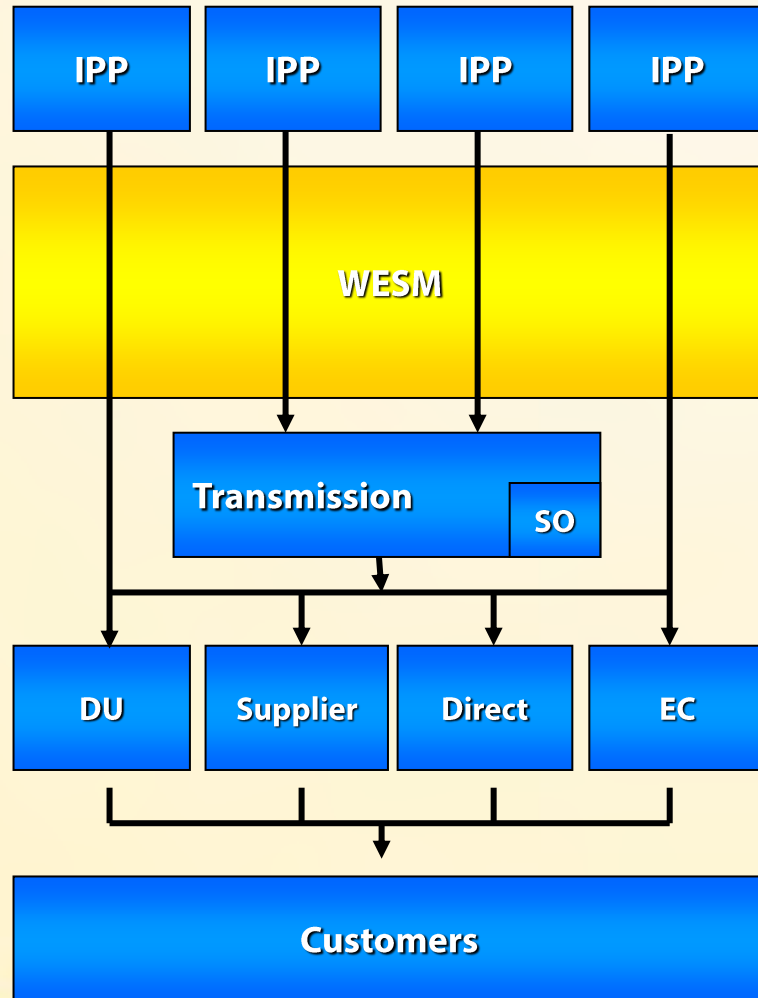
- NPC

## Distribution and Supply

- distribution utilities, electric cooperatives, NPC

# The Electric Power Industry Structure with WESM

## 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

# New Industry Structure

## Generation

- Competitive
- Privatized

## Transmission

- Regulated
- Privatized
- Includes system operations functions

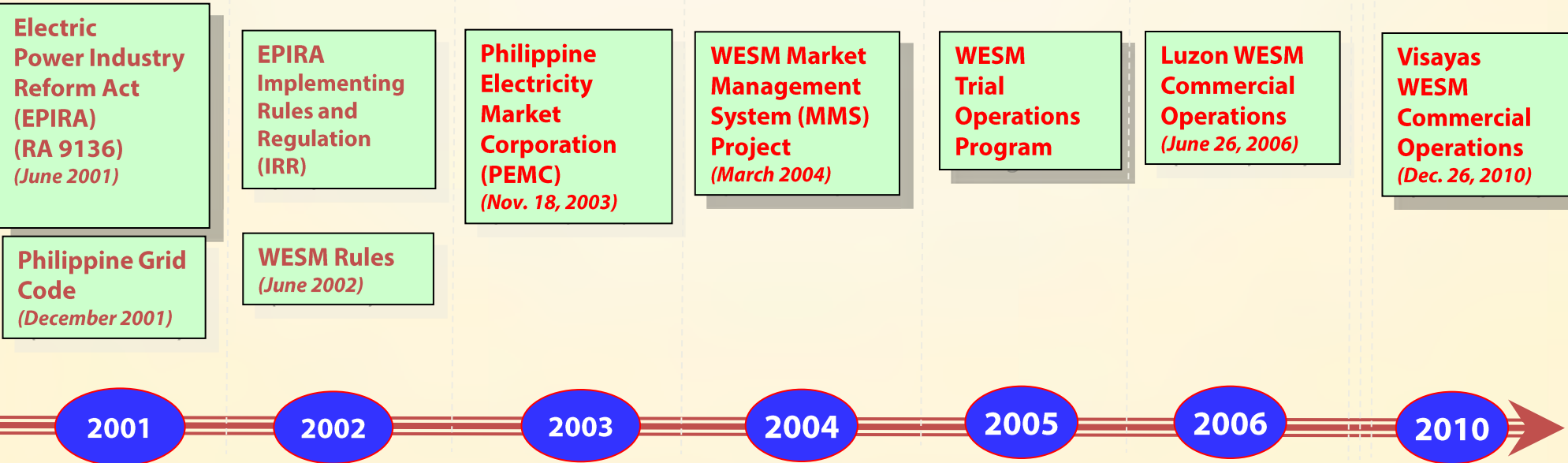
## Distribution

- Regulated
- Privately-owned & Electric Cooperatives

## Retail/Supply

- Competitive

# WESM Implementation: Timeline



# What is the Legal Basis for WESM Establishment?

## EPIRA Sec. 30: *Wholesale Electricity Spot Market (WESM)*

- Within one (1) year from the effectivity of this Act, the DOE shall establish a wholesale electricity spot market composed of the wholesale electricity spot market participants.
- 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.

# What is the Legal Basis for WESM Establishment?

## Section 30, RA 9136 (“Electric Power Industry Reform Act of 2001” or EPIRA)

- Subject to the compliance with membership criteria, all generating companies, distribution utilities, suppliers, bulk consumers/end users and other similar entities authorized by the ERC shall be eligible to become members of the wholesale electricity spot market.
- The cost of administering and operating the wholesale electricity spot market shall be recovered by the market operator through a charge imposed on all market members: Provided: That such charge shall be filed with and approved by the ERC.



# Legal Basis-Related Provisions

## GENERATION Section 6, RA 9136

- Generation of electric power, a business affected with public interest, shall be competitive and open.
- Upon implementation of retail competition and open access, the prices charged by a generation company for the supply of electricity shall not be subject to regulation by ERC except as otherwise provided in this Act.

# What are the General Features of WESM?

## WESM as a venue for “trading” of electricity –

- Centralized scheduling generation and supply of electricity, including those covered by supply contracts
- Determining prices of un-contracted quantities (i.e., spot market transactions)
- Settlement of spot market transactions (billing, payment and collections)

# What are the General Features of WESM?

**WESM is a real-time energy market.**

- Generation schedules to meet customer demand or requirements for each hour of the day are determined an hour ahead.

**WESM is a mandatory market.**

- All persons or entities connected to the grid are required to become members of the WESM. Failure to register is a ground for disconnection from the grid.

# What are the General Features of WESM?

WESM operates in Luzon and Visayas.

- Commercial operations commenced in Luzon on 26 June 2006 and in the Visayas on 26 December 2010.
- WESM operates as a single market, and this is possible as the grids are connected through the Leyte-Luzon HVDC link.

# What are the General Features of WESM?

## Market Operator of WESM

- ❑ WESM is administered by the Philippine Electricity Market Corporation (PEMC).
- ❑ The Market Operator or PEMC, as administrator of the WESM, is not a party to the selling and buying of electricity that passes through the market.

## System Operations

- ❑ In the EPIRA, the systems operations functions resides in an entity different from the market operator.

# What is the Market Structure of WESM?

## **Participation**

- Trading Participants (Generation Companies & Customers)
- Ancillary Service Providers

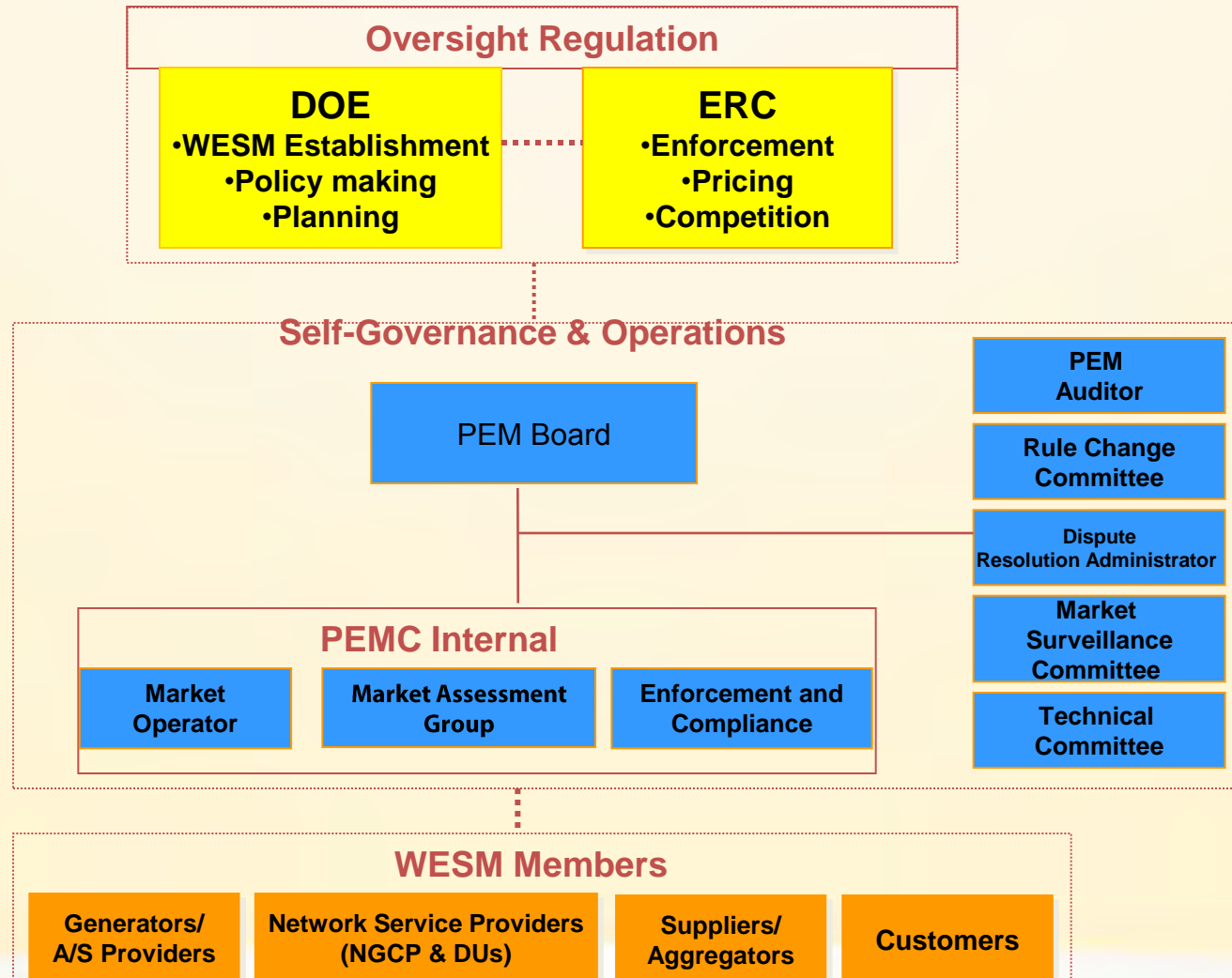
## **Operations/Services**

- Market Operator (PEMC)
- Systems Operator (NGCP)
- Network Service Provider (NGCP and Dus)
- Metering Services Provider (NGCP)

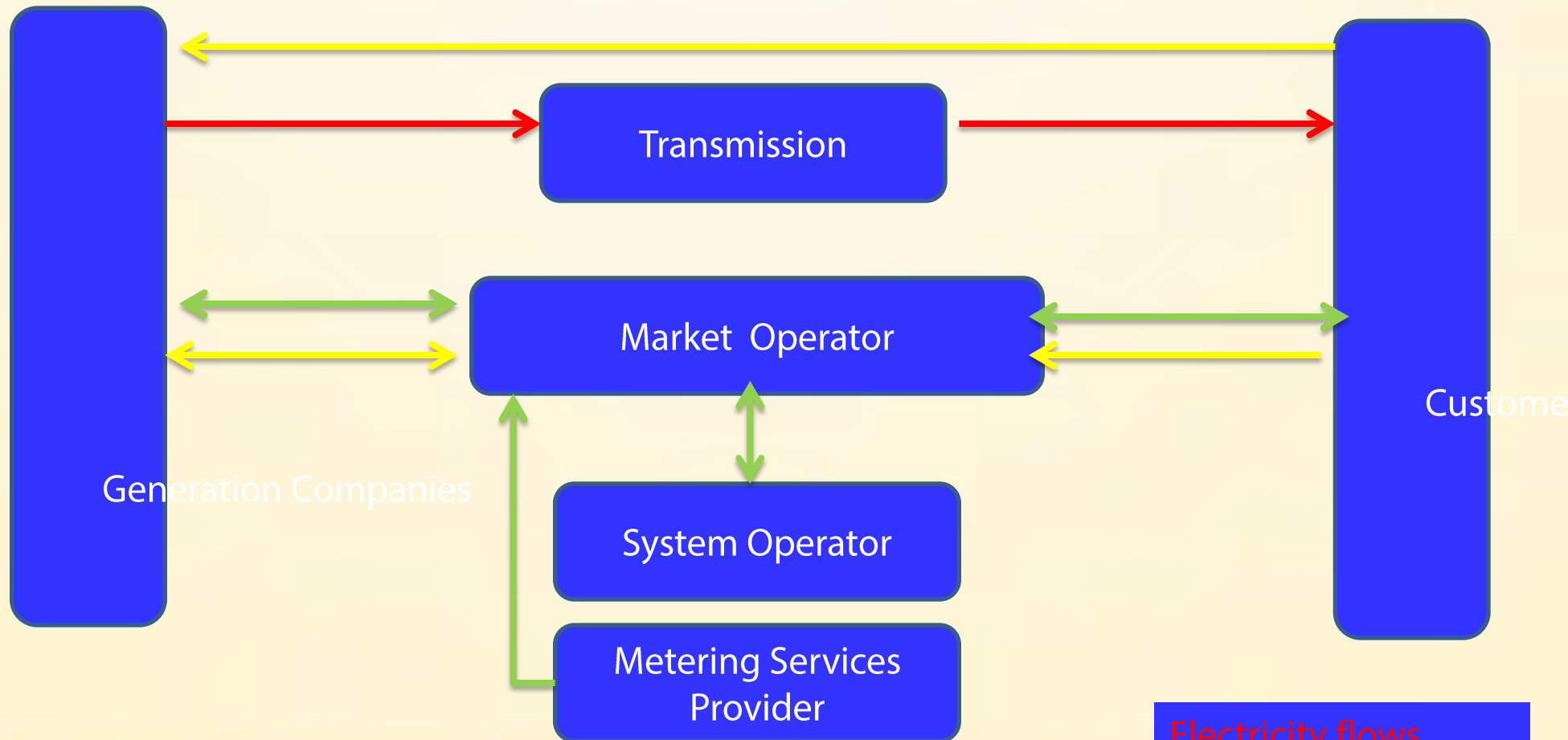
## **Governance and Regulation**

- PEM Board, WESM Governance Committees and PEMC governance units
- Department of Energy
- Energy Regulatory Commission

# What is the Market Structure of WESM?



# What is the Market Structure of WESM?



Electricity flows  
Information flows  
Money flows



# What is the Market Design of WESM?

## Centralized Scheduling of Generators

- **Hourly** – generation schedules to meet demand is determined for each hour of the day, by the hour.
- **Bid-based** – participants submit bids/offers to be scheduled
- **Gross pool** – all energy transactions are scheduled in the market, including quantities covered by bilateral contracts
- **Mandatory market** – all entities connected to grid must participate

# Centralized Scheduling Hourly/Daily Trading Mechanism



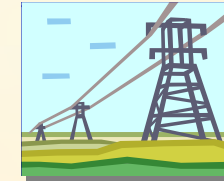
Trading Participants (TP)



Market Operator (PEMC)  
Power Market



System Operator (NGCP)  
Power System



**Market Input Data:**

- Energy offers and bids



**Market Clearing Results:**

- Prices and Schedules



**Market Input Data:**

- Bilateral contract quantities



**Market  
Management  
System**

(MMS)

**System Demand:**

- Energy demand
- Reserve requirements



**System Condition:**

- Outages/contingencies
- Transmission limits



**Dispatch Schedules**

- Dispatch targets



**Revenue Meters:**

- Metered values



# Centralized Scheduling Gross Pool

## Gross Pool

(Every Generator submits offers to be scheduled in the power system)



### Generator Trading Participants

- Fully contracted
- Partially contracted

ENERGY Offer  
(Price & Quantity)



Generator  
Dispatch  
Scheduling

# What is the Market Design of WESM?

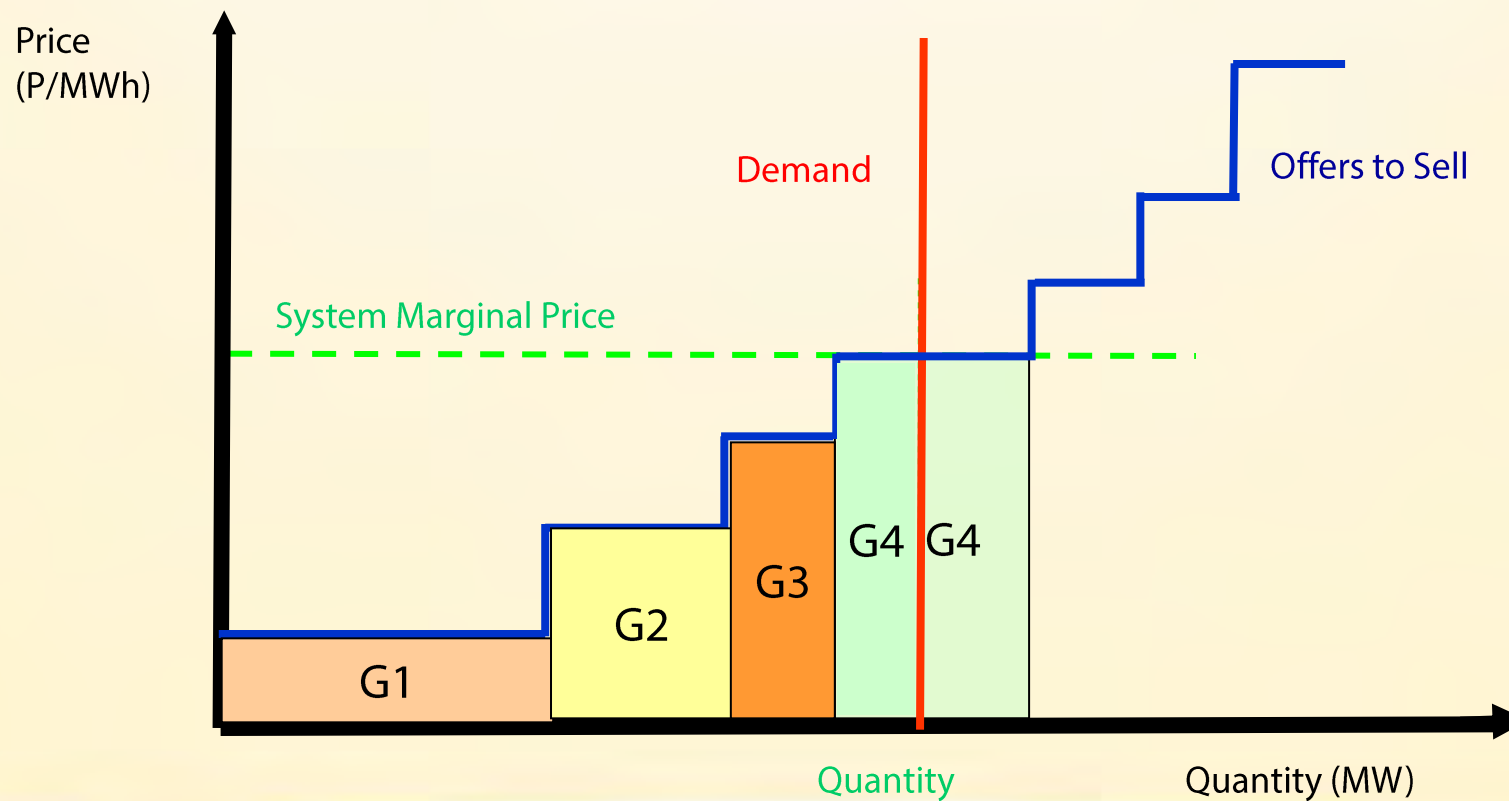
## Pricing of Spot or Un-contracted Transactions

- **Locational marginal pricing** – prices are set at various locations or nodes to reflect the economic cost of losses and congestion in the transmission system

# Spot Pricing

## Locational Marginal Price

### Determining Schedules and Clearing Price



# What is the Market Design of WESM?

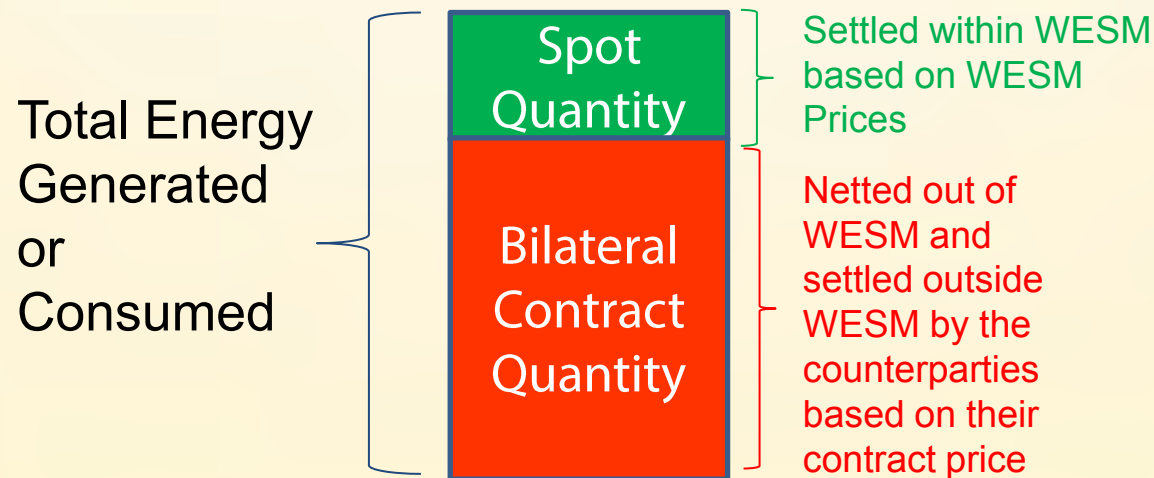
## Settlement of Spot or Un-contracted Transactions

- **Net settlement** – bilateral contracts are settled between the parties based on their contracts, outside the WESM settlement processes
- **Two-settlement system** – trading amounts account for discrepancies in scheduled and actual outcomes

# Settlement of Spot Transactions

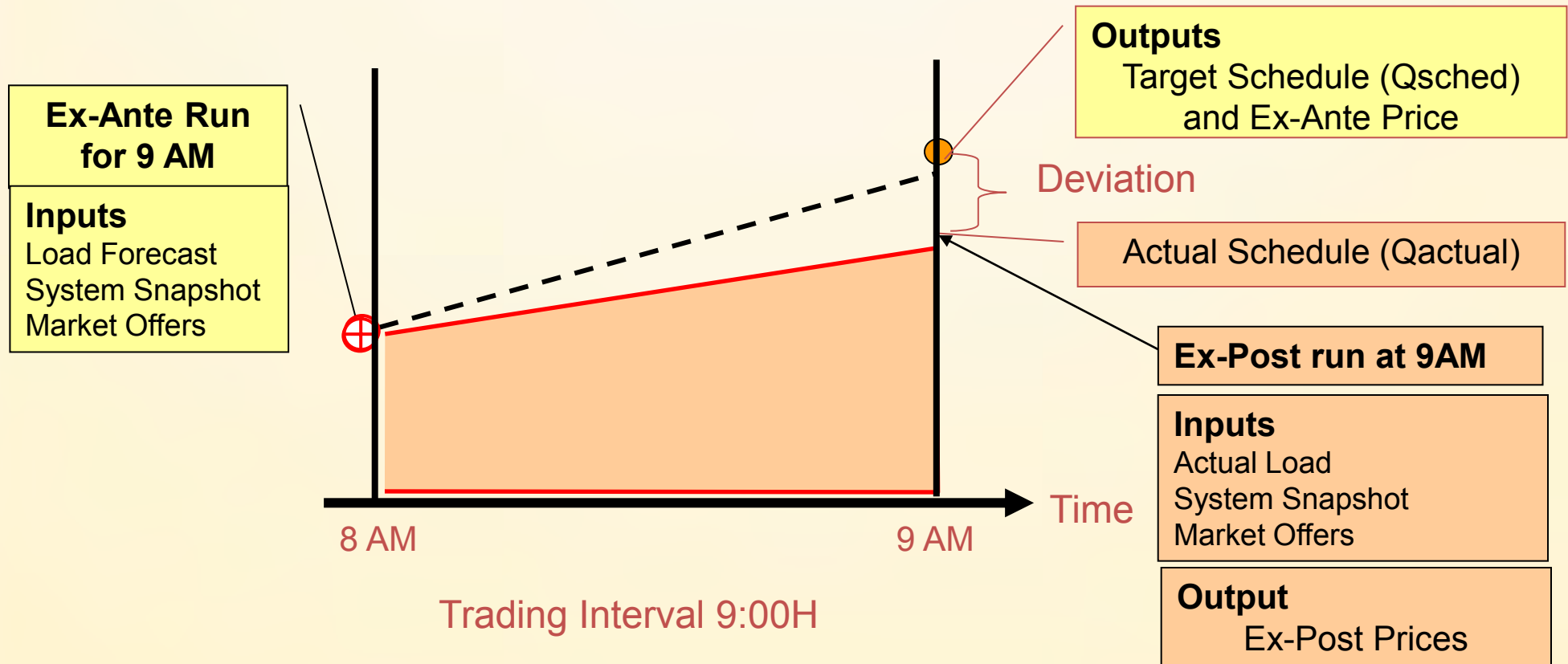
## Net Settlement

**Net Settlement**  
(Only Spot quantity is settled at market price)



# Settlement of Spot Transactions

## Two-Settlement System



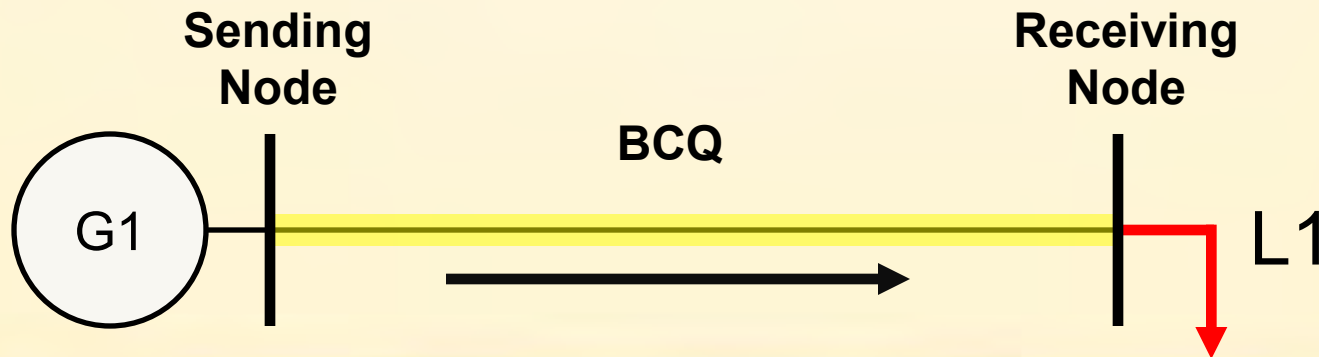
$$\begin{aligned}
 \text{Trading Amount}_{(\text{hour})} &= \text{Ex-ante Amount} + \text{Ex-post Amount} \\
 &= Q_{\text{sched}} * P_{\text{ex-ante}} + (Q_{\text{actual}} - Q_{\text{sched}}) * P_{\text{expost}}
 \end{aligned}$$



# What is line rental?

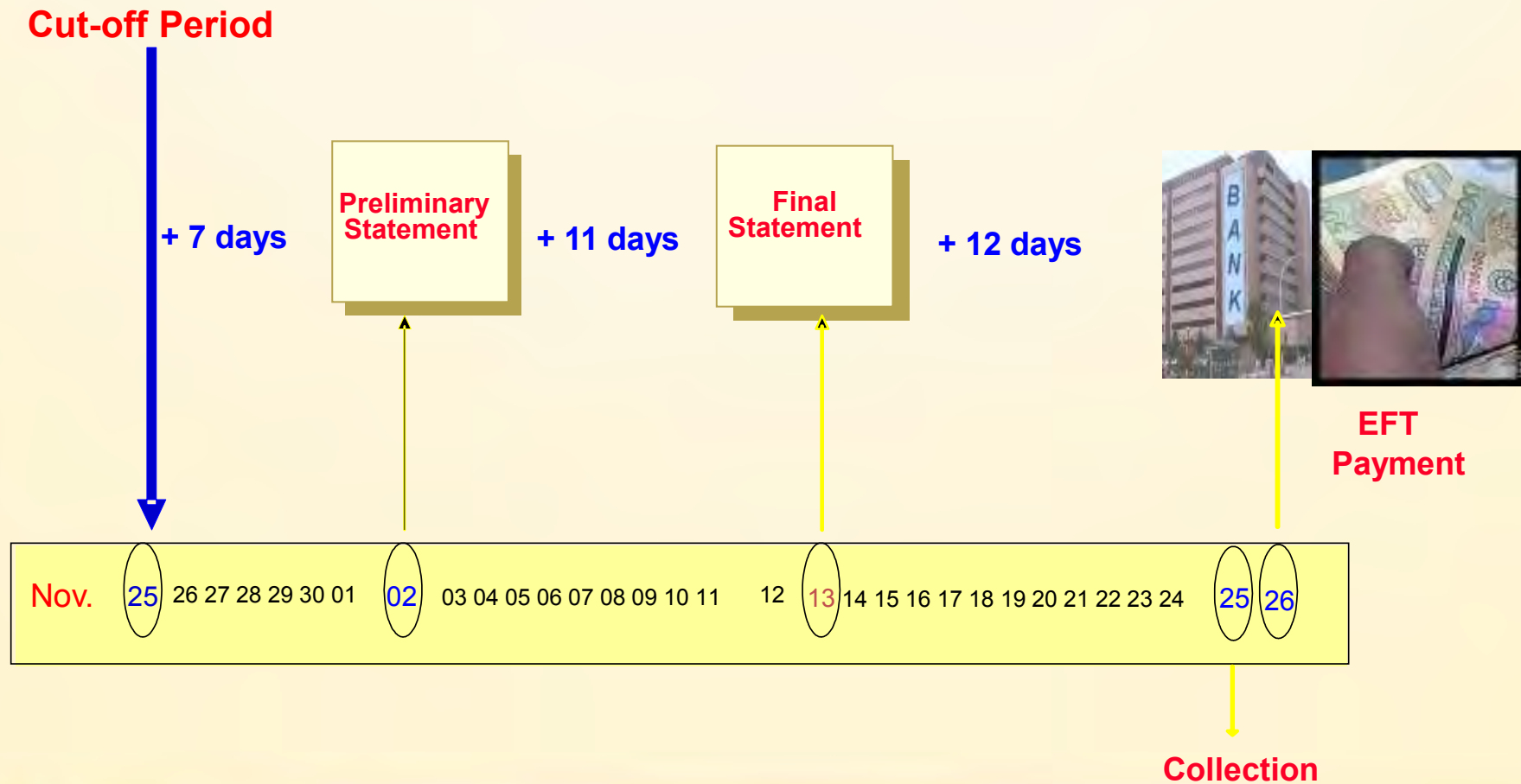
*“The economic rental arising from the use of a transmission line, calculated as the difference in value between flows out of the receiving node of that line and flows into the sending node...”<sup>1</sup>*

$$\text{Line Rental} = \text{BCQ} \times (\text{LMP}_{\text{RECEIVING}} - \text{LMP}_{\text{SENDING}})$$



<sup>1</sup> WESM Price Determination Methodology

# Settlement of Spot Transactions Timetable





**Wholesale Electricity  
Spot Market**

# Introduction to RCOA

# What is Retail Competition and Open Access (RCOA)?

## Retail Competition

- refers to the provision of electricity to a Contestable Market by Suppliers through Open Access\*

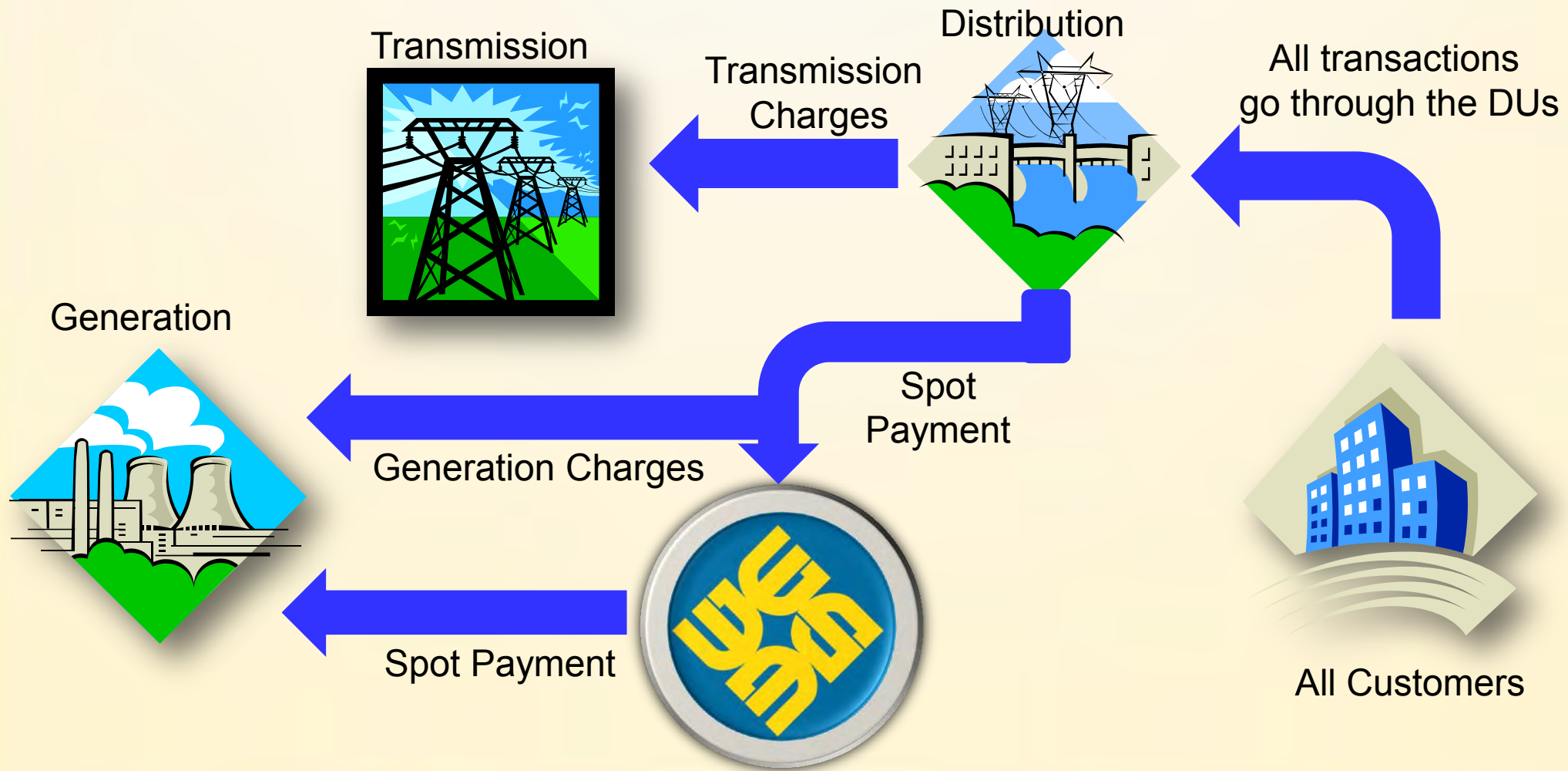
## Open Access

- 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. For this purpose, qualified Persons shall include all WESM Participants\*\*

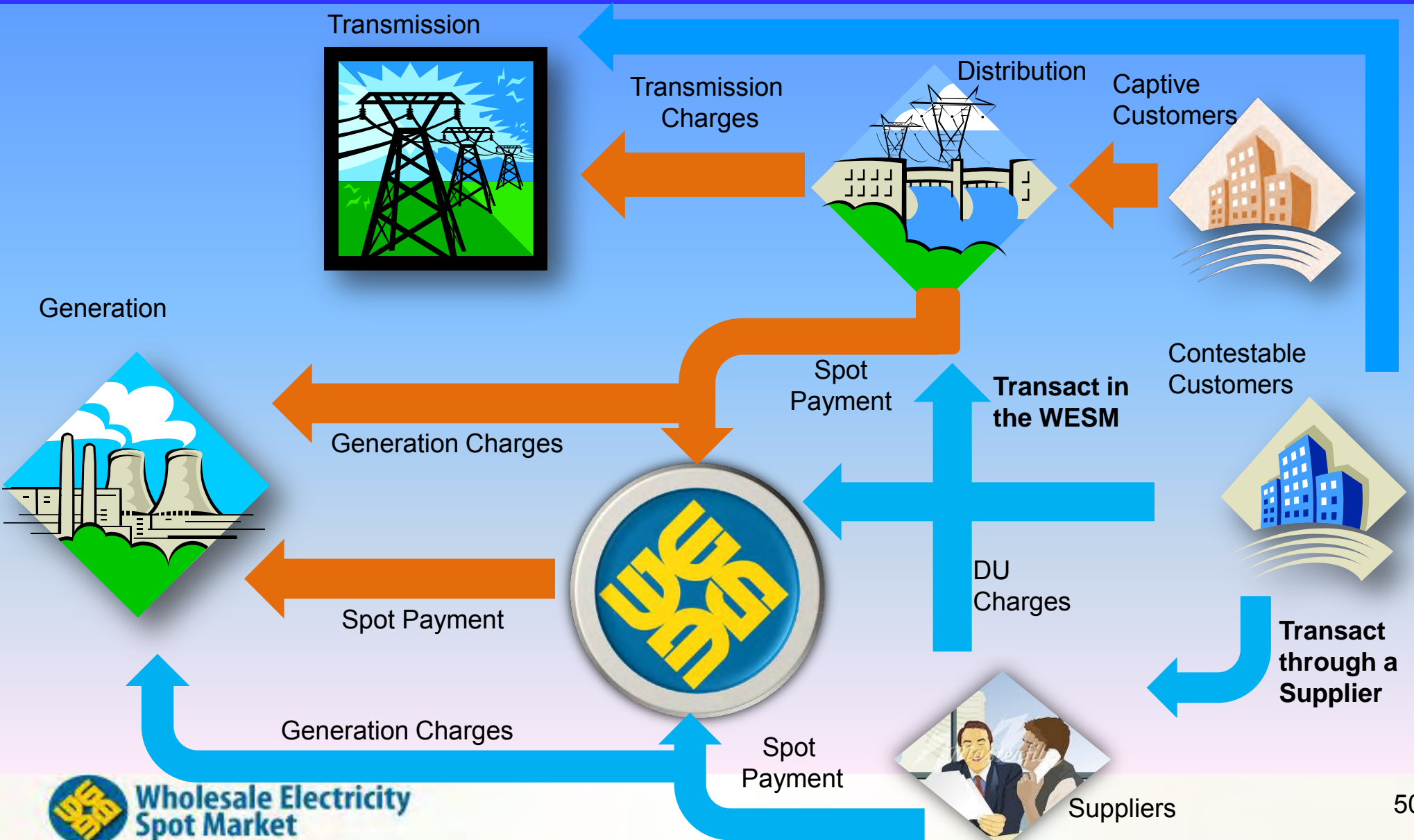
\*(EPIRA IRR Rule 4 (vvv))

\*\* (EPIRA IRR Rule 4 (hhh))

# How does the industry transact before RCOA?



# How does the industry transact with RCOA?



# Definition of Terms

## Contestable Customer

- refers to the electricity end-user who is a part of the Contestable Market.

## Contestable Market

- 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.

## Captive Market

- 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.

# Definition of Terms

## Central Registration Body

- refers to the entity assigned to undertake the development and management of the required systems and processes and information technology system that shall be capable of handling customer switching and information exchange among retail electricity market participants, as well as the settlement of their transactions in the WESM

## Certificate of Contestability

- refers to the certificate issued by ERC to the qualified contestable customers based on rules on contestability



# Definition of Terms

## Directly Connected Customers

- refer to industrial or bulk electricity end-users, which are directly supplied with electricity by a Generation Company or Power Sector Assets and Management Corporation (PSALM) or NPC pursuant to Republic Act No. 6395 as amended by Presidential Decree No. 395;

## Last Resort Supply Event

- refers to an event when a supplier of a Contestable Customer has defaulted on its obligations or fails to provide electricity based on the following reasons: (i) cessation of its operation; (ii) revocation of its license; (iii) non-payment of transmission and distribution services; (iv) suspension of its membership in the WESM due to non-compliance to WESM Rules and retail market (v) such other grounds that may be specified by the ERC

# Definition of Terms

## Open Access Date

- refers to the date determined by the ERC that marks the commencement of the operations of RCOA in the grid specified.

## Supplier/ Retail Electricity Supplier (RES)

- refers to any person or entity authorized by the ERC to sell, broker, market or aggregate electricity to the end-users.

## Retail Supply Contract / RSC

- The contract for the sale of electricity entered into by and between the RES/ Local RES and the Contestable Customer

# What is the Legal Basis for RCOA Establishment?

## Retail Competition and Open Access

- Any law to the contrary notwithstanding, retail competition and open access on distribution wires shall be implemented not later than three (3) years upon the effectivity of this Act, subject to the following conditions:
  - Establishment of the wholesale electricity spot market;
  - Approval of unbundled transmission and distribution wheeling charges;
  - Initial implementation of the cross subsidy removal scheme;
  - Privatization of at least seventy (70%) percent of the total capacity of generating assets of NPC in Luzon and Visayas; and
  - Transfer of the management and control of at least seventy percent (70%) of the total energy output of power plants under contract with NPC to the IPP Administrators.

# What is the Legal Basis for RCOA Establishment?

## EPIRA SEC. 31. Retail Competition and Open Access.

- The ERC shall allow all electricity end-users with a monthly average peak demand of at least one megawatt (1MW) for the preceding twelve (12) months to be the contestable market. Two (2) years thereafter, the threshold level for the contestable market shall be reduced to seven hundred fifty kilowatts (750kW).

## EPIRA IRR- Rule 12 Section 3

- The ERC shall, after due notice and public hearing, declare initial implementation of Open Access not later than three (3) years from the effectivity of the ACT, subject to compliance to the pre-conditions.

# DOE Issuances

## DOE Department Circular 2012-02-0002 Section 1 –

- “The Philippine Electricity Market Corporation is hereby designated as Central Registration Body (CRB)...”

## DOE Department Circular 2012-05-0005 –

- “Prescribing the General Policies for the Implementation of the Retail Competition and Open Access”

## DOE Department Circular 2012-11-0010

- Providing for Additional Guidelines And Implementing Policies For Retail Competition And Open Access And Amending Department Circular No. (DC) 2012-05-0005 Entitled “PRESCRIBING THE GENERAL POLICIES FOR THE IMPLEMENTATION OF THE RETAIL COMPETITION AND OPEN ACCESS

## DOE Department Circular 2013-01-0002 –

- “Promulgating the Retail Rules for the Integration of Retail Competition and Open Access in the Wholesale Electricity Spot Market”

# What are the Entities Involved in RCOA?

- I. Department of Energy (DOE)
- II. Energy Regulatory Commission (ERC)
- III. National Electrification Administration (NEA)
- IV. Central Registration Body (CRB) / PEMC
- V. National Grid Corporation of the Philippines
- VI. Distribution Utility (DU)
- VII. Contestable Customers
- VIII. Supplier (RES)
- IX. Local Supplier (Local RES)
- X. Supplier of Last Resort (SOLR)
- XI. Metering Services Provider

# What are the Entities Involved in RCOA?



## Department of Energy (DOE)

- Supervise the restructuring of the electric power industry;
- Formulate rules and regulations as may be necessary to implement the objectives of the EPIRA; and
- Exercise such other powers as may be necessary or incidental to attain the objectives of the EPIRA

# What are the Entities Involved in RCOA?



## Energy Regulatory Commission (ERC)

- Evaluate the performance of the market and based on its evaluation, gradually reduce the threshold level for the Contestable Market until it reaches the household demand level;
- Determine the appropriate mechanism to mitigate the impact of migration of Contestable Customers in the operation of the DU and its Captive Market
- Ensure:
  - customer choice and promote competition
  - encourage market development,
  - discourage/penalize abuse of market power, cartelization and any anti-competitive or discriminatory behavior
- Provision of regulatory support on the recoveries of needed investments to support the efficient and effective implementation of RCOA.



# What are the Entities Involved in RCOA?

## Energy Regulatory Commission (ERC)



- Declare Open Access Date;
- Establish and approve a methodology for setting transmission and distribution wheeling rates, and for setting retail rates for the Captive Market of a DU
- Prescribe qualifications and evaluate applications for supply of electricity to the Contestable Market, issue license to suppliers, metering service providers
- Upon the initial implementation of RCOA, specify the Contestable Market through the issuance of Certificate of Contestability to electricity end-users with an average twelve months peak demand of one megawatt and above

# What are the Entities Involved in RCOA?

## National Electrification Administration (NEA)



- Prepare Electric Cooperatives (ECs) for the RCOA regime and provide the technical, financial and institutional support and assistance necessary in ensuring that the ECs are able to complete and perform their mandates under a competitive environment
- Assist the ECs in educating their respective member-consumers about the implementation of RCOA and its impact on electricity end-users
- Develop mitigating measure to address any impact on the operations and viability of the ECs resulting from the possible migration of C's to their Suppliers.

## National Grid Corporation of the Philippines (NGCP)



- Abide by the methodology approved by the ERC for setting transmission wheeling rates upon the implementation of RCOA
- As the System Operator, provide open and non-discriminatory access to its transmission system to all electricity users
- Ensure reliability and adequacy of transmission system to cater to the RCOA requirements.

# What are the Entities Involved in RCOA?

For the purpose of implementing the functions of the CRB under the RCOA regime and under the supervision of DOE, PEMC is directed to undertake the following:

## Philippine Electricity Market Corporation (PEMC)



- Develop Market Infrastructure, Systems and Processes
- Conduct Training for the Electric Power Industry Participants
- Coordinate with relevant stakeholders and other government agencies

# What are the Entities Involved in RCOA?

## Distribution Utilities (DUs)

- Ensure provision of pertinent information necessary for Contestable Customers' transition to RCOA forty five (45) days prior to Open Access Date
- Continuously review and update respective Distribution Development Plan (DDP) and prepare for the investments necessary to adequately respond to the RCOA requirements
- Notify ERC of its intent to recover stranded contract costs
- Conduct regular Information and Education Campaign to all electricity end-users particularly the Captive Customers on the RCOA and its impact to the end-users.

# What are the Entities Involved in RCOA?

## Distribution Utilities (DUs)

- Provide open and non-discriminatory access to its distribution system to all electricity end-users, including suppliers
- Ensure reliability and adequacy of distribution system to cater to the RCOA requirements;
- Ensure least-cost supply to electricity end-users as well as transparency in the rates and charges applied to both regulated and competitive services
- Perform the role as the default Metering Service Provider (MSP)

# What are the Entities Involved in RCOA?

## Contestable Customers (CC)

- The electricity end-user who is a part of the Contestable Market.
- Shall be allowed to choose where to source its electricity either from a Generation Company, a Supplier, an affiliate of a DU which has constituted itself as a Supplier, or the Supply Business of a Distribution Utility (DU) within its franchise area.
- Shall only deal with a supplier of electricity duly licensed by the ERC.

# Sample Certificate of Contestability



## CERTIFICATE OF CONTESTABILITY

Pursuant to Section 38 of Republic Act No. 9136 (RA 9136) creating the Energy Regulatory Commission (Commission), and the pertinent provisions of the Implementing Rules and Regulations (IRR) of RA 9136, and the Rules for Contestability issued by the Commission, this Certificate of Contestability\* is hereby granted to:

By virtue of this Certificate, the above named Contestable Customer in the Competitive Retail Electricity Market (CREM), shall be entitled to all the rights and privileges subject to such obligations appertaining, consistent with the laws, rules and regulations pertinent thereto.

Given this 20<sup>th</sup> day of September, 2011, Ortigas Center, Pasig City, Philippines.

  
FRANCIS SATURNINO C. JUAN  
Executive Director

\* Certificate applies to facilities covered by Service ID No. 188934301

Pursuant to Section 38 of Republic Act No. 9136 (RA 9136) creating the Energy Regulatory Commission (Commission), and the pertinent provisions of the Implementing Rules and Regulations (IRR) of RA 9136, and the Rules for the Contestability issued by the Commission, the Certificate of Contestability is hereby granted to:

**<Contestable Customer's Name>**

By the virtue of this certificate, the above named Contestable Customer in the Competitive Retail Electricity Market (CREM), shall be entitled to all the rights and privileges subject to such obligations appertaining, consistent with the laws, rules and regulations pertinent thereto.

# What are the Entities Involved in RCOA?

## Suppliers (RES)

- Any person or entity authorized" by the ERC to sell, broker, market or aggregate electricity to the end-users.
- Shall register with the PEMC as a WESM direct member Trading Participant
- Shall provide PEMC with its offer of terms and conditions to the CCs for publication in the PEMC website.

## Local Suppliers

- Refers to the Non- regulated supply business of a Distribution Utility (DU) catering to the Contestable Customers within its franchise area, duly authorized by the ERC.
- Shall include the Philippine Economic Zone Authority (PEZA) and the PEZA- Accredited Utility Ecozone Enterprises in the public and private Ecozones (EZ's) respectively
- Shall provide PEMC with its offer of terms and conditions to the CCs for publication in the PEMC website.



# What are the Entities Involved in RCOA?

## Supplier of Last Resort

- If the Supplier is not able to perform its obligations to its Contestable Customers the franchised DU shall act as the SOLR.
- Should the franchised DU is deemed not capable to perform the SOLR service, the ERC, prior to the Full RCOA Commercial Operation Date, shall designate another DU which will perform the SOLR function for the affected Contestable Customers.
- The SOLR may source electricity to be supplied to the Contestable Customers through the WESM or any available source of energy supply.

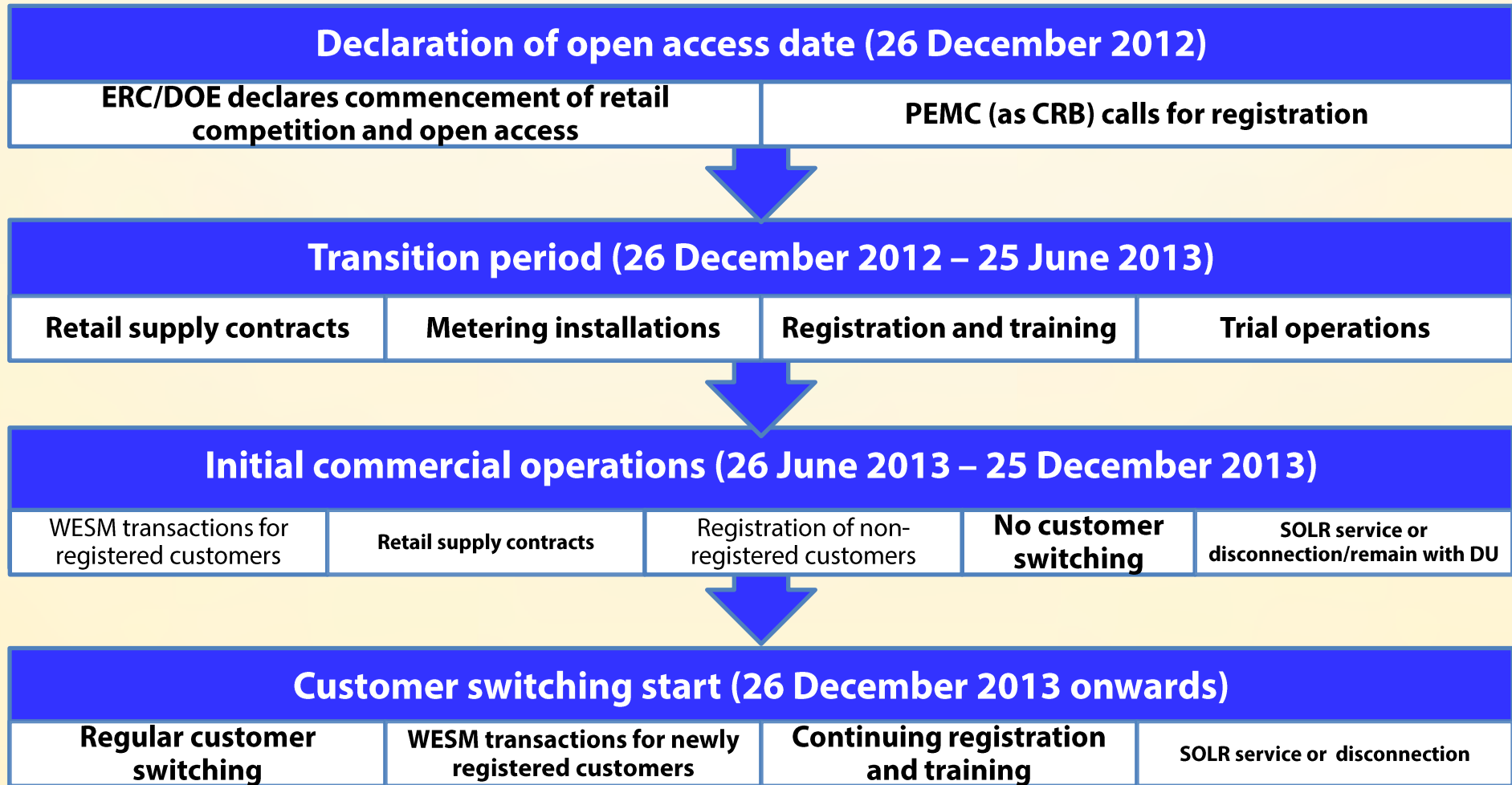
*DOE Department Circular 2012-11-0010*

# What are the Entities Involved in RCOA?

## Metering Services Providers (MSPs)

- Except for the DCCs connected to the system operated by NGCP, the DU shall be the Metering Service Provider (MSP) and owner of all billing and the associated metering equipment prior to the implementation of competitive metering services.
- The metering requirement for the CC shall be compliant with the WESM metering standards.

# What are the Activities During the First Year of RCOA?





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# About the Contestable Customers

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# Mandatory Contestability and Customer Choice

## Power of Choice

- Consistent with EPIRA, RCOA should promote customer choice
- The power of choice is conferred to Contestable Customers (CCs) subject to the rules and regulations

## Customer Empowerment

- CCs shall be allowed to choose where to source its supply of electricity
- CCs may source electricity supply requirements from a Supplier duly licensed by ERC, a Local Supplier duly authorized by the ERC, or through the WESM

# Who are the Qualified Contestable Customers (CCs)?

## Section 31 of EPIRA

- Provides that upon the initial implementation of RCOA, the ERC shall allow all electricity end-users with a monthly average peak demand of at least one megawatt (1 MW) for the preceding twelve (12) months to be the **contestable market**

## Contestable Market

- 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 the EPIRA

## Contestable Customer

- Refers to the electricity end-user who is part of the contestable market

# Who are the Qualified Contestable Customers (CCs)?

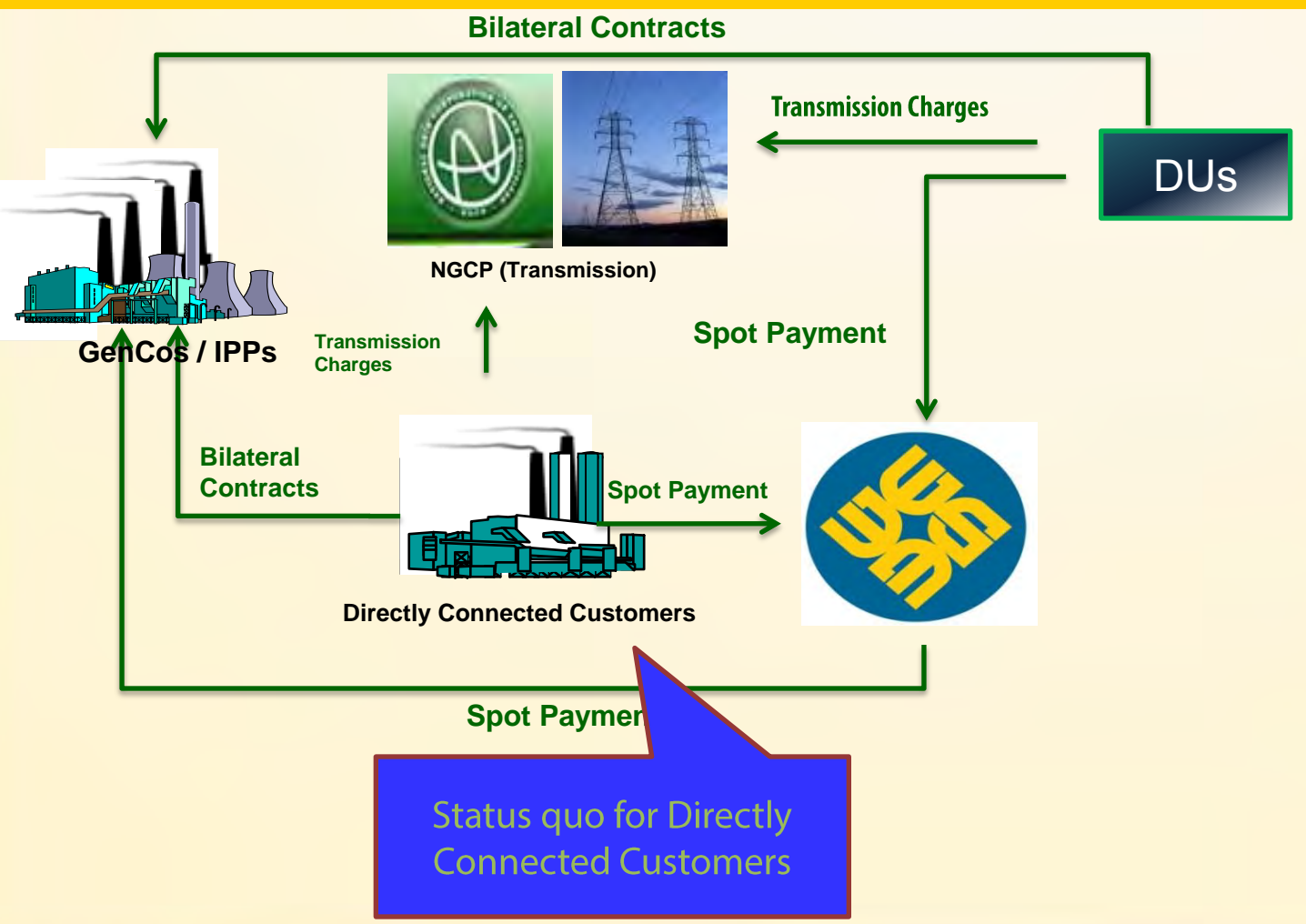
## Government Entities CCs

- Government entities qualified as CCs in Luzon and Visayas may continue to be supplied by the DUs or their current suppliers until the Government Policy Procurement Board shall have issued the necessary guidelines
- Shall comply with the EPIRA and its IRR

## Directly Connected Customers (DCCs) as CCs

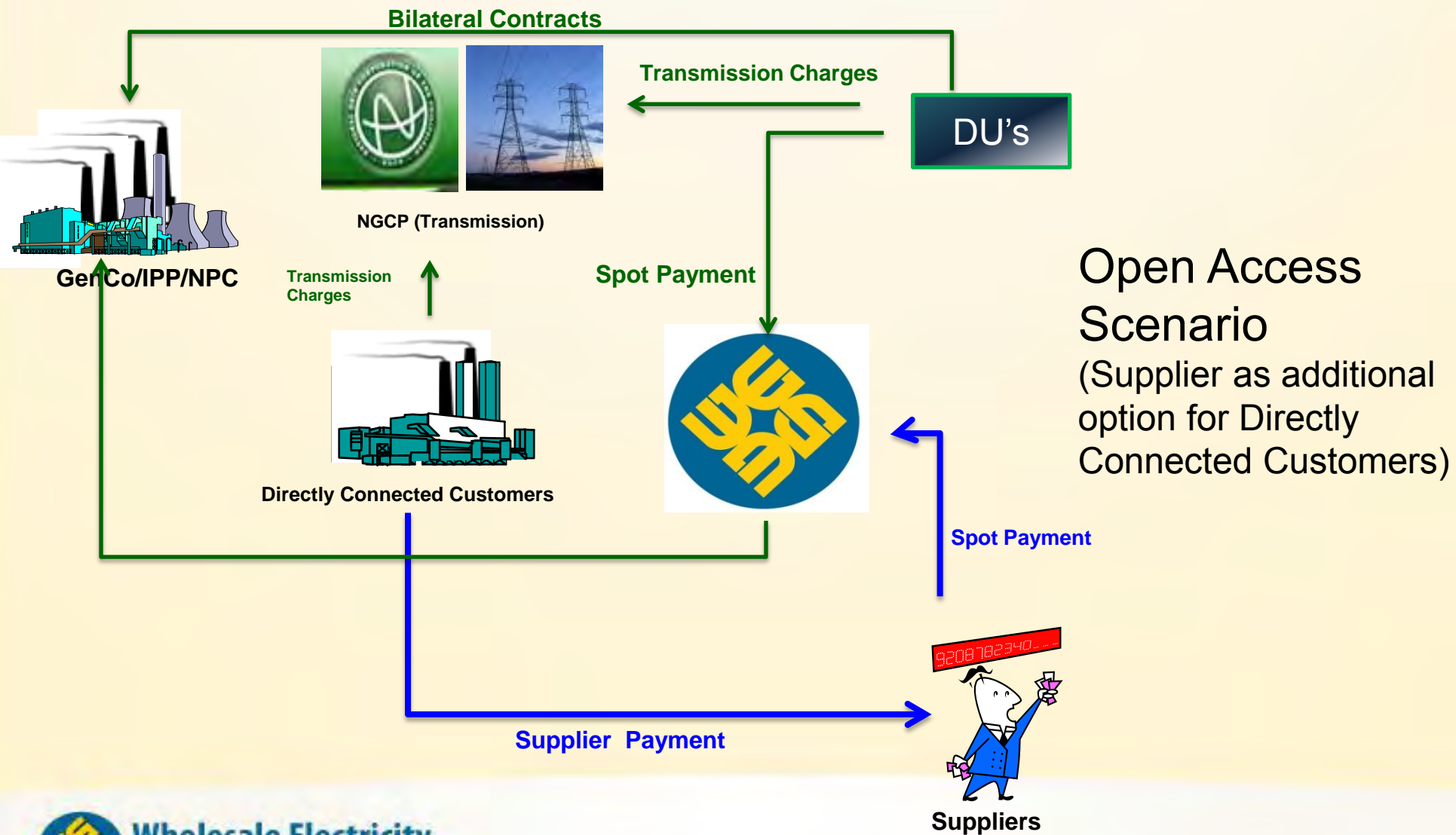
- All DCCs shall be considered Contestable Customers
- DCCs may secure additional energy requirements from a Supplier
- Shall comply with the EPIRA and its IRR

# How will RCOA affect the Directly Connected Customers?





# How will RCOA affect the Directly Connected Customers?



# What are the responsibilities of the Qualified Contestable Customers (CCs)?

## During the RCOA Transition Period

- CCs shall start with or continue to negotiate and enter into RSCs with Suppliers
- CCs that have not yet entered into an RSC by March 25, 2013 may seek assistance from the ERC
- CCs shall enter into an RSC with RES or Local RES on or before May 20, 2013
- DCCs shall remain the customer of NGCP and shall receive a separate billing from NGCP for transmission services

## After the RCOA Transition Period

- CCs not able to contract with RES shall continue to be served by DU from June 26 to December 25, 2013; CC to show to ERC that they have exhausted all means in securing an RSC
- CCs with no RSC, that will not source power requirement from WESM, or does not signify intent to remain with the DU shall be disconnected by the DU on June 26, 2013 or the subsequent billing period or transfer to SOLR if CC opts to avail SOLR Service



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# **Retail Supply Contracts (RSCs)**

# What Information should be included in the Disclosure Statement and Retail Supply Contract?

## Provision of Disclosure Statement and Retail Supply Contract

- **A Disclosure Statement is provided to the Customer, covering the following information**
  - Full Name, business address, telephone and facsimile numbers and e-mail address of the Supplier or local Supplier
  - Type, frequency of bills and payment methods the customer will receive
  - Details of applicable prices, charges and service levels that will apply to the Customer
  - Any prices or charges payable under or in connection to RSC
  - Price adjustment mechanism, of Supplier or local supplier is adopting a variable pricing offer.

# What Information should be included in the Disclosure Statement and Retail Supply Contract?

## Cont...Provision of Disclosure Statement and Retail Supply Contract

- Penalties, fees, interest which may be payable by the customer if the customer defaults or is late in making payments
- Any requirement for the payment of funds or security deposit, the amount of such funds or security deposit, the circumstances in which that fund or security deposit (or any part of it) may be retained by the Supplier or Local Supplier, and the circumstances in which that security deposit, and the interest earned by such deposit, must be returned to the Customer
- The circumstances in which the Supplier, Local Supplier of the Customer may terminate the Retail Supply Contract.

# What Information should be included in the Disclosure Statement and Retail Supply Contract?

## Cont...Provision of Disclosure Statement and Retail Supply Contract

- The early termination charges which may apply if the customer terminates the Retail Supply Contracts prior to its expiry date and after the Cooling Period, and the method of calculation of those charges.
- Details of the right conferred on a Customer to cancel the Retail Supply Contract in accordance with **Article II, Section 13, Cooling-Off**
- Details of the procedure approved by the ERC under **Article II, Section 15, Complaint Handling Procedures** to resolve complaints by the Customer and the right under those procedures for Customers to refer such complaints to the ERC, if they are not satisfactorily resolved;
- Circumstances by which a Customer may be transferred to the Supplier of Last Resort

# When is the Disclosure Statement considered received by a CC?

## Cont...Provision of Disclosure Statement and Retail Supply Contract

- The Disclosure Statement shall be considered as having received by the customer based on the following circumstances
  - In the case where the statement is personally delivered to and received by the Customer or any of its employees/agent or representative, the date when it is delivered;
  - In the case where the statement is received by the Customer by facsimile or e-mail on or before 5:00PM on a business day, that Business Day; and
  - In the case where the statement is received by the Customer by facsimile or e-mail after 5:00Pm on any day, the next Business Day.

# What are Other Considerations on Retail Supply Contract?

## Other Provisions

- A Supplier or Local Supplier may enter into a Retail Supply Contract with a Customer within five (5) Business Days commencing on the date of receipt by the Customer of the Disclosure Statement;
- A Supplier or Local Supplier shall ensure that upon signing of the Retail Supply Contract, the Customer is provided with a copy of said contract.
- Retail Supply Contracts shall provide for the supply of electricity to commence on the day as agreed upon by both Supplier or Local Supplier and Customer but not earlier than the expiration of the Cooling-Off Period.
- The rates and any terms and conditions of the Retail Supply Contract between a Customer and a Supplier or Local Supplier may only be modified by agreement in writing between the Customer and a RES or Local RES.



# What are Other Considerations on Retail Supply Contract?

## Other Provisions

- For the avoidance of doubt, if the amount of the contract price changes in accordance with some terms and conditions of a Retail Supply Contract previously agreed between the Customer and the Supplier or Local Supplier, no further agreement is required.
- A Retail Supply Contract with a Customer that is renewed shall be consistent with the original contract, unless both parties agree to new terms and conditions
- A Supplier or Local Supplier shall not renew a Retail Supply Contract with a Customer unless the original contract contains terms of renewal, or the customer;
  - Receives an advance notice of the renewal not more than sixty (60) days before the expiration of the Retail Supply Contract; and
  - Has at least thirty (30) days from the receipt of such notice and prior to the expiration of the Retail Supply Contracts to reject the renewal

# Contracting Parameters

<b>Retail Electricity Supplier</b>	<b>Indicative Average Contract Price (PhP/kWh)</b>	<b>Minimum Contract Period (Years)</b>
Aboitiz Energy Solutions Inc	4.5977	10-25
Advent Energy Inc	4.5977 <sup>1</sup>	10-25
DirectPower Services Inc	6.00-7.50 <sup>2</sup>	5
KRATOS RES Inc	5.00-5.50	1
Manila Electric Company	4.44-4.91	1
Masinloc Power Partners Co.	see note 3	5
Prism Energy Inc	4.5977 <sup>1</sup>	10-25
SEM-Calaca RES Corp.	see note 4	1
TeaM Philippines Energy Corp	see note 5	1
Trans-Asia Oil Energy Dev't Corp	3.00-10.00	1
San Miguel Electric Corp.	5.50-7.50	1

## NOTES:

<sup>1</sup> @100% LF

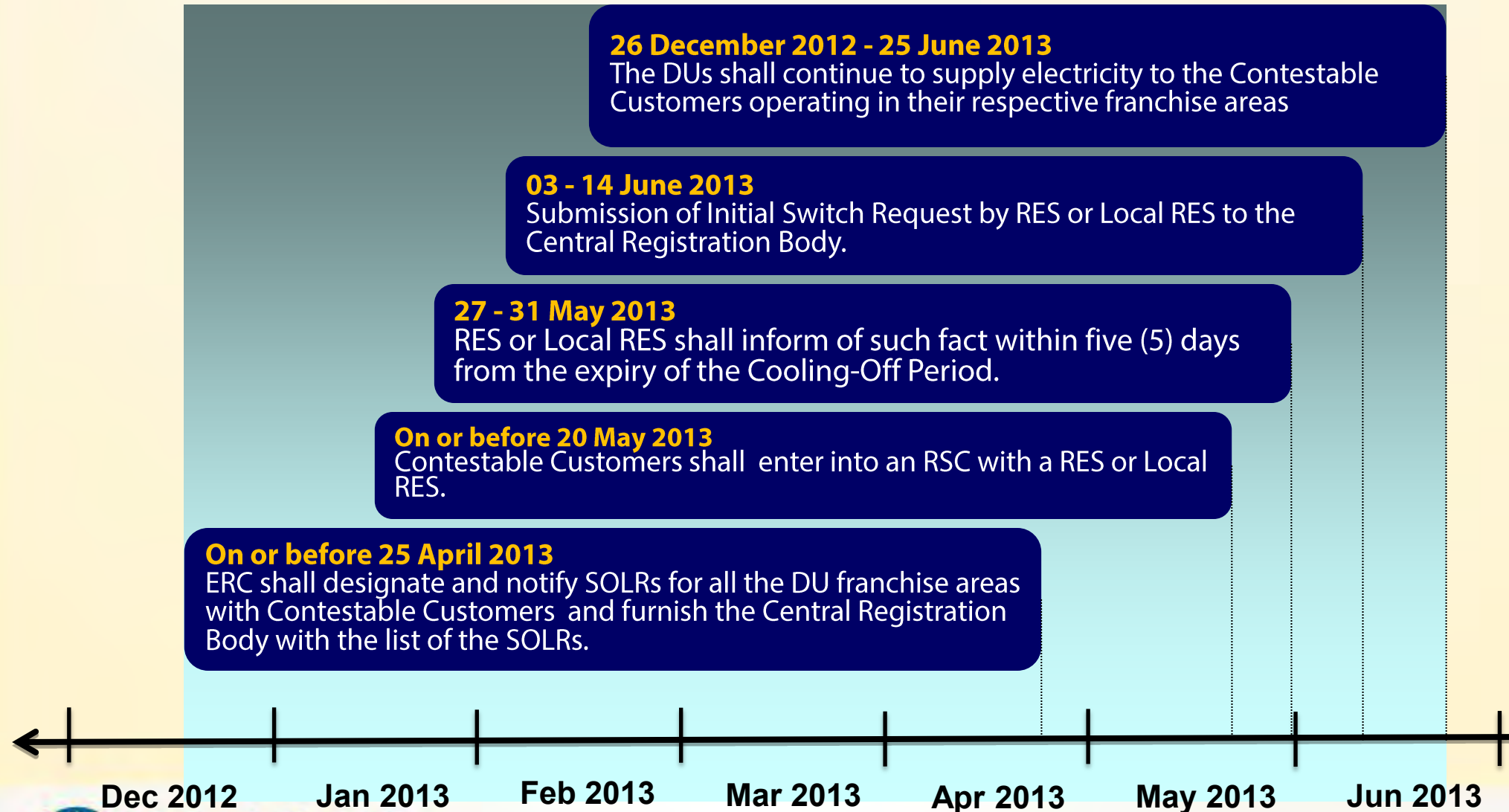
<sup>2</sup> Indicative Contract Price only based on the customer's profile; excluding line rental, other WESM fees, monthly adjustments (i.e. Philippine CPI, NewCastle Coal Index, US\$/PhP Exchange), all DU pass through charges, and all taxes

<sup>3</sup> Prices subject to Customer's Load Factor, Capacity, Credit Rating and Contract Term

<sup>4</sup> Depending on negotiated price from generator (source of power)

<sup>5</sup> Contract Price will depend on the following factors at the time of offer: (Cost of generation, Consumption pattern, Contract period, Backup provision, Delivery point, Credit and other associated risks)

# Timeline Under ERC's Transitory Rules for the Initial Implementation of RCOA





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**Thank You!**

**<http://www.wesm.ph>**

**helpdesk@wesm.ph**