

Energy Investment Forum

July 31, 2014



ATTY. FRANCISCO S. VILLA, JR.
DIRECTOR, PLANNING AND INFORMATION SERVICE
ENERGY REGULATORY COMMISSION

ERC
towards a brighter future

ENERGY REGULATORY COMMISSION • PHILIPPINES

Vision and Mission

VISION:

Ensuring progress through exemplary power regulation.



MISSION:

A technically competent and professional ERC committed, through the exercise of its regulatory authority, to be the driving force in the transformation of the electric power industry in ensuring reasonable electricity rates, enhancing market competition, promoting long-term consumer interest, and assuring that electricity industry participants provide and maintain safe, adequate, reliable, and efficient electric service.

The Energy Regulatory Framework - Concepts



Sec. 38 of EPIRA

“There is hereby created an independent, quasi-judicial regulatory body to be named the Energy Regulatory Commission (ERC).”

THE FIVE MAJOR FUNCTIONS

Promote
competition

Monitor the
Market

Encourage
market
development

Ensure
customer
choice

Penalize
abuse of
market power

MOST ESPECIALLY:

EPIRA – RA 9136

Sec. 41. *Promotion of Consumer Interests.* – The ERC shall handle consumer complaints and ensure the adequate promotion of consumer interests

Generation

- Certificate of Compliance
- Generation tariffs (Captive Bilateral PSA & RE LAW FIT)
- SPUG (Missionary Electrification)
- WESM monitoring
- Competition Rules

Transmission

- Tariffs of NGCP TRANSCO
- Philippine Grid Code
- CAPEX plans
- Ancillary services

Supply

- Suppliers' licenses
- Issuance of needed rules for retail competition
- Declaration of open access and retail competition

Distribution

- Tariffs of distribution utilities
- Philippine Distribution Code
- Lifeline rate
- Franchise for consortium of sub-transmission assets
- Stranded contract cost
- Systems loss
- CPCN
- Spot inspections/ audits
- Bilateral power supply contracts
- CAPEX plans
- Magna Carta and DSOAR enforcement
- *Loan Condonation



Competitive



Natural Monopolies

The Journey

Open Access
and Retail
Competition

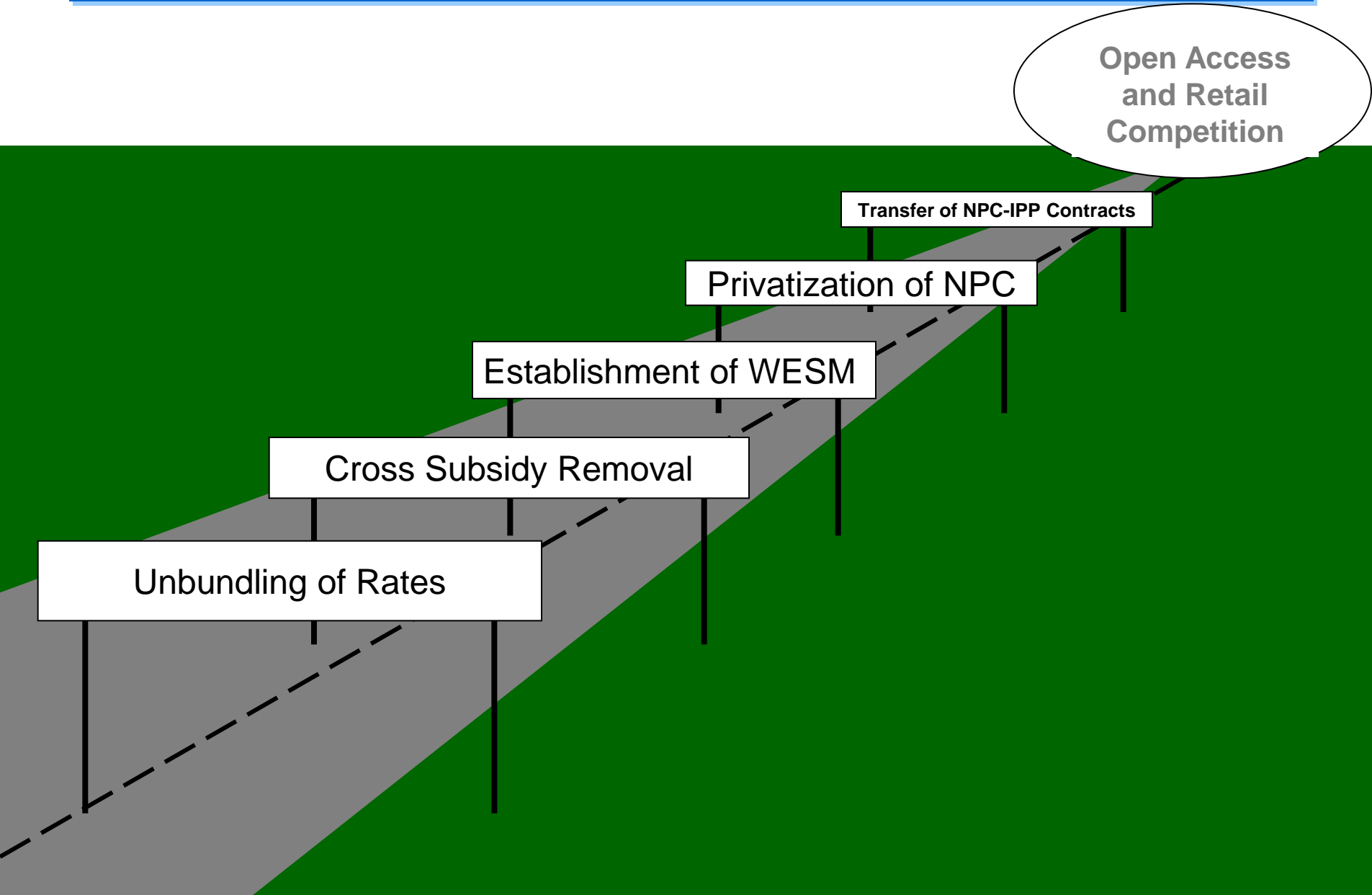
Transfer of NPC-IPP Contracts

Privatization of NPC

Establishment of WESM

Cross Subsidy Removal

Unbundling of Rates



Retail Competition Timeline

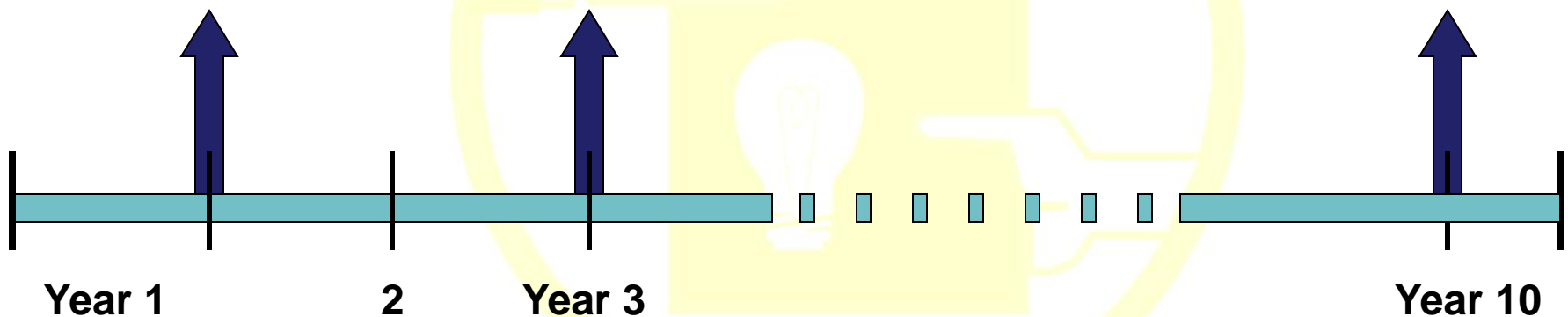
LUZON-VISAYAS GRIDS

750 kW – 999 kW

Aggregation within
contiguous area
allowed

1 MW & above

Household level



DEC 2012

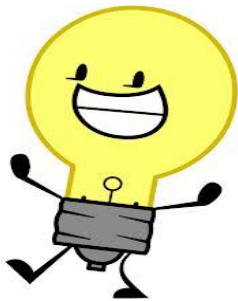
Transition period (26 December 2012 – 25 June 2013)

Initial commercial operations (26 June 2013 – 25 December 2013)

Basic Concepts on Power Supply Agreements (PSA)



What is a Power Supply Agreement (PSA)?



A PSA is a bilateral agreement between a **Generation Company (GenCo)** and a **Distribution Utility (DU)** for the purchase and supply of power.

Why does the ERC need to review and approve PSAs?

Section 25, Chapter 2 of the Republic Act No. 9136 or the Electric Power Industry Reform Act of 2001 (EPIRA) states that:

RETAIL RATE. The retail rates charged by distribution utilities for the supply of electricity in their captive market shall be subject to regulation by the ERC based on the **principle of full recovery of prudent and reasonable economic costs incurred**, or such other principles that will promote efficiency as may be determined by the ERC.

GENERATION CHARGE

ALCANTARA BRUNO
(D) 76 SPS ST
MANGGAHAN
PASIG CITY
METRO MANILA

LE OF PH 110-192

33SLN03403 311032021330

PASIG BUSINESS CTR
DR. SIXTO ANTONIO AVE
PASIG CITY
Tel. No. 841-9524
TIN - 000-101-528-000-VAT
79048

INV. NO. 3111102472943

Page 1 of 2

For inquiries please contact our LSA Letter at 16211 or visit our website at www.meralco.com.ph

Service Info

Service ID Number : 476984101-9
Rate : Residential
Contract in the name of : ALCANTARA BRUNO
Service Address : (D) 76 SPS ST
MANGGAHAN, PASIG CITY
METRO MANILA

Billing Info

Bill Date : 18 OCT 2011
Billing Period : 18 SEP 2011 to 18 OCT 2011
Due Date : 27 OCT 2011
Total kWh : 237
Total Current Amount : ₱ 2,543.80

Billing Summary

BILL SUBGROUP	SUBTOTAL	PERCENTAGE
Generation	1,279.28	50.3%
Transmission	248.40	9.8%
System Loss	154.07	6.1%
Distribution (Meralco)	567.87	22.3%
Subsidies	31.97	1.3%
Government Taxes	234.08	9.2%
Universal Charges	28.15	1.1%
Other Charges	0.00	0.0%
Total	2,543.80	100.0%

Panahon na ng bagyo, siguraduhing walang mga sangang nakakasagabal sa mga linya ng kuryente.
Para sa serbisyong ito, tumawag sa 16211.

Your monthly electricity consumption chart

Average Usage for 12 month/s: 203 kWh per month / ₱ 69.51 per day

BILL UNDER AUTOMATIC DEBIT - CITIBANK CARD

Please see details at the back. This will serve as a receipt when machine validated.

For authorized collecting agents

Account Name ALCANTARA BRUNO	Billing Address (D) 76 SPS ST MANGGAHAN PASIG CITY METRO MANILA
Service ID No. (S.I.N.) 476984101-9	ATM / Phone Reference No.
Meralco Reference No.	Total Current Amount ₱ 2,543.80

- Biggest component of the retail rate (around 40% to 60%)
- Through the generation charge, the DUs recover their generation costs associated with their energy purchases from:

A	PSALM/NPC (under duly approved TSCs)	NPC TOU Rate
B	IPPs (under duly approved PSAs)	ERC-approved Contract Rate
C	WESM	Spot Market Rate

Power Generation Sources



**Oil-based
18%**



**Coal
33%**



**Hydro
21%**



**Renewable
0.1%**



**Geothermal
11%**



**Natural Gas
16.9%**

RATE STRUCTURE REVIEW



What does the ERC look into in its PSA review and approval process?

Capacity Fee/Capital Recovery Fee

Fixed Cost

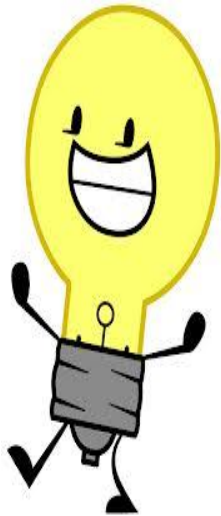
Operations & Maintenance Fee

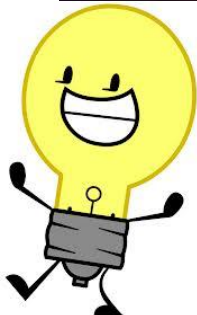
Fixed O&M

**Variable
O&M**

Fuel Recovery Fee/Energy Fee

**Variable
Cost**



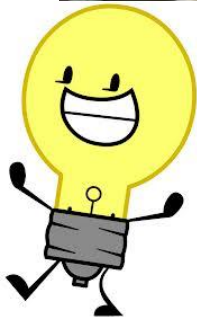


Capacity Fee/Capital Recovery Fee

**Fixed
Cost**

- Cost for the recovery of capital or investment incurred in putting up the power plant
- Fixed for the duration of the project life/plant economic life

GENERATION RATE STRUCTURE



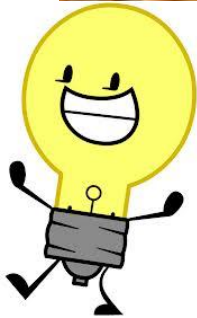
Operations & Maintenance Fee

Fixed
O&M

Variable
O&M

- Costs involved in operating and maintaining a utility plant and in the provision of utility service; and
- Operating outlays consist mainly of costs for purchased power, fuel, wages, applicable taxes, maintenance, supplies, and other necessary expenditures.

GENERATION RATE STRUCTURE



Fuel Recovery Fee/Energy Fee

Variable Cost

- Pass-through cost to allow recovery of fuel consumed to generate power
- Cost also depends on the plant heat rate

Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City


IN THE MATTER OF THE
APPLICATION FOR THE APPROVAL
OF THE POWER SALES AGREEMENT,
AS AMENDED, AMONG SOUTH
COTABATO II ELECTRIC
COOPERATIVE, INC. (SOCOTECO II),
CONAL HOLDINGS CORPORATION
AND SARANGANI ENERGY
CORPORATION

ERC CASE NO. 2011-138 RC

SOUTH COTABATO II ELECTRIC
COOPERATIVE, INC. (SOCOTECO II)
AND SARANGANI ENERGY
CORPORATION (SEC),

Applicants.

x-----x

DOCKETED
Date: AUG 01 2012
By: 

DECISION

Before the Commission for resolution is the joint application filed on October 7, 2011 by South Cotabato II Electric Cooperative, Inc. (SOCOTECO II) and Sarangani Energy Corporation (SEC) for the approval of their Power Sales Agreement (PSA).

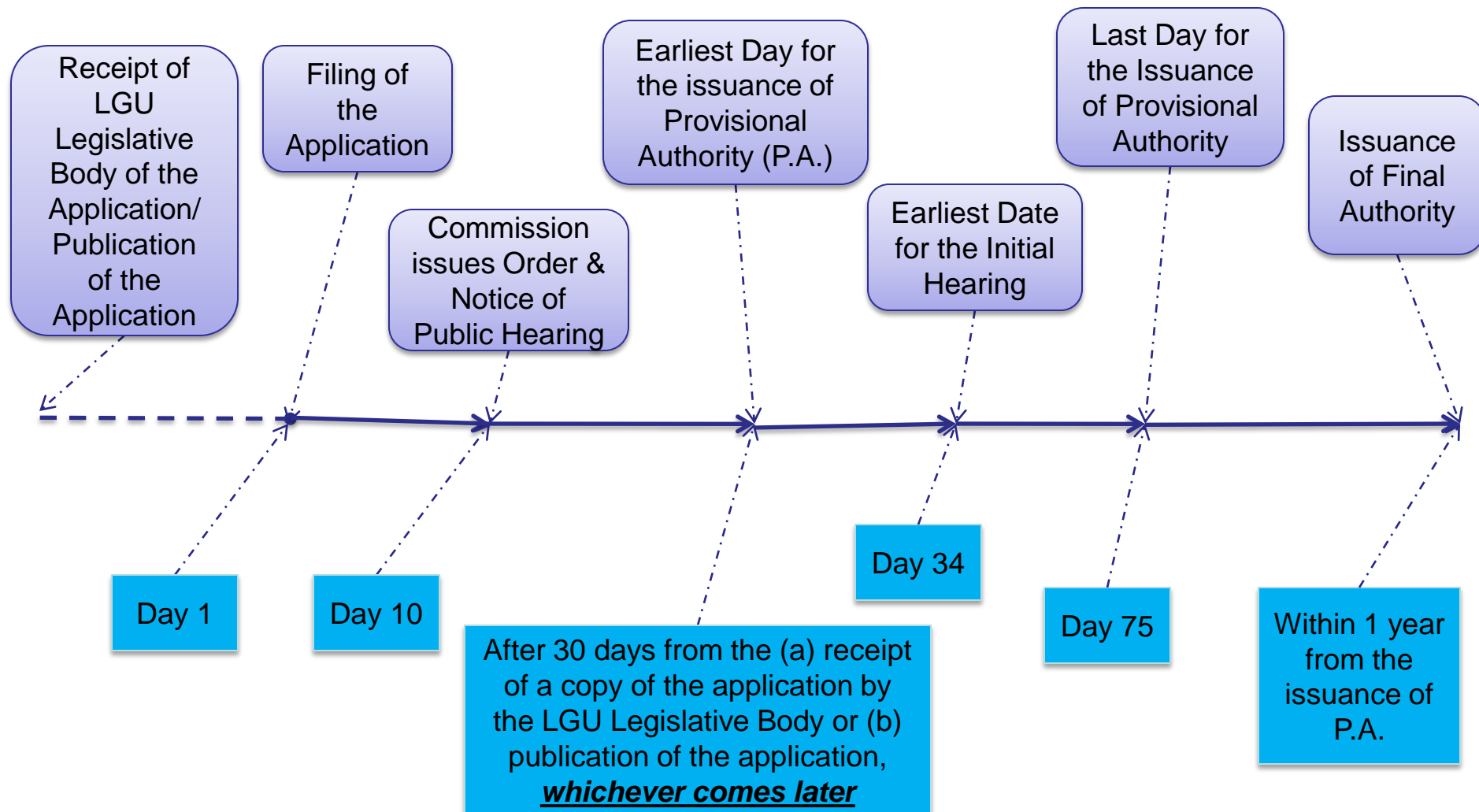
In the said joint application, SOCOTECO II and SEC alleged, among others, the following:

1. SOCOTECO II is a non-stock, non-profit electric cooperative organized and existing under and by virtue of Presidential Decree No. 269, as amended, with office address at J. Catolico Avenue, Lagao, General Santos City. It has a franchise to distribute electricity in the City of General Santos, in the Municipalities of Alabel, Glan, Kiamba, Maasim, Maitum, Malapatan and Malungon, all in the Province of Sarangani, and in the Municipalities of Polomolok and Tupi, both in the Province of South Cotabato (Franchise Area).

Steps:

1. Provisional Approval
2. Final Approval

PROCEDURE FOR THE APPLICATION OF PSA



Public Consultations were held on the following dates:

DATE	VENUE
February 18, 2014 (Tuesday)	University of Mindanao, Matina Campus, Davao City
February 20, 2014 (Thursday)	Social Hall, Cebu Provincial Capitol, Cebu City
February 24, 2014 (Monday)	ERC Hearing Room, 15 th Floor, Pacific Center Building, San Miguel Avenue, Pasig City


Focus Group Discussions were held on the following dates:

Date	Venue
April 22-24, 2014	ERC Hearing Room, Pasig City
May 6-8, 2014	NEDA Region 7 Office, Cebu City
May 13-14, 2014	Grand Caprice, Limketkai Center, Cagayan de Oro City
May 20-22, 2014	ERC Hearing Room, Pasig City

As of date, revision of the PSA draft rules is still ongoing.

Procedures and Requirements in Securing a Certificate of Compliance (COC)

What is a COC?



Certificate of Compliance

Certificate Number: LR 111716-1
Revision: LR 111716-1 Date Issued: March 10, 1998

Issued to: Datafield India Ltd.
119/18 Mudallpalayam Road
Neelambur Village, Arasur Post
Coimbatore, 641407
India

The products listed below are eligible to bear the CSA Mark
'NOTE: The "NRTL/C" indicator also appears adjacent to the CSA Mark.

Issued by: Sebastian George, P. Eng.
Vancouver, BC Canada

Signature: 

PRODUCTS
CLASS 4872 02 - TELECOMMUNICATION EQUIPMENT
CLASS 4872 82 - TELECOMMUNICATION EQUIPMENT

Communication Cords and cord sets, coiled or straight type, rated 1 A, 150 V, FT1, 32 AWG tinsel conductors and 28 AWG copper conductors, 2 to 8 conductors with PVC jackets, DIL Series.

Note: Suffix letters and Numbers are added to above designation to denote type, length, configurations and mechanical variations.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No 233-M89	- Cord and Cord Sets for Communication Systems
UL Standard 1863	- Cords and Cord Sets - Certified to US Standards

The "NRTL/C" indicator adjacent to the CSA Mark signifies that the product has been evaluated to the applicable ANSI/UL and CSA Standards, for use in the U.S. and Canada. NRTL, i.e. Nationally Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.

DQD 507 Canadian Standards Association Offices: Montreal, Toronto, Edmonton, Vancouver, Tokyo, Hong Kong Page 1

A Certificate of Compliance (COC) is required before a generation company can commence commercial operations. It has a validity period of five (5) years and must be renewed six (6) months prior to its expiration.

Article III of COC Revised Rules, Requirements and Procedures (Resolution No. 09, Series of 2010):

Section 1.
In General

Section 3.
Documents/Information Required for COC Renewal

Section 5.
Transfer of Ownership

Section 7.
Ocular Technical Inspection

Section 2.
Documents/Information Required for New Applications

Section 4.
When to File

Section 6.
Change of Status

Section 1. In General

All GENCOS and Entities with Generating Facilities shall apply for COC issuance with the ERC

ERC shall notify the applicant of its action within 60 days from the conduct of the technical inspection

In the event ERC requires submission of additional information, the 60-day period shall be reckoned from the date of complete submission of the required information

ERC shall deny the COC application if the applicant failed to submit the additional information required

COC shall be deemed provisionally approved if applicant has not been issued within 60-day period, provided it had complied with all the requirements.

Section 2. Documents/ Information Required for New Applications



(1) General Requirements

(2) Technical Qualification

(3) Financial Capability

(4) Ownership/Control

(5) Other Requirements

Section 3. Documents/Information Required for COC Renewal

For Generation Companies:



(1) General Requirements

(2) Technical Qualification

(3) Financial Capability

(4) Ownership/Control

(5) Other Requirements

For Self-Generation Facility (SGF):

(1) Self-Generation Facility (SGF) with aggregate installed capacity of below 1 MW

(2) Self-Generation Facility (SGF) with aggregate installed capacity of 1 MW and above



Section 4. When to File

Not later than three (3) months before the targeted date of Commissioning of the facilities



Section 5. Transfer of Ownership

- **If a Generating Facility including that of NPC with unexpired COC is transferred or sold:**
 - New owner shall not be required to secure a new COC for the remainder of the term of the existing COC, provided:**
 - Transfer of ownership is reported within three (3) days
 - New owner conforms to and complies with all the obligations and submit reportorial requirements under Sec. 10, Art. IV of the Revised Rules.
- **If New Owner desires to be named licensee under the COC:**
 - An application for such amendment shall be filed and approved by the ERC**

Section 6. Change of Status

- **SGF intending to sell its generated electricity shall:**
 - File an application for COC amendment from SGF to Genco
 - Submit and comply with all the requirements imposed on a Genco under Sec. 2, Art. III of the Revised Rules
- **Pending evaluation and final action on application for COC amendment, ERC may:**
 - Provisionally allow such SGF to sell its generated electricity on the basis of its existing COC, subject to its compliance with the applicable requirements for power supply to DUs or participation in the WESM

Requirements and Procedures

Section 7. Ocular Technical Inspection

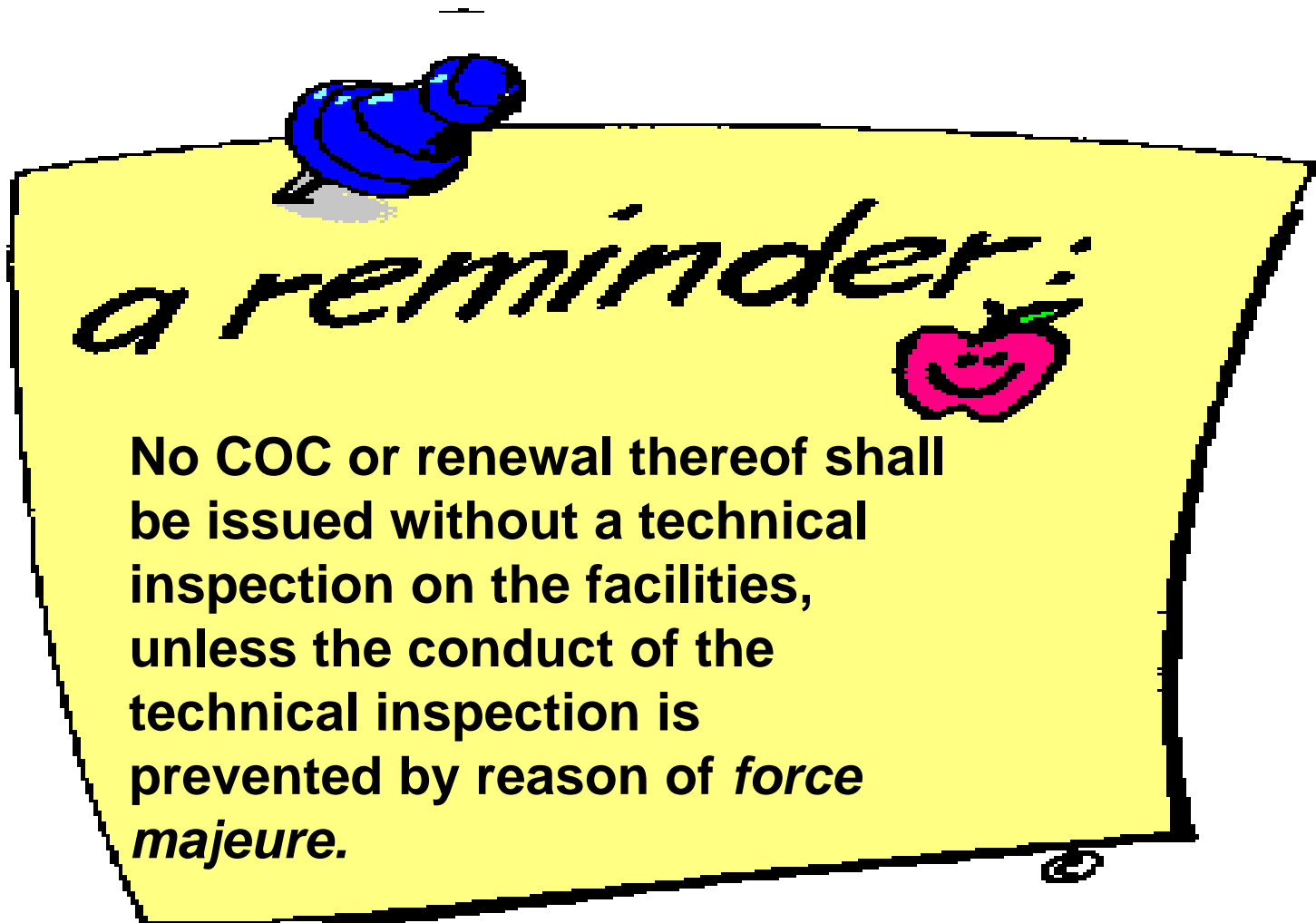
All Gencos/Facilities shall be:

Subject to technical inspection by ERC, at least twice (2x) during the five (5) year term of the COC

For New Gencos/Facilities, a technical inspection shall be:

Conducted by ERC on or during the Commissioning of the facilities and in all cases prior to the commercial operation





COC Fees

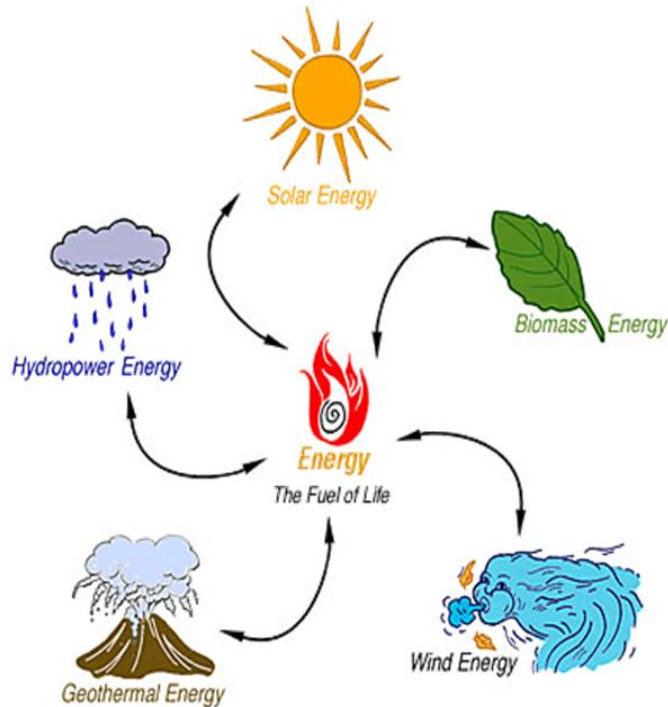
Aggregate Installed Capacity	Fees (PhP)
For Self Generation Facility (SGF)	
100 KW and below	1,500.00
101 – 500 KW	5,000.00
501 – 999 KW	7,500.00
1 MW and above	10,000.00
For GENCO regardless of Installed Capacity	10,000.00



Philippine Feed-In Tariff System Implementation

Republic Act No. 9513

An Act Promoting the Development, Utilization and Commercialization of Renewable Energy Resources and For Other Purposes



December 16, 2008

On-Grid Renewable Energy Development

- Renewable Portfolio Standards
- Feed-In Tariff System
- Renewable Energy Market
- Green Energy Option
- Net-metering for Renewable Energy

Off-Grid Renewable Energy Development

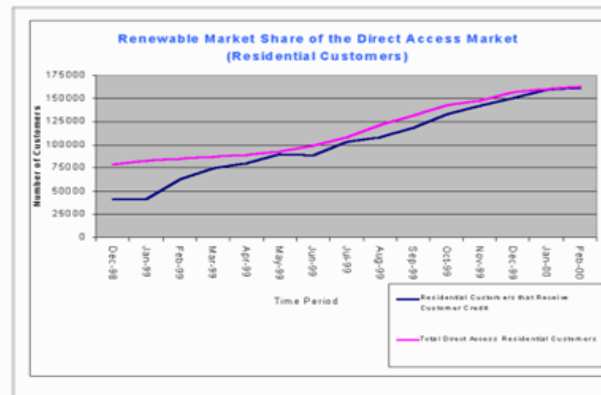
- Minimum RE generation capacities

- ❑ Defined as “a market-based policy that requires electricity suppliers to source an agreed portion of their energy supply from eligible RE resources”
- ❑ The NREB shall set:
 - ❑ Minimum percentage of generation from eligible renewable energy resources
 - ❑ Which sector RPS shall be imposed on a per grid basis



*Section 6 of the RE Law

- ❑ The DOE shall establish the REM
- ❑ Direct PEMC to implement changes to the WESM rules in order to incorporate the rules specific to the operation of the REM under the WESM
- ❑ PEMC, under DOE supervision, establish a Renewable Energy Registrar
 - ❑ Issue, keep and verify RE Certificates



*Section 8 of the RE Law

Green Energy Option

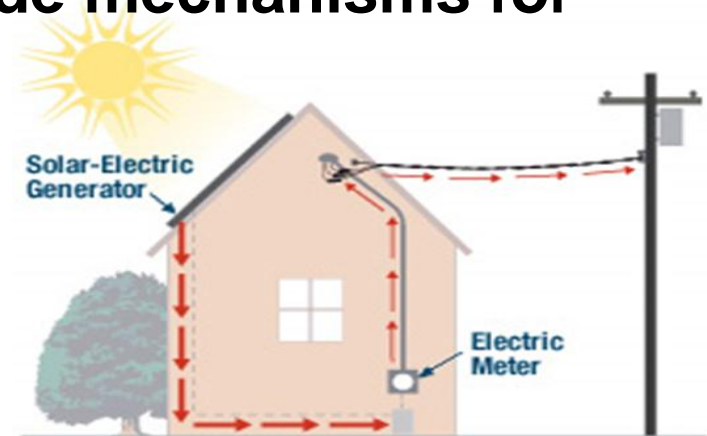
- ❑ The DOE shall establish a Green Energy Option program which provides end-users the option to choose RE resources as their sources of energy
- ❑ End-users may directly contract from RE facilities their energy requirements
- ❑ TRANSCO, DUs, PEMC and all relevant parties are hereby mandated to provide the mechanisms for the physical connection and commercial arrangements necessary to ensure the success of the Green Energy Option
- ❑ ERC to develop regulatory framework



*Section 9 of the RE Law

Net Metering for RE

- ❑ DUs may enter into Net-Metering agreements with qualified end-users
- ❑ The ERC, in consultation with the NREB shall develop Net-metering interconnection standards and pricing methodology and other commercial arrangements
- ❑ The DOE, ERC, Transco, DUs, PEMC and all relevant parties are mandated to provide mechanisms for physical connection and commercial arrangements



*Section 10 of the RE Law

Section 7: Feed In Tariff System Mandate

- **ERC, in consultation with the NREB**
- **For emerging renewable energy resources to be used in compliance with the renewable portfolio standard**
 - ✓ **Wind**
 - ✓ **Solar**
 - ✓ **Ocean**
 - ✓ **Run-of-river Hydro**
 - ✓ **Biomass**
- **Priority connection to the grid**
- **Priority purchase and transmission of, and payment for, such electricity by the grid system operators**
- **Fixed tariff by technology**
- **Mandated number of years, not less than 12**



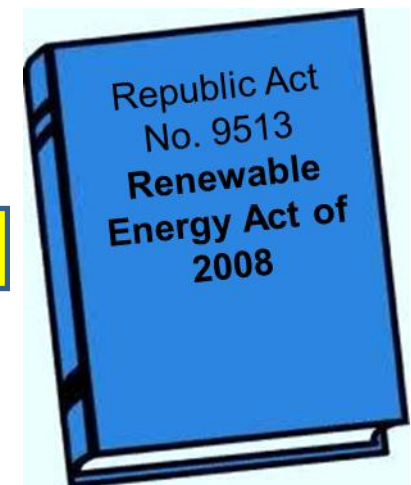
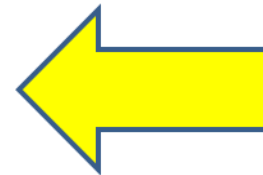
Feed-In Tariff Rules

**ERC Resolution No. 16, Series of 2010
(July 12, 2010)**

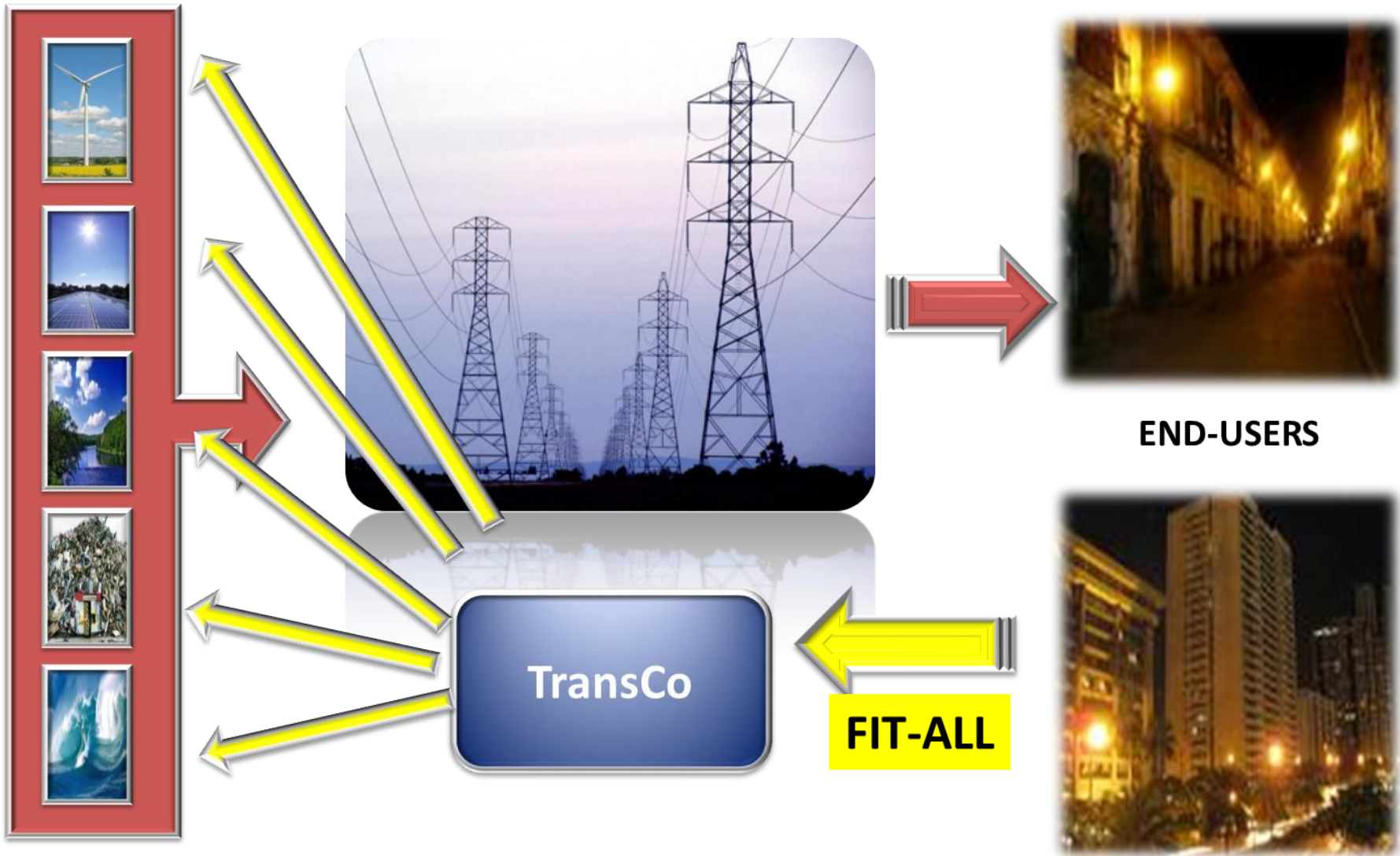
Resolution Adopting the Feed-in Tariff Rules

**ERC Resolution No. 15, Series of 2012
(November 19, 2012)**

Resolution Adopting the Position of the Commission on the Issues Paper Published on 02 April 2012 and the Corresponding Amendments to the Feed-in Tariff Rules



The Overall Fit Framework



The Fit to be Paid to RE Developers



- **Based on cost of a representative project**
- **Technology-specific**
- **20 years duration**
- **Subject to degression and adjustments**
- **Subject to review**

ERC Case No. 2011-006 RM

	NREB (in PhP/kWh)	ERC-Approved (in PhP/kWh)
Solar	17.95	9.68
Wind	10.37	8.53
Biomass	7.00	6.63
ROR Hydro	6.15	5.90

Effectivity

“Payment of the approved FIT rates to the eligible RE Developers shall commence upon the effectivity of the Feed-in Tariff Allowance (FIT-All), which shall be determined by the Commission at a later date after due proceedings thereon.”

*Note: Decision on OTEC
FIT deferred*

DOE Installation Targets

	NREB DOE-REMB TARGETS
ROR Hydro	250 MW
Solar	50+450 MW
Wind	200 MW
Biomass	250 MW

ERC-Approved (in PhP/kWh)

ROR Hydro	0.5% <i>after year 2 from effectivity of FIT</i>
Solar	6% <i>after year 1 from effectivity of FIT</i>
Wind	0.5% <i>after year 2 from effectivity of FIT</i>
Biomass	0.5% <i>after year 2 from effectivity of FIT</i>

Section 2.5: FIT Rules

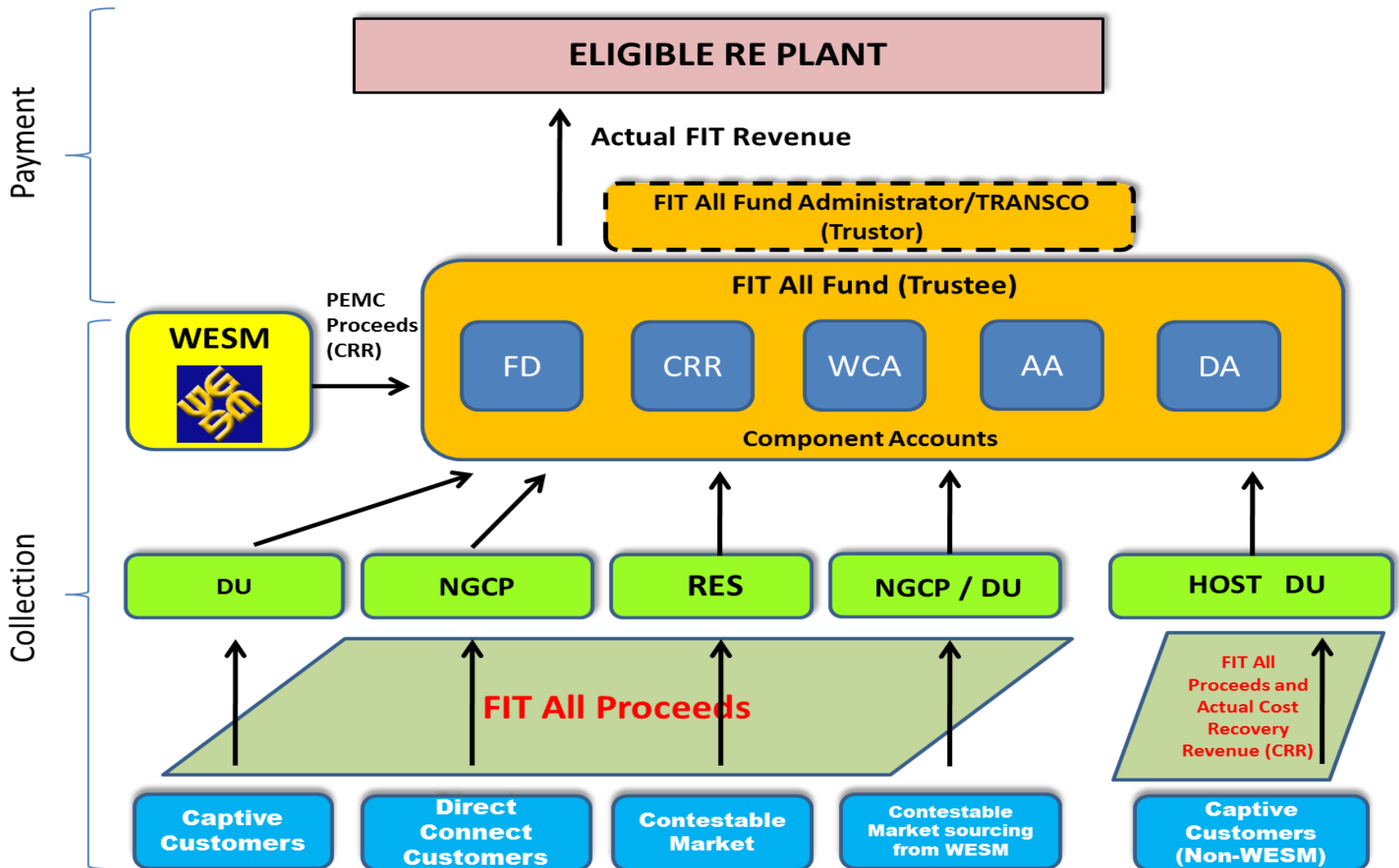
Feed-In Tariff Allowance (FIT-All)



- **Uniform ₱/kwh charge**
- **Payable by all electricity users**
- **Periodically calculated and set**
- **Based on forecasted RE deliveries**
- **Proceeds go to a fund administered by Transco from where the RE payments will be sourced**

- ❑ **Sec. 2.6 of the FIT Rules provides that NREB shall establish more detailed guidelines for the collection & disbursement of the FIT-All Fund.**
- ❑ **Sec. 2.9 of the FIT Rules provides that ERC may consider the issuance of additional guidelines governing the dispatch and settlement of the FIT.**

FIT-All Framework



FIT-All Application

- ✓ **Application to be filed by Administrator annually, no later than July 31 of each year.**
- ✓ **FIT-All to be approved by the ERC no later than October 31 of each year.**
- ✓ **FIT-All to be approved by ERC shall be applied to the succeeding calendar year.**
- ✓ **Formula for computing the FIT-All provided in the Guidelines.**

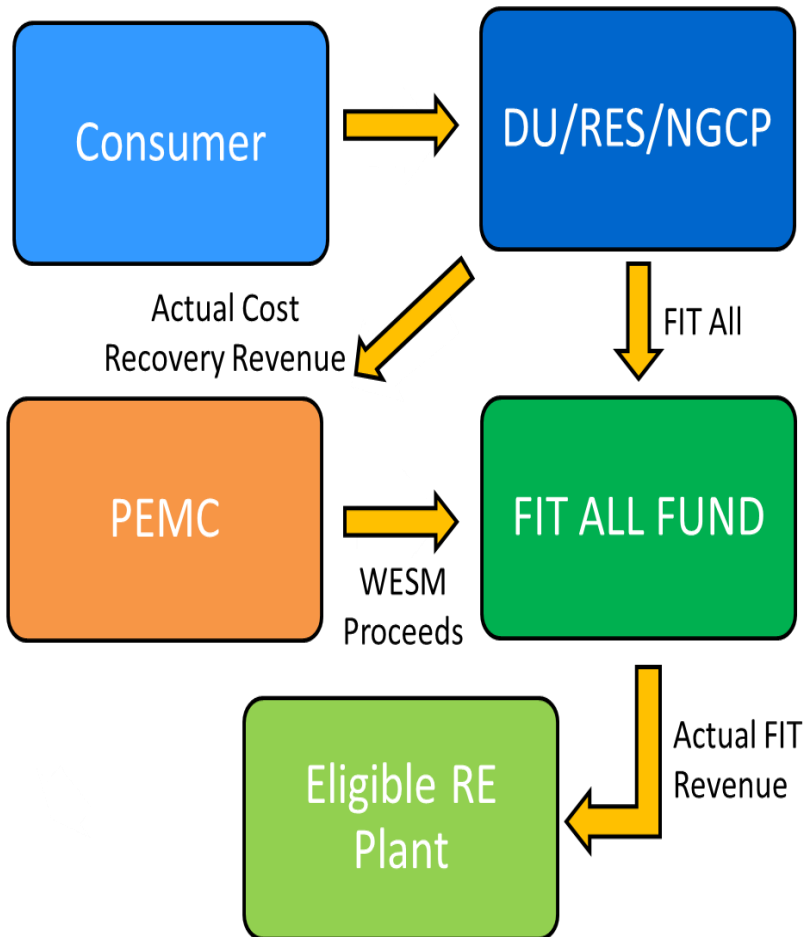
- ✓ **FIT-All Fund shall be in the form of a special discretionary trust account corresponding to each component of the FIT-All Fund with a Government Financial Institution as Trustee.**
- ✓ **Agreement shall be governed by a Trust Agreement to be approved by the ERC.**
- ✓ **For the sole and exclusive benefit of the Eligible RE Plants except AA and DA.**

- ✓ **Eligible RE Plant may assign the Actual FIT Revenue to banks or financial institutions for purposes of securing financing.**
- ✓ **FIT-All Fund shall not form part of the assets of the Administrator.**
- ✓ **Nor shall it be made to pay out from its own funds for any liability of the FIT-All Fund.**

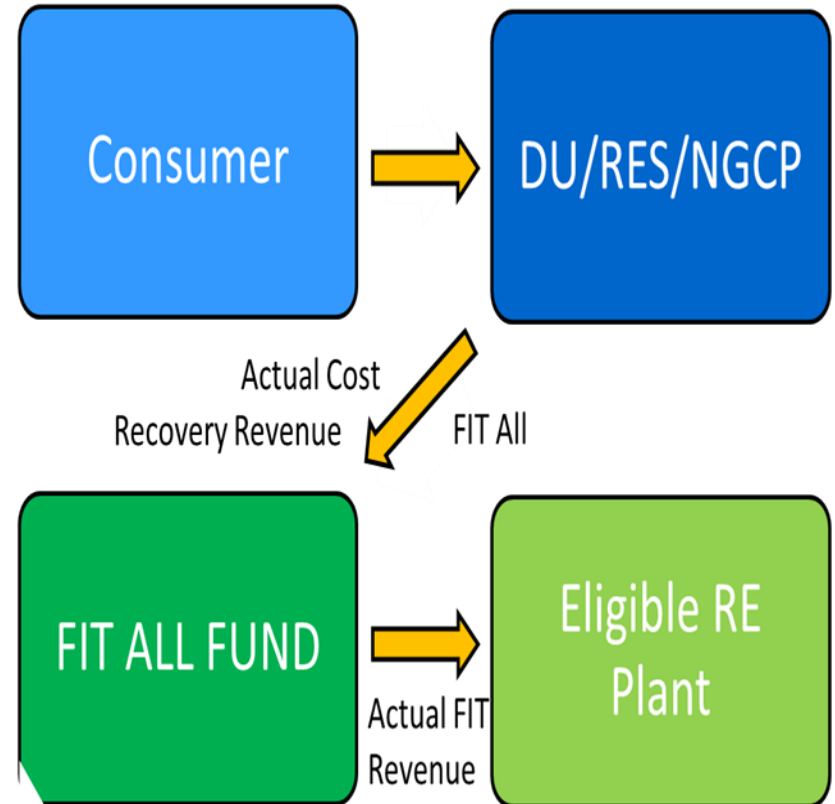
- ✓ **All Eligible RE Plants shall enter into a Renewable Energy Payment Agreement (REPA) with the Administrator for the payment of the FIT, a template of which shall be issued by the ERC.**
- ✓ **Trustee shall separate and allocate the remittances into the component accounts, as computed by the Administrator, and in accordance with this Rules and the ERC Decision on FIT-All.**

Fund Flow

WESM



Non-WESM



Thank You!



fjsvilla@erc.gov.ph

Planning & Information

18F, PIS, ERC

Pacific Center, San Miguel Avenue

Pasig City, Philippines

Tel. (632) 631-5816 or -18 or

VOiP 689-5-303

www.erc.gov.ph

ERRC
towards a brighter future

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