



Public Consultation
December 2017

DRAFT

RENEWABLE ENERGY MARKET RULES

[REM RULES]

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OUTLINE



BACKGROUND



HIGHLIGHTS OF THE RULES



BACKGROUND

RA 9513: Renewable Energy Act of 2008

PEMC Mandates

OBJECTIVE: Accelerate the development of the country's renewable energy resources

1. Establish the Renewable Energy Registrar under the DOE's supervision (2nd paragraph, Section 8, RE Act)¹
2. Implement changes to the WESM Rules to incorporate the rules specific to the operation of RE Market (1st paragraph, Section 8, RE Act)²

1\ The **RE Registrar** shall issue, keep and verify the RE Certificates corresponding to energy generated from eligible RE facilities.

2\ **RE Market** refers to the market where the trading of RE Certificates equivalent to an amount of power generated from RE resources is made. (Section 4 (qq), RE Act).

MARKET DEVELOPMENT MILESTONES



USAID

Development of the Inception Report for the design and establishment of Philippine RE Market



**THE
WORLD
BANK**

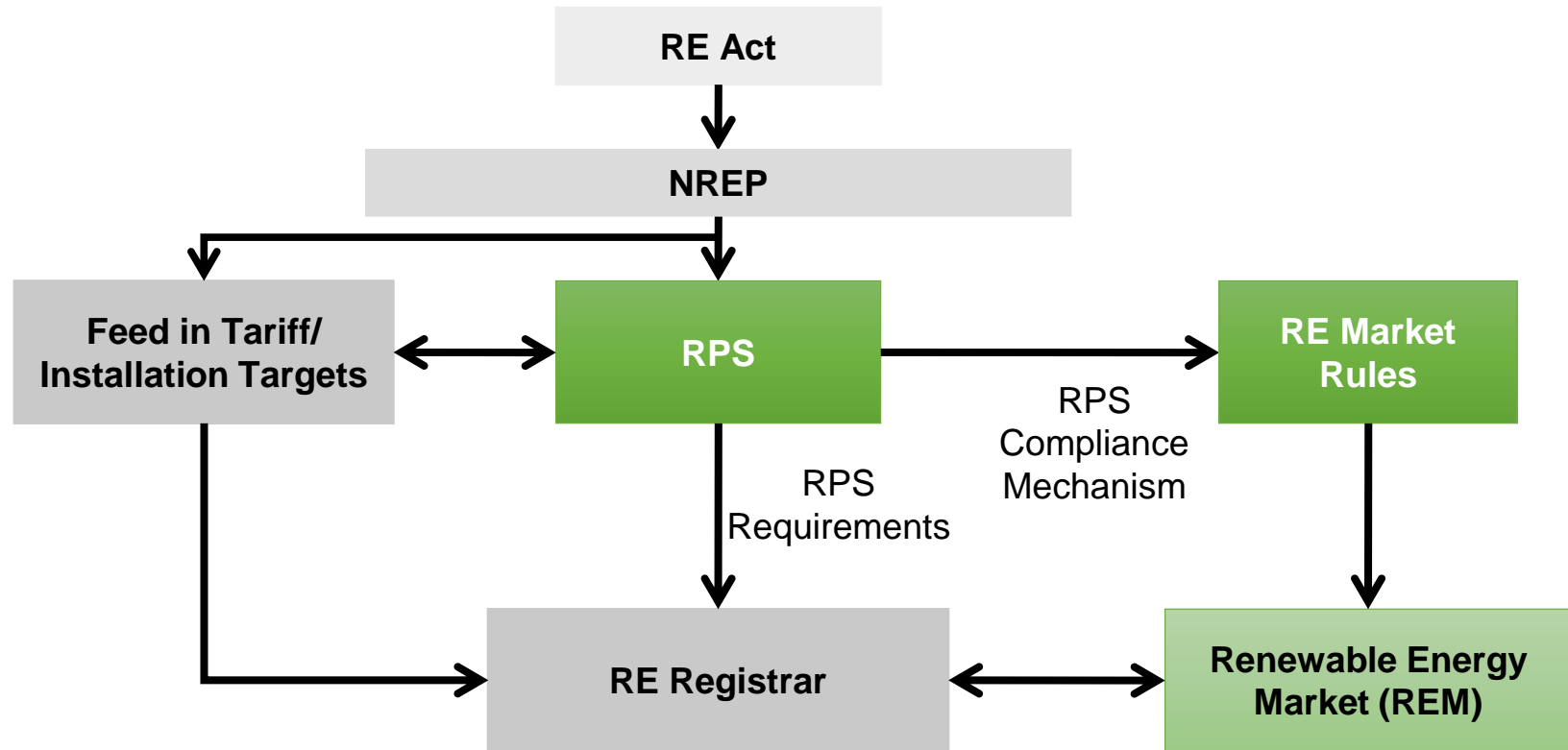
Preparation of the RE Market Rules and IT Infrastructure design



**UN
DP**

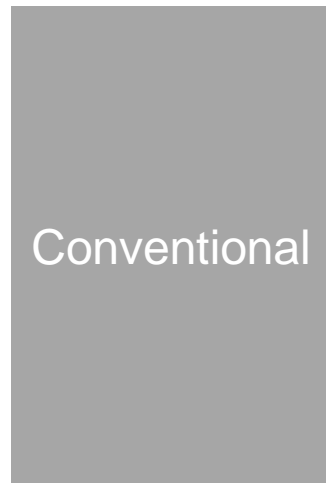
Development of the RE Market IT Infrastructure and Capacity-building for the Stakeholders

REM Policy Framework

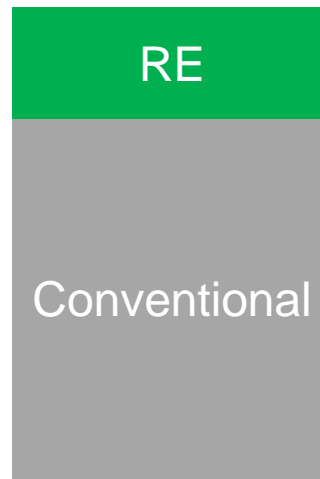


RENEWABLE PORTFOLIO STANDARDS (RPS)

Requires suppliers to source a certain portion of their generation from renewable energy resources [RE Act, Section 3 (bbb)]



Without RPS



With RPS

Suppliers/ mandated entities

1. Private DUs
2. Electric cooperatives
3. RES
4. SOLR
5. distributors of Economic Zones
6. Generator companies to the extent of their supply to the DCCs

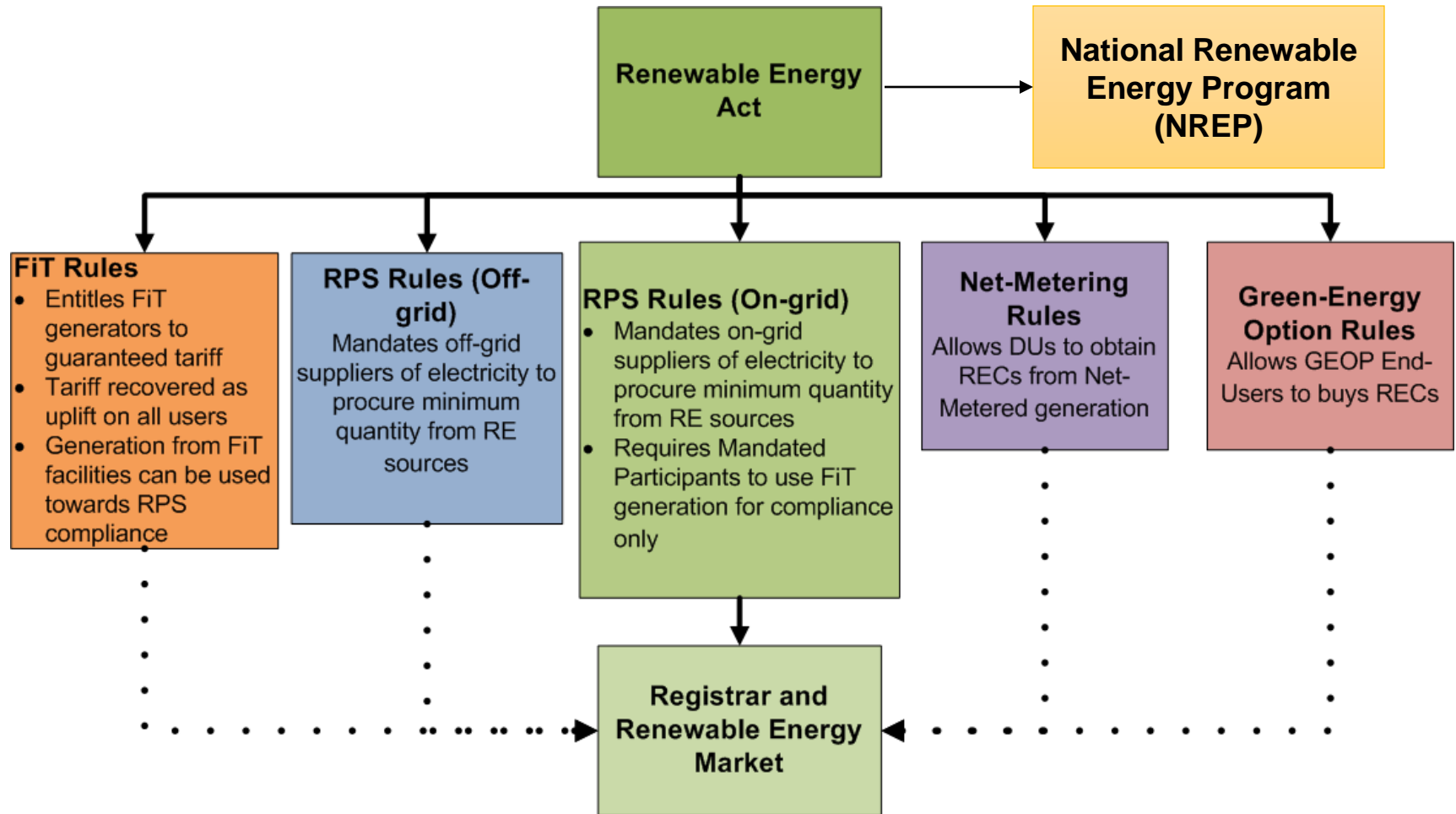
DEFINITION

Renewable Energy Certificates (RECs)

- Electronic certificates that represent the environmental attributes of the energy generated from renewable energy resources



REM RULES POLICY FRAMEWORK



REM OBJECTIVES

- Establish a fair and transparent market for the trading of Renewable Energy Certificates (RECs)
- Facilitate compliance with RPS mechanisms established under the REM Rules
- Ensure level playing field for all REM participants
- **Issue RECs only based on actual RE generation from eligible RE generation capacities**
- Ensure REC prices are governed (as far as practicable) by the fundamentals of supply and demand
- Ensure REC prices, in the long-term, reflect long-term marginal cost of bringing an additional MWh of RE generation into the Philippine electricity system



HIGHLIGHTS OF THE RULES

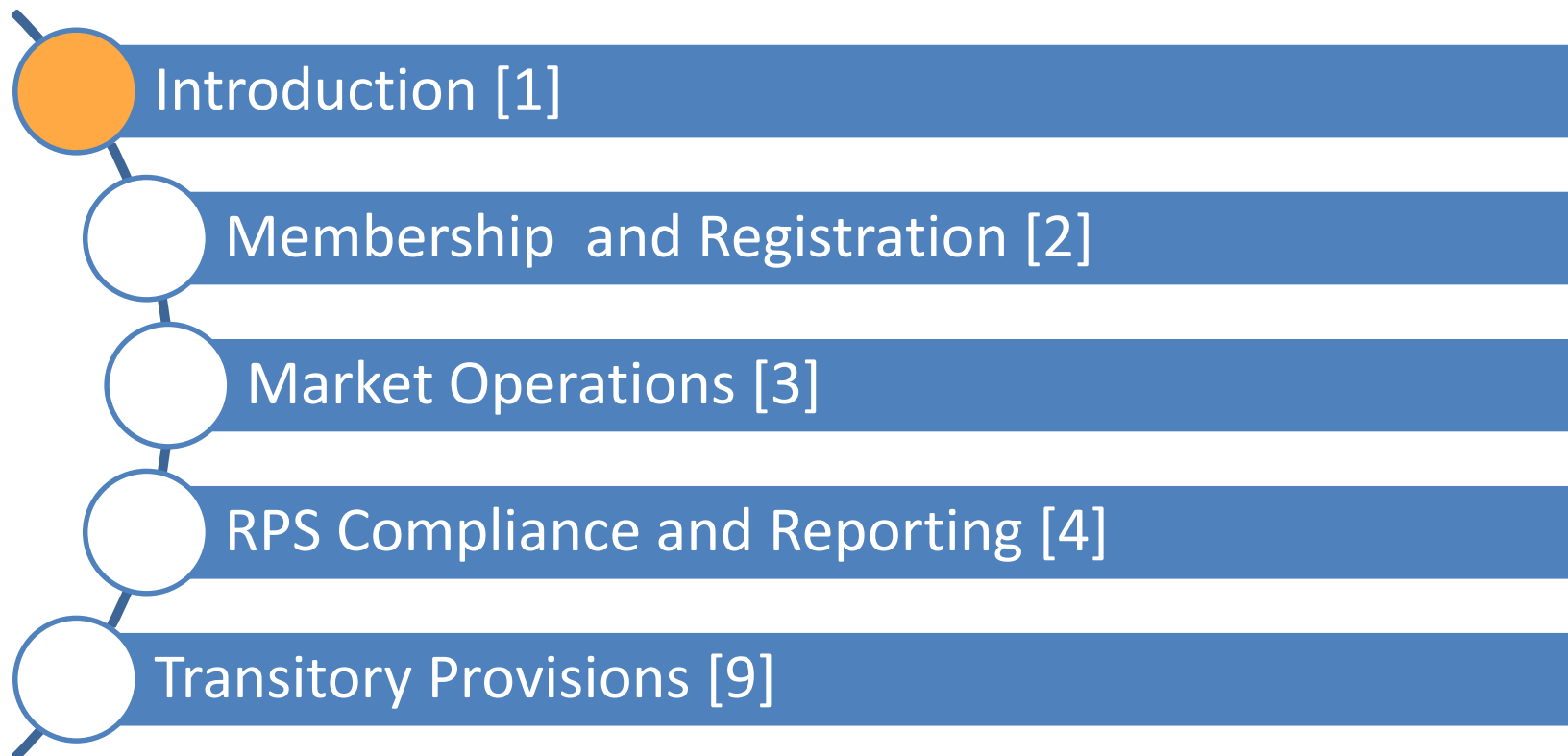
KEY CHAPTERS



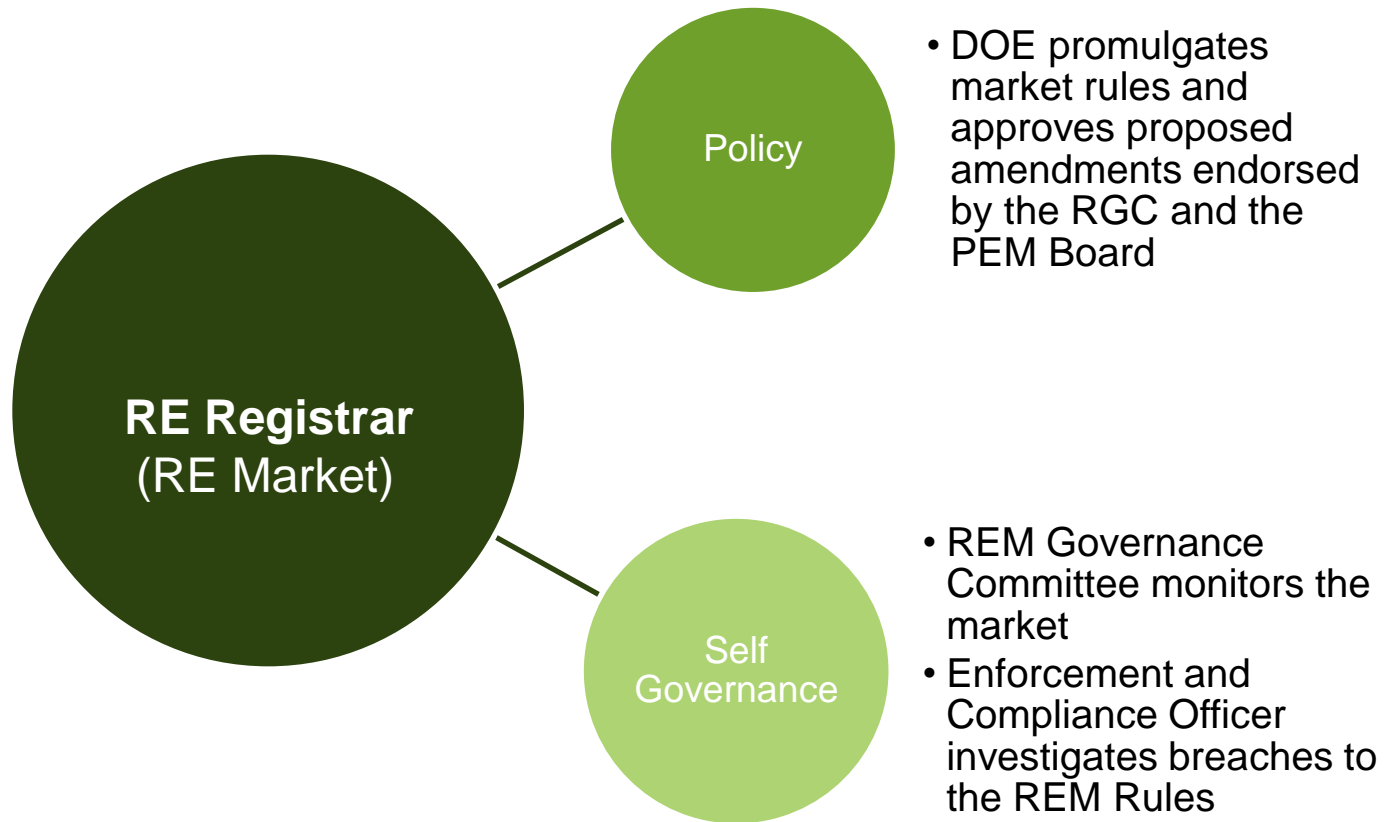
Other Chapters

- Chapter 5: Information Confidentiality
- Chapter 6: REM Compliance, Audit and Dispute Resolution
- Chapter 7: REM Rule and Manual Change Process
- Chapter 8: Interpretation
- Chapter 10: Glossary

KEY CHAPTERS



GOVERNANCE & REGULATORY FRAMEWORK



GOVERNANCE & REGULATORY FRAMEWORK

REM Governance Committee

- Composed of **2 independent members to be elected from the independent members of the PEM Board, representatives of the RER, the REM Generators, and the Mandated Participants to be appointed by the PEM Board; The RGC Chairperson will be selected from the 2 independent members.**
- Imposes financial and/or non-financial penalties for breaches of the REM Rules and Manuals
- Approves or disapproves Rule Change Proposals and refer approved Rule Change Proposals to the DOE for promulgation, subject to the endorsement of the PEM Board
- Adopts performance standards to be endorsed by the PEM Board to the DOE for approval

Other Market Governance Functions

- Functions of Audit and Dispute Resolution will be discharged by the existing WESM Governance Committees.

KEY CHAPTERS



MEMBERSHIP CATEGORIES

REM Trading Participants



Mandated Participants

- On-Grid Mandated Participants: Suppliers of electricity to end-users in On-Grid Systems (i.e. DUs, ECs, RES, LRES, SOLR , GenCos supplying DCCs)
- Off-Grid Mandated Participants: Suppliers of electricity to end-users in Off-Grid Systems



Generating Participants

- Generation Companies who own eligible RE generation facilities that generate into a WESM pool, operates in the off-grid area, operates as a net-metered or embedded facility



GEOP Participants

- Green Energy Option Participants
- End-users enrolled in the GEOP can register in the REM if they wish to purchase RECs.

MEMBERSHIP CATEGORIES

REM Data Providers



WESM Operator

- Metered data and contract data to enable the issuance of RECs created from generation associated with RE generators in WESM
- Metered data from FiT generators registered in the WESM to enable allocation of FiT RE generation towards RPS compliance
- WESM registration information to assist with deemed registrations of existing WESM members



FiT-All Fund Administrator

- (i.e. TransCo) will provide Registrar with data on FiT-All tariff remitted by Mandated Participants and NGCP (for DCCs) to enable allocation of FiT RE generation towards RPS compliance

CESSATION AND DEREGISTRATION

Cessation

- Entities ceasing operations relating to REM Member category must submit written cessation request (in respect of the relevant REM Member category) to the Registrar
- Request shall include the following: date of intended cessation of registration which shall not be less than 30 BD from receipt of the request

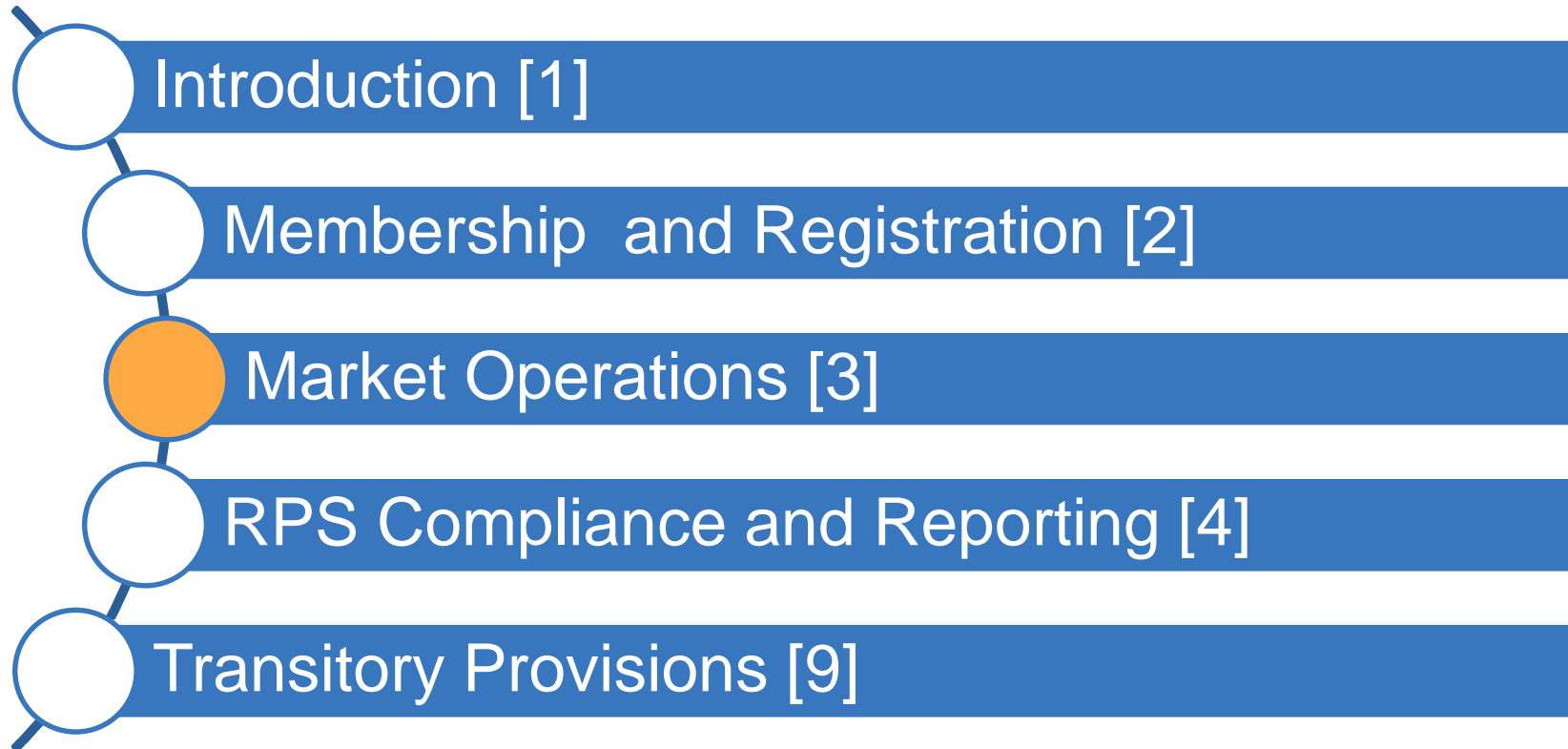
Suspension

- Grounds include: (1) the failure to pay transaction fees; and (2) proven breach of the REM Rules

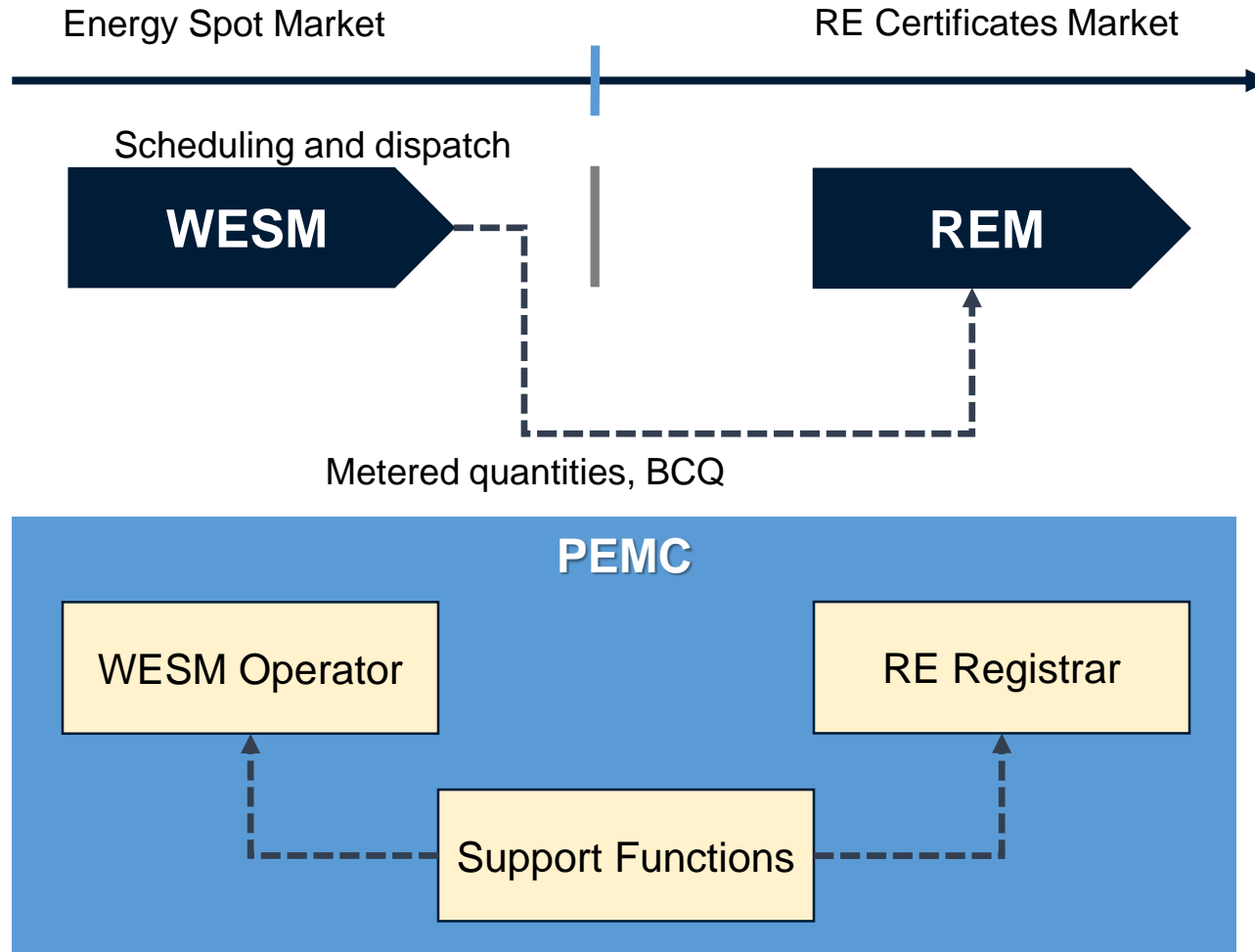
De-registration

- The Registrar shall deregister a REM Member if: (1) It has received a cessation request, or (2) The REM Member has been sanctioned for a breach of the REM Rules.
- Deregistered REM member shall be disallowed to participate in the REM in respect of the relevant REM Member category but must still be liable for any obligations incurred prior to the deregistration.

KEY CHAPTERS



REM AND ENERGY MARKET



RE MARKET OPERATIONS

- **Data Provision.** Market Operator/ MSPs provide settlement-ready MQ and BCQ data
- **REC Issuance:** Certificates are issued upon actual (metered) RE generation
- **REC Trading:** Certificates are live for trading during the compliance period in which they were issued, **until the cutoff set in the RPS Rules**
- **Retirement:** Certificates are retired once used for compliance or if they expire.



REC ISSUANCE TIMETABLE

Category	Timeline	Remarks
WESM/ Grid		
<i>not Multi-Fuel Hybrid Systems</i>	Monthly	More organized data processing
<i>Multi-Fuel Hybrid Systems</i>	Quarterly	More time needed for data consolidation and securing certifications by the concerned generators
Non-WESM/Non-grid (i. e. Net-metered and embedded)	Quarterly	More time needed for data consolidation and validation by the mandated representing the Non-WESM generator

REC ISSUANCE

Default Ownership based on the RPS Rules

Renewable Energy Transaction Method	RE Certificate (REC) Owner
FiT	Allocated among the Mandated Entities (MEs)
Partial FiT	Non-FiT eligible part goes to the Generator (if sold to WESM) or to the customer (if with PSA)
Power Supply Agreement (PSA) with non-DCC (DU, EC, RES, etc.)	Non-DCC counterparty
Power Supply Agreement (PSA) with DCC	Generator counterparty
WESM	Generator
Net-metering	Host Mandated Entities
Self-generation	Host Mandated Entities

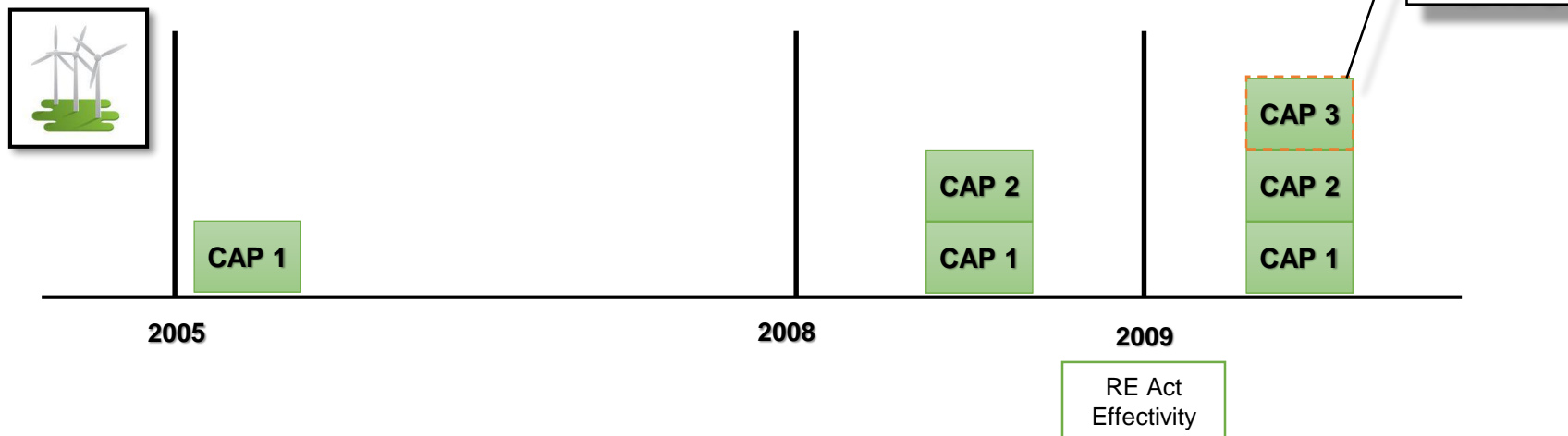
1. Only REM-registered entities can receive the REC based on the assignment above.
2. **No REC to be issued to generation of RE capacities prior the enactment of the RE Act in 2008.**

REC ISSUANCE

Definitions

- A Baseline Generator (**BG**) is a REM generator included in the DOE's calculation of the Baseline RPS Obligation, **that came into commercial operations only after the effectivity of the RE Act.**
- A non-baseline Generator (**NBG**) is a REM generator that was not included in the DOE's calculation of the Baseline RPS Obligation, that has a portion of its capacity eligible for REC issuance due to **expansion of an existing RE plant, upgrading of an existing RE plant, change to RE technology, etc.**, after the cutoff set in the RPS Rules.

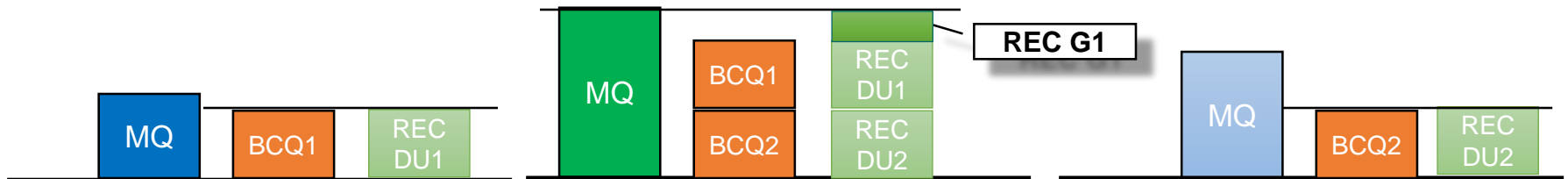
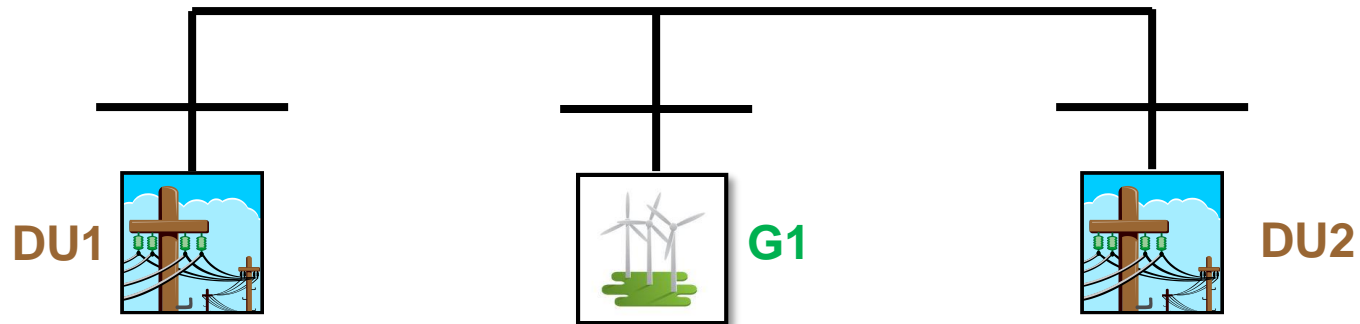
EXAMPLE



REC ISSUANCE

BG 1: Baseline Generator underdeclares BCQ.

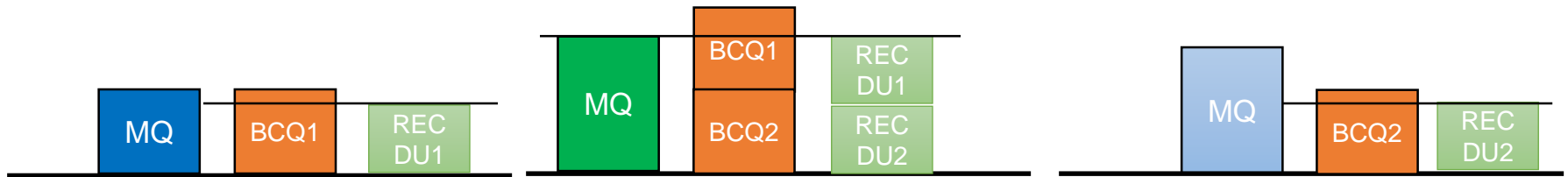
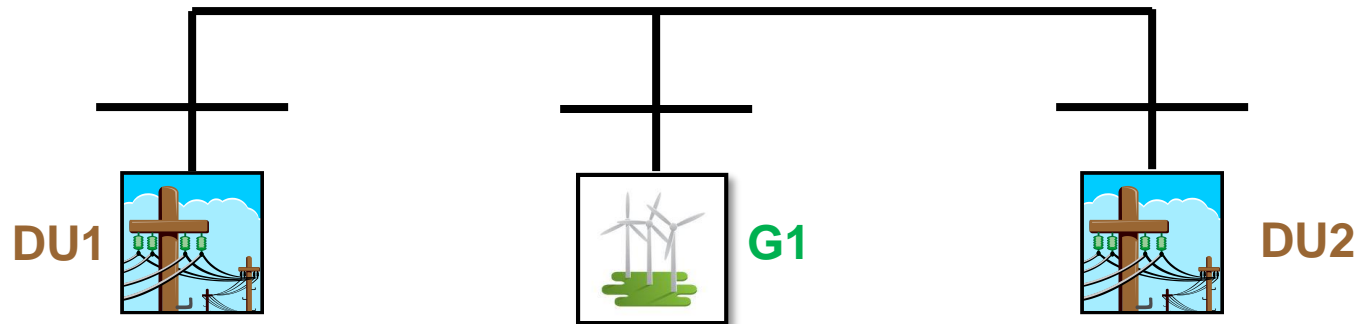
- G1 is a baseline, non-hybrid



REC ISSUANCE

BG 2: Baseline Generator overdeclares BCQ.

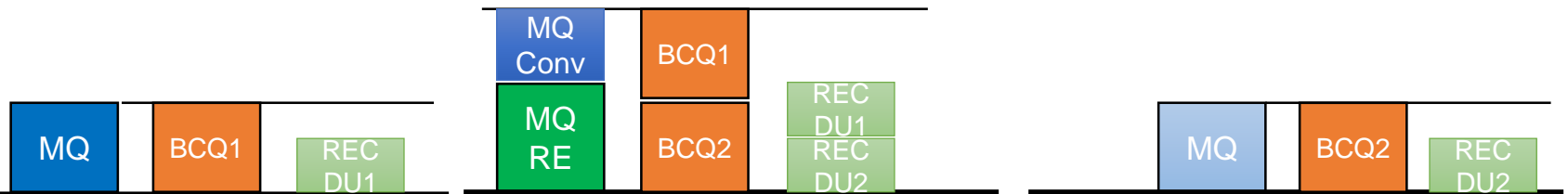
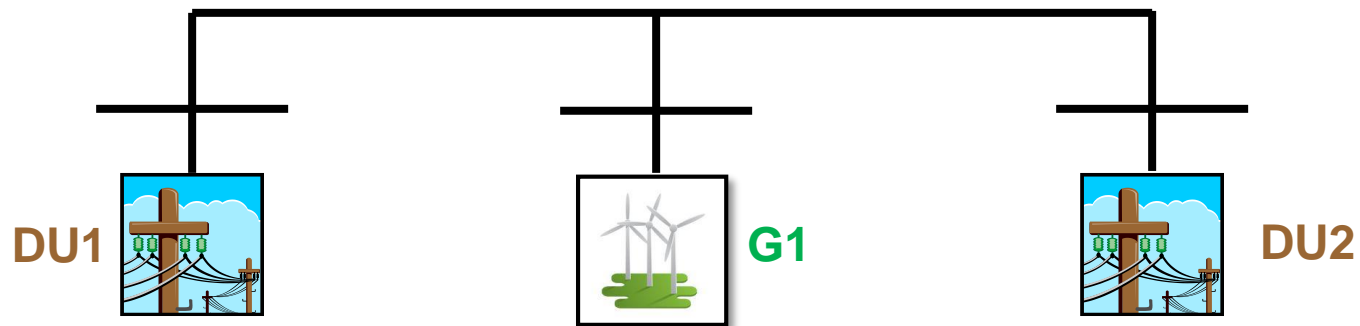
- G1 is a baseline, non-hybrid



REC ISSUANCE

BG 3: Baseline Hybrid Systems

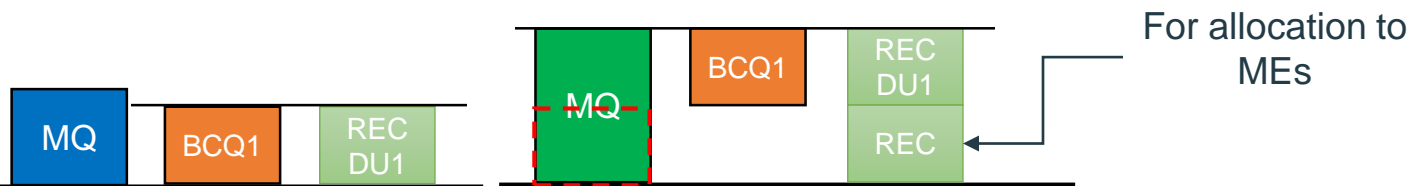
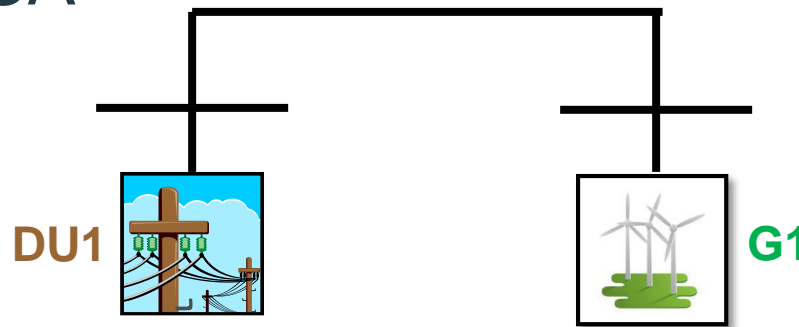
- Applies to the RE component of the separately metered or multi-fuel hybrid systems*.



REC ISSUANCE

BG 4: Baseline Partially FiT-eligible facility

- G1 is a partially FiT-eligible facility
- Non-FiT eligible portion of the capacity is with PSA



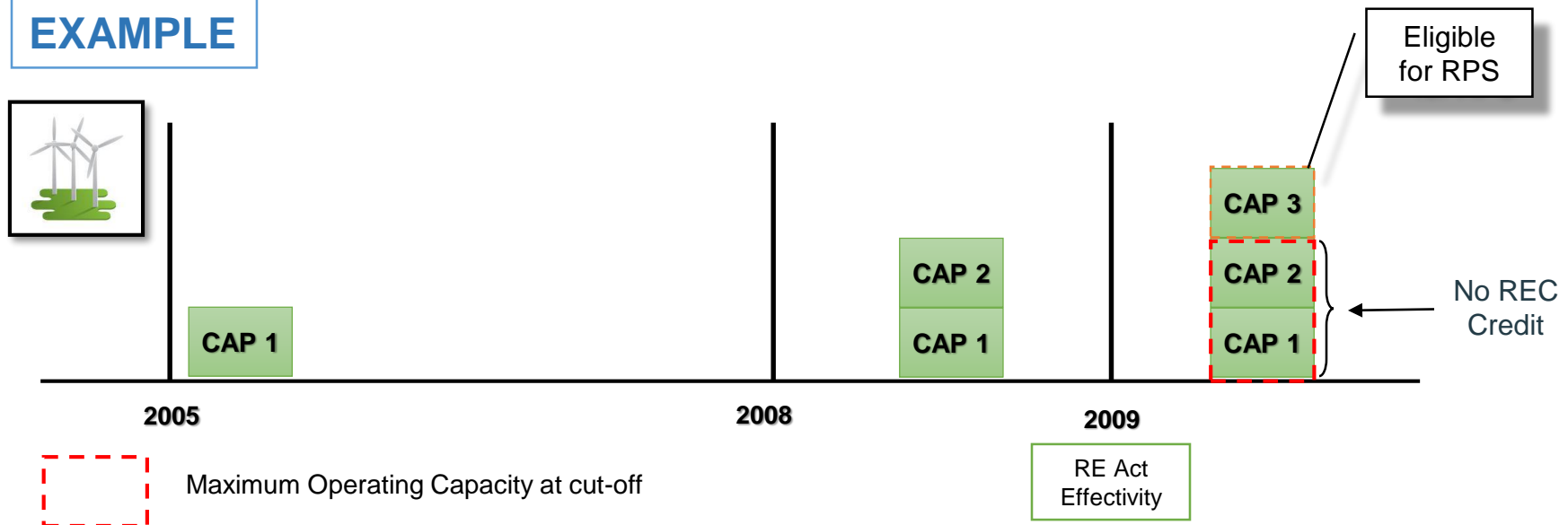
FiT-eligible capacity

REC ISSUANCE

NBG1: Non-baseline RE generators

- A Baseline Generator is a REM generator that was included in the DOE's calculation of the Baseline RPS Obligation, **wherein it have come into commercial operations only after the effectivity of the RE Act.**
- A non-baseline Generator is a REM generator that was not included in the DOE's calculation of the Baseline RPS Obligation, but a portion of its capacity is eligible for REC issuance due to **expansion of an existing RE plant, upgrading of an existing RE plant, change to RE technology, etc,** after the cutoff set in the RPS Rules.

EXAMPLE



REC TRADING: TRANSFERS

- REM Trading Participants can transfer RECs between each other's Registry accounts through the Registry user interface.
- REM Trading Participants can transfer RECs through a one-off transfer only.
- REM Trading Participants must disclose volume and price of each transfer:
 - *The price will be up to the limit (Price Cap) to be approved by the ERC and endorsed by the DOE and NREB, based on the difference of the cost of adding renewable generation, and of the generation cost of the most economic additional generating facility.*
 - The transfer cannot proceed until both the seller and buyer have accepted the volume and price in the user interface.
 - REM Trading Participants must enter accurate price and volume data
- A Green Energy Option Participant's (GEOP) REC is immediately retired upon



RE MARKET OPERATIONS

REC Bulletin Board-Initial Implementation

- The Registrar shall provide a Bulletin Board to facilitate trading of RECs
- The Bulletin Board is not a trading platform
- REM Trading Participants may advertise REC transaction initiations



REC Selling

- The price they wish to sell the REC for
- The vintage and technology type
- The expiry date of the REC



REC Buying

- The quantity of RECs required
- The price they are willing to pay
- The vintage and technology type (if relevant)

BANKING AND RETIREMENT

Banking

- REM Trading Participants may bank a REC for up to **3 years** after the end of the RPS Compliance Period which contains the WESM Billing Period or REM Quarter for which the REC was issued.
- A REC that is banked as above shall expire **3 years** after the end of the RPS Compliance Period which contains the WESM Billing Period or REM Quarter for which the REC was issued.

Retirement

- Mandated Participants can surrender RECs by moving RECs to their “retirement sub-accounts” through the Registry user interface.
- A Mandated Participant can surrender a REC in respect of a particular RPS Compliance Period **within the deadline set in the RPS Rules.**

KEY CHAPTERS



RPS COMPLIANCE MECHANISMS

- On-Grid Mandated Participants can demonstrate compliance with their Annual RPS Obligation through the following:
 1. Retirement of Renewable Energy Certificates (RECs)
 2. Generation from Feed-in-Tariff eligible RE generation facilities (allocated to each Mandated Participant)

ALLOCATION OF FIT GENERATION

- Registrar shall allocate FiT generation to On-Grid Mandated Participants based on energy consumption of the Mandated Participants.
- FiT-Generation accruing to DCCs who contract with Generators will accrue to Generator who is the Mandated Participant (in proportion to their BCQ to spot declaration)
- Participants must raise disputes relating to FiT allocations within **60 days** of being notified
- The following entities are responsible for the FiT allocation process:
 1. The Registrar will calculate the Monthly FiT Generation Share of each Mandated Participant
 2. WESM Market Operator shall provide FiT generation data for all FiT plants over 1 MW

Allocation Methodology

Generation volume: Gross, based on Metered Quantities of the Mandated Entities

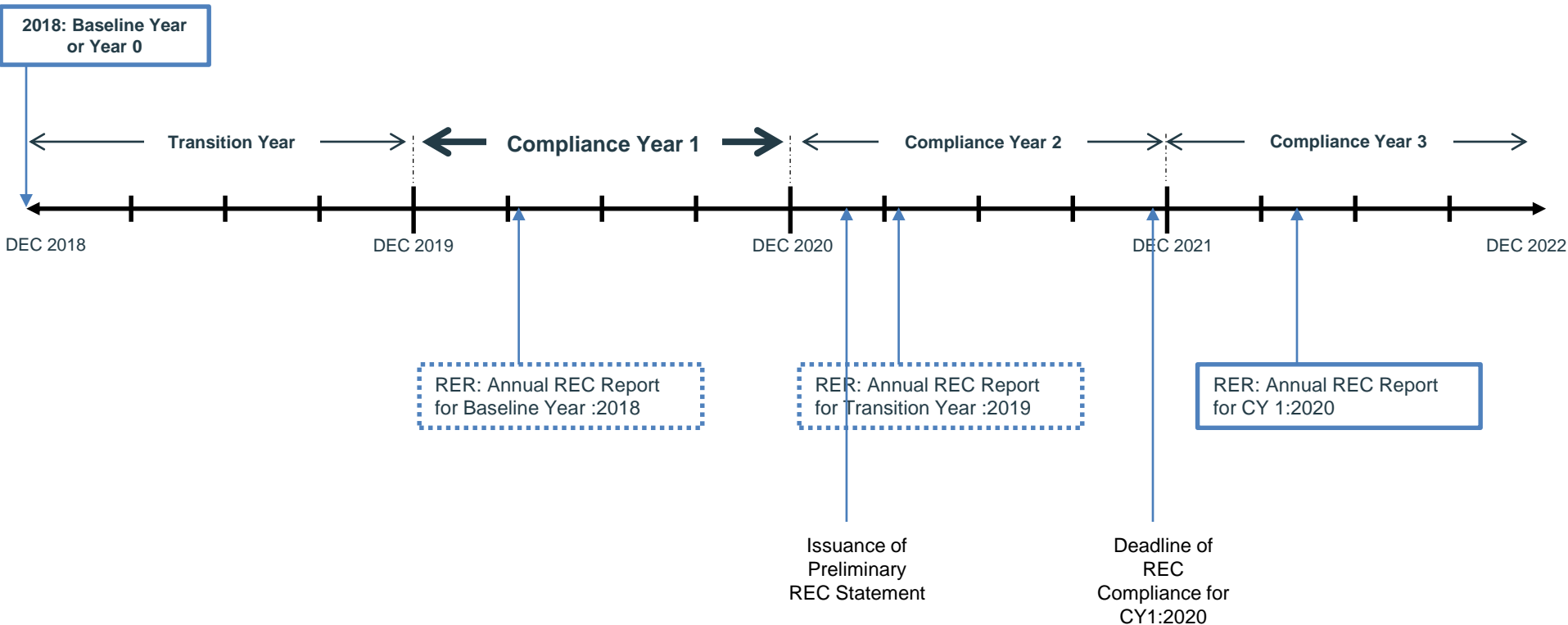
Entity to perform the allocation: RE Registrar

Criteria to allocation: Based on payment to the FiT All

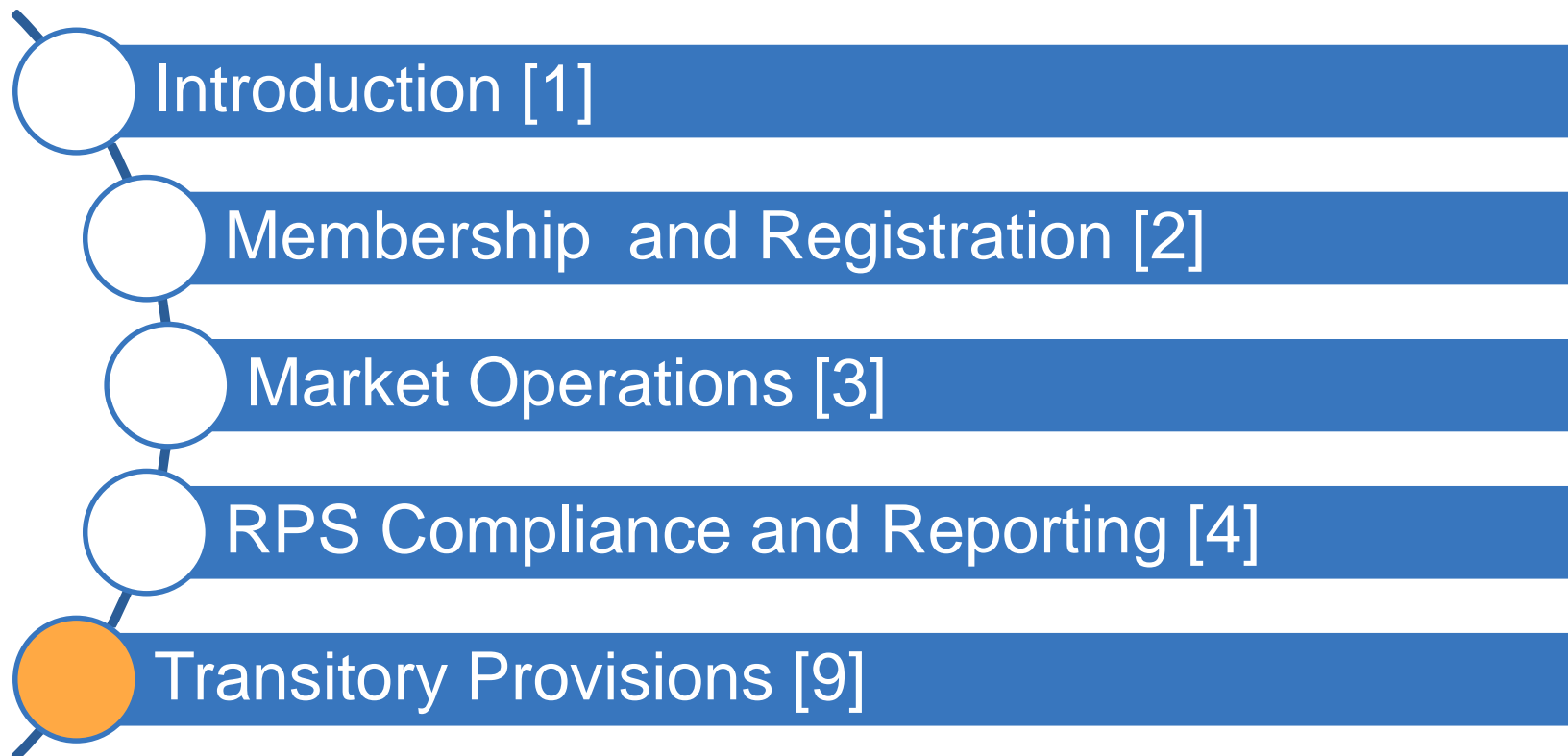
RPS COMPLIANCE TIMELINE

- RPS Compliance Period runs from **26 December Year T to 25 December Year T+1**
- Registrar will issue Preliminary RPS Compliance Statement to On-Grid Mandated Participants **45 days** after end of RPS Compliance Period
- Participants have until **25 December Year T+1** to comply with their Annual RPS Obligation
- The Registrar shall issue Final RPS Compliance Statements to participants 10 BD after 25 December Year T+1 showing final RPS compliance levels
- Disputes in relation to compliance levels must be raised with 60 days of Final RPS Compliance Statements being issued
- Registrar shall submit **Annual RPS Compliance Report** to DOE **5 BD after issuing Final RPS Compliance Statements**

RPS COMPLIANCE TIMELINE



KEY CHAPTERS



TRANSITORY PROVISIONS

Establishment of the REM and the Registry

- Requirement to establish the REM, no later than **one year** upon promulgation of the RPS Rules.
- Development of the IT infrastructure, RE Manuals and internal business procedures.

Registration and membership in the REM

- Mandatory registration of on-grid Mandated Participants in the REM prior to REM commencement
- Mandatory registration of off-grid Mandated Participants in the REM prior to promulgation of the RPS for off-grid
- Participants that are mandatorily required to register are deemed registered with the Registrar, subject to the submission of additional requirements set out in the relevant Manual.
- Registration of *GEOP Participants* in the corresponding category will commence once *the Green Energy Option Rules* have been promulgated by the *DOE*.

TRANSITORY PROVISIONS

Transition Period

- Transition Period will be within a year after the establishment of the REM.

Participation of hybrid systems

- Technical requirements (i. e. generation output, metering and monitoring) for the participation of hybrid systems and certifications required for their participation.

DETAILS

REM Rules Public Consultations

GENERAL DETAILS	
DATE	Luzon:Manila-14 December 2017 Visayas (Bohol) -19 December 2017
PROVISION OF COMMENTS	To be submitted to the DOE-NREB Secretariat at techsec.nreb@gmail.com or to PEMC at events@wesm.ph on or before 29 December 2017 by submitting a duly accomplished <u>REM Rules Comment Form</u>



END OF PRESENTATION

WESM Works.



WESM Helpdesk Ticketing System
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