

RENEWABLE PORTFOLIO STANDARDS RULES

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Republic Act No. 9513

“An Act Promoting the Development, Utilization and Commercialization of Renewable Energy Resources and for Other Purposes”

Feed-in-Tariff

Net Metering

Fiscal Incentives

Green Energy Option

Renewable Portfolio Standards

Section 6. Renewable Portfolio Standard (RPS). - All stakeholders in the electric power industry shall **contribute to the growth of the renewable energy industry** of the country. Towards this end, the National Renewable Energy Board (NREB), created under Section 27 of this Act, **shall set the minimum percentage of generation from eligible renewable energy resources and determine to which sector RPS shall be imposed on a per grid basis within one (1) year from the effectivity of this Act.**

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RE Act IRR (DC2009-05-0008)

Rule 2, Section 4 Renewable Portfolio Standards

“xxxx

(c) Formulation of RPS Rules:

xxxxx

Upon the recommendation of the NREB, the DOE shall, within six (6) months from the effectivity of this IRR, formulate and promulgate the RPS Rules which shall include, but not be limited to, the following:

- (1) **Types of RE Resources**, and identification and certification of generating facilities using said resources that shall be required to comply with the RPS obligations;
- (2) **Yearly minimum RPS requirements** upon the establishment of the RPS Rules;



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RE Act IRR (DC2009-05-0008)

Rule 2, Section 4 Renewable Portfolio Standards

(3) Annual minimum incremental percentage of electricity sold by each RPS-mandated electricity industry participant which is required to be sourced from eligible RE Resources and **which shall, in no case, be less than one percent (1%) of its annual energy demand over the next ten (10) years;**

(4) **Technical feasibility** and stability of the transmission and/or distribution grid systems; and

(5) **Means of compliance** by RPS-mandated electricity industry participant of the minimum percentage set by the government to meet the RPS requirements including direct generation from eligible RE Resources, contracting the energy sourced from eligible RE Resources, or trading in the REM.”



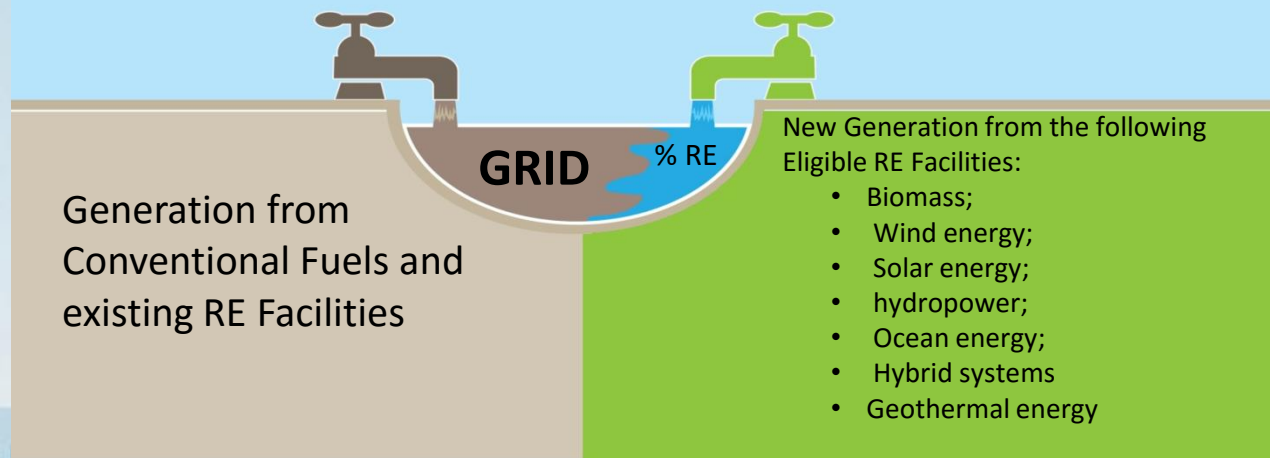
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Renewable Portfolio Standards (RPS)

- ✓ Mandated Renewable Energy electricity blend to the total supply of electricity for on-grid and off-grid areas.

Will Create Market for Renewable Energy



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RULE 3. ELIGIBLE RE FACILITIES, AND MANDATED PARTICIPANT

Section 9. Eligible RE Facilities (slide no. 11)

Section 10. Generation from Eligible RE Facilities for RPS Compliance (slide no 12-13)

Section 11. RPS Mandated Participant. The following entities are mandated to comply with the RPS:

- a. All DUs for their captive customers;
- b. SOLR;
- c. All Local and licensed RES for the Contestable Market upon commencement of RCOA;
- d. Generating companies only to the extent of their actual supply to their DCCs;
- e. Entities duly authorized to operate as distributors within the economic zones; and
- f. Other entities as may be recommended by NREB and approved by the DOE.

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RULE 3. ELIGIBLE RE FACILITIES, AND MANDATED PARTICIPANT

Section 12. Generation RPS Targets

The Mandated Participant shall be guided by the RE generation targets to be determined by the NREB consistent with the targets set in the NREP duly approved by the DOE.

Section 13. Review of RPS

This Circular and the targets set hereunder, as well as the baseline and other relevant This should happen before setting the target and the annual increment.



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35% RE share in energy (kWh)

- Which plants are Eligible RE Facilities?
- What is the Baseline allocation for Mandated Participants?

???
target RE percentage

25% current share

???
% Incremental RE

Target year 20??

2008

2009

2017

2019

RE Act passed

RE Act IRR promulgation

2 years to prepare for market rules to be in effect

As per RE Law IRR – minimum 1% incremental RE per annum for 10 years

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Setting Targets

Rule 2, Section 7. Minimum Annual RPS Requirement

*To restore the RE share in the national energy mix to **35%** in MWh by the “Target RE Share”*

Option 1: 2030 - based from 2016 version of the RPS

Option 2: 2040 - based from “Ambisyon 2040”

the minimum annual target per grid shall be equal to the sum of the minimum target of all Mandated Participants in the grid. xxx



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Incremental RPS Compliance

➤ **Option 1:**

K = 2.15% fixed annual increase

Based on the 2016 draft of the RPS Rules

➤ **Option 2:**

K = 1% fixed annual increase

Based on the RE Act IRR minimum requirements

➤ **Option 3:**

K = not constant; initially set at 1%

Initially based on the RE Act IRR minimum requirements, but may increase depending on the future costs of RE facilities, grid capability and targets

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Section 9. Eligible RE Facilities

- ▶ Biomass;
- ▶ Waste to energy technology;
- ▶ Wind energy;
- ▶ Solar energy;
- ▶ Run-of-river hydroelectric power systems;
- ▶ Impounding hydroelectric power systems;
- ▶ Ocean energy;
- ▶ Hybrid systems as defined in the RE Act, with respect to the RE component;
- ▶ Geothermal energy; and
- ▶ Other RE technologies that may be later identified by the DOE, through a separate issuance, upon the recommendation of the NREB;

...provided that, for the RE Facilities utilizing these technologies shall have been in commercial operations after the effectivity of the RE Act for the RE Facilities to be eligible.



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Section 10. Generation from Eligible RE Facilities for RPS Compliance

- ▶ New RE installations targeted under the NREP;
- ▶ Existing RE power generating facilities
- ▶ Incremental capacity resulting from expansion of an existing RE power generating facility;
- ▶ Incremental capacity resulting from the upgrading of an existing RE power generation facility that includes retrofitting, refurbishing or re-powering;
- ▶ New capacities resulting from a change in the technology i.e., from a non-RE to RE power generation facility e.g., a coal plant that is modified to use agricultural wastes as fuel: Provided, That co-firing shall not be allowed;



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- ▶ Exported energy from RE facilities installed in end-user's premises participating under the Net Metering program;
- ▶ Mothballed RE facilities that are restored into operation; and
- ▶ Other RE technologies as may be later identified by the DOE, through a separate issuance, upon the recommendation of the NREB.

In order to be an Eligible RE Facility, the abovelisted RE facilities shall have come into commercial operations after the effectivity of the RE Act; provided, that with respect to RE facilities under Section 10(a), these shall come into commercial operation after effectivity of this Circular.



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Section 14. Compliance Mechanisms

The Mandated Participant shall use any one, a combination hereof, or all of the following in complying with this Circular:

- ▶ Allocation from the Market Operator pursuant to the FIT Rules or the relevant rules issued by the ERC therefor. RE Generation allocated by the Market Operator pursuant to the FIT Rules shall be used for compliance purposes and cannot be traded;
- ▶ Generation from an Eligible RE Facility with a Power Supply Agreement (PSA) duly approved by the ERC;
- ▶ Generation from an Eligible RE Facility with a PSA with another generating company for the supply to its contracted DCC;
- ▶ A REC acquired from the REM where the ownership and value per unit shall be defined by the DOE in a separate circular; and
- ▶ Any generation from Net Metering arrangements.



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RE Market and RE Registrar

Provisions with revisions:

- ▶ REC shall be issued based on the following:
 - ▶ Regarding the output of Eligible RE Facilities not under the FIT System, to the owner of the Eligible RE Facility as regards the output of the RE Facility, *provided that*, this does not preclude the Mandated Participant and the owner of the Eligible RE Facility to have an arrangement wherein the Eligible RE Facility's output offtaker or buyer may own the REC, provided further that, the owner of the Eligible RE Facility can only sell RECs;
 - ▶ Regarding the output of Eligible RE Facilities under the FIT System, the RECs corresponding to the total output of the Eligible RE Facilities under the FIT System shall be shared pro-rata among the Mandatory Participants except the Mandatory Participant in Section 11 (d);

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RE Market and RE Registrar

Provisions with revisions:

- ▶ Excess RECs of the Mandated Participant can be traded pursuant to Section 14 (d), Rule 4
- ▶ A REC shall be valid for three (3) years and can be banked only during its validity
- ▶ A price cap on the REC shall be established
- ▶ During the first three years of the RPS program and every other year thereafter, the DOE shall review the REM Rules for possible revisions based on the rate of compliance of the Mandated Participant, REC market activity and general success in meeting RPS goals
- ▶ In the event that a functioning REM is not in place within one (1) year after the effectivity of this Circular, the DOE shall appoint a third party temporary RE Registrar

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Thank You!

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