



RE MARKET (REM) CONSULTATION PAPER

Note: For more clarity, this document is to be read along with the draft REM Rules and the REM Frequently Asked Questions (FAQs).

A. Governance and Membership

1. Governance Structure of the REM

Under the RE Act, the DOE is mandated to establish the REM through supervising the integration of the operation of the REM under the WESM including implementing changes to the Wholesale Electricity Market Rules (WESM) Rules to provide for the operations and governance of the REM. The DOE will also promulgate the REM Rules and REM Manuals, and approve amendments on the REM Rules. The DOE is further empowered to impose administrative fines and penalties for any violation of the provisions of the RE Act, its Implementing Rules and Regulations (IRR) and other issuances relative to the same.

REM operations is proposed to be supervised by the REM Governance Committee (RGC) which is under the Philippine Electricity Market (PEM) Board. As to the composition, the RGC will be composed of two (2) independent members to be elected from the independent members of the PEM Board, one (1) representative each from the RE Registrar (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. The RGC is created to provide more focused and expert decision-making for the operations and governance of the REM.

Aside from the supervision of the REM, the RGC will take the lead in the review and approval of proposals for REM Rules and Manuals changes. The DOE, as the lead agency for the implementation of the RE Program, will promulgate the REM Rules and will approve the proposed amendments to the REM Rules endorsed by the RGC and the PEM Board. The RGC will also have the authority to impose sanctions on REM Members if the breach of the REM Rules was proven through an investigation carried out by the Enforcement and Compliance Office (ECO) under the PEM Board's supervision.

The other governance functions such as market audit and dispute resolution will be carried out by the existing WESM governance committees noting the less frequent activities involved in carrying out this functions enabling the existing WESM governance committees to also perform these for the REM.

2. Participation of Embedded Generators and Net Metering Facilities

The registration of net-metered and non-WESM embedded generators is proposed to be voluntary for them, with the generator being able to use their host DU as a registration agent. In turn, the host DUs will assume the obligations of the RE Generators which include the submission of the required information or data to the REM to facilitate the issuance of the RE Certificates (RECs) and prompt payment of all fees, charges and other payments arising under the REM Rules as they become due, subject to the arrangements to be agreed upon by the host DU and the generator.



DRAFT **Renewable Energy Market (REM)** Rules

The RE Act provides that the RECs out of the generation of Net-metered RE Generation Facilities will be credited to the host distribution utilities (DU). Similarly, majority of the production of the Embedded Non-WESM RE Generators are contracted/ withdrawn by the host distribution utility.

The voluntary registration of net-metered and non-WESM embedded generators, with the generator being able to use their host DU as a registration agent is proposed for the following reasons:

• It would ensure that the generator does not face unnecessary costs (as the DU would facilitate the registration process); and

• The DU has an incentive to undertake registration on the generator's behalf as they would receive all RECs corresponding to the generator's RE production.

B. Market Operations

1. Frequency of Issuance of RE Certificates

For the WESM/ grid-connected generators (more specifically not Multi-Fuel Hybrid Systems¹), the issuance of RECs is proposed to be done monthly noting the more established process on the validation of metered quantities (MQ) which will be the basis of REC issuance. Quarterly issuance is to be done for the hybrid systems, net-metered generators and non-WESM embedded generators. The monthly issuance of RECs for WESM non-hybrid generators and quarterly issuance for the other generator categories, respectively, are due to practical reasons. May we note that more time is needed for data consolidation for net-metered and embedded generators and securing certifications from the DOE on actual RE generation for multi-fuel hybrid systems, However, such difference in the timing of the REC issuance will have minimal impact to the mandated entities on their compliance to their RPS obligations noting that they will be given one (1) year to comply to their Renewable Portfolio Standards (RPS) obligations reckoned at the end of the subject compliance period, as provided in the RPS Rules.

Furthermore, RECs will be issued only to whole MWh of RE generation. Thus, fractional RE generation especially those generated by small RE facilities will be *carried over* and aggregated in the following REC issuance.

2. Simple market design for the trading of the RECs

In a simple design/ over the counter (OTC) setup, entities who have excess RECs will post the price and quantities of RECs they are willing to sell, while those entities with shortfall for their RPS compliance will also post their REC requirement in the bulletin board to be managed by the RER functioning as the REM. The RER will have no direct involvement in the transaction and will just facilitate the trading of the RECs among the parties. If a transaction transpires among the parties, the RE Registrar will be notified by the parties electronically to facilitate the subsequent centralized transfer of the RECs.

¹ RE Act, Section. 4. Definition of Terms: (w) "Hybrid Systems" refers to any power or energy generation facility which makes use of two (2) or more types of technologies utilizing both conventional and/or renewable fuel sources, such as, but not limited to, integrated solar/wind systems, biomass/fossil fuel systems, hydro/fossil fuel systems, integrated solar/biomass systems, integrated wind/fossil fuel systems, with a minimum of ten (10) megawatts or ten percent (10%) of the annual energy output provided by the Renewable Energy (RE) component.



DRAFT **Renewable Energy Market (REM)** Rules

In more advanced markets, the RER plays an active role wherein it implements the market rules and the price determination methodology for the trading of the RECs. The foregoing table summarizes the international experience on the market implementation.

Jurisdiction	Open Market	Exchange
Poland	\checkmark	\checkmark
Romania	\checkmark	\checkmark
Italy	\checkmark	\checkmark
Sweden and Norway	\checkmark	
Texas	\checkmark	
New England	\checkmark	
New Jersey	\checkmark	
California	\checkmark	
India		\checkmark
United Kingdom	\checkmark	
Australia	\checkmark	\checkmark

Table 1. International experience of trading arrangements

Considering the projected low volumes during the early years of the market, the costs of an exchange implementation of the REM outweighs the liquidity benefits. Thus, it is proposed that a simple design/ over the counter (OTC) setup be adopted for the initial REM implementation.

However, an implementation roadmap will be developed together with the criteria for assessing market maturity to cause the implementation of the phases leading to a more advanced market implementation identified in the roadmap.

3. Disclosure of the volume and price for each transaction to the RE Registrar.

On a monthly basis, the REM is proposed to publish <u>aggregated</u> information on the number of RECs issued to REM participants and are available for trade. To this end, the REM participants will be required to provide the price and volume of each REC transfer transaction. Again only aggregated information will be disclosed publicly and such disclosure will be governed by the REM Rules Chapter for Information Confidentiality.

4. Automatic retirement of RECs bought by GEOP participants.

The RER allows the registration of end-users participating in the Green Energy Option Program² (GEOP) in the REM. Noting that they are not mandated entities for RPS Compliance, the RECs that they will voluntarily purchase for their corporate programs is proposed to be retired automatically and are not allowed to be traded in the REM. However, the participation in the RE Market of end-users owning generating facilities eligible to be issued with RECs will be considered in the advanced phases of REM

implementation.

² RE Act, Section. 4. Definition of Terms: (u) "Green Energy Option" refers to the mechanism to empower end-users to choose renewable energy in meeting their energy requirements.