# <u>Draft MERC (Net Metering for Roof-top Solar Photo Voltaic Systems) (First Amendment)</u> Regulations, 2017

#### **EXPLANATORY MEMORANDUM**

25 May, 2017

## **Existing Net Metering Regulations**

The MERC (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations, 2015 ('Net Metering Regulations') are applicable to an Eligible Consumer of electricity in the area of supply of a Distribution Licensee who uses or intends to use a Solar Photo Voltaic (PV) generating system of a capacity below 1 MW in his premises to meet all or part of his own electricity requirement through a Net Metering Arrangement. The Net Metering Arrangement refers to an arrangement under which a Roof-top Solar PV System with Net Meter at an Eligible Consumer's premises delivers surplus electricity, if any, to the Distribution Licensee after setting off the quantum of electricity supplied by the Licensee during the applicable Billing Period.

## Representations received for including other RE Generating Systems

Subsequent to the notification of the Regulations, the Commission has received the following representations seeking that the Solar PV Net Metering dispensation be extended to other Renewable Energy (RE) generating systems also, including Hybrid RE systems:

- 1. Shri. Dhananjay N. Date, vide his e-mail dated 22 February, 2017, stated that he had installed a Roof-top Hybrid Renewable Energy System (comprising 3.6 kW Solar and 1.8 kW Windmill) at his premises in Pune in 2014. After notification of the Net Metering Regulations, he sought and had installed a Net Meter at his premises in 2015. Since a hybrid system (Solar + Wind) was not covered by the Regulations, the Maharashtra State Electricity Distribution Co. Ltd. asked him to disconnect the Roof-top Windmill from the Net Metering facility. Shri Date has suggested the inclusion of Wind energy in the Net Metering dispensation in Maharashtra for the following reasons:
  - Wind energy is a clean and natural energy, like Solar energy. It is in the national interest to encourage use of such natural energy sources,
  - Wind energy is environment-friendly and renewable,
  - The Delhi Electricity Regulatory Commission has notified Net Metering Regulations for RE sources instead of making any distinction between Solar and Wind energy.
- 2. INS Shivaji, Lonavala (Capt. Nilkanth Khond, Project Director), vide e-mail dated 19 September, 2016, has stated that it is a premier technical training establishment of the Indian Navy which has been given approval by the Ministry of Defence, Government of

India for a Smart Micro Grid (Solar, Wind and Diesel) for which it intended to have connectivity with the Distribution Licensee. Since the Net Metering Regulations cover only Solar energy, the policy and procedure for connectivity of the Hybrid Plant to the Licensee's network may be intimated.

- 3. Municipal Corporation of Greater Mumbai (MCGM) (Assistant Commissioner, H Ward), vide letter dated 7 September, 2016 addressed to Reliance Infrastructure Ltd. (with a copy to the Commission) sought a Net Metering arrangement for its Solid Waste-based Bio Gas Plant at Kalina. The Plant is expected to generate 175 units of electricity per day, of which 50 units would be for own consumption and 125 units for injection into the grid through a Net Metering arrangement.
- 4. Pali Hill Residents' Association (PHRA), vide letter dated 11 August, 2016 addressed to the Assistant Commissioner, H Ward, MCGM has stated that PHRA intended to install a Waste to Energy Bio Gas Plant through its own funds for garbage disposal. The electricity generated could be used for LED street lights at Pali Hill, Bandra.

### **Proposed Amendments to existing Regulations**

Net Metering for Solar PV generation had been the focus of attention of the Ministry of New and Renewable Energy, Govt. of India, most other State Commissions and also in a Petition before this Commission. In this background, the Net Metering Regulations applicable to Solar PV energy were notified in the Official Gazette on 10 September, 2015 after considering comments received on the draft during the public consultation process. The Commission notes that, at that time, no suggestions were received to include other RE generating systems also.

While the Net Metering Regulations of most State Electricity Regulatory Commissions are also restricted to Solar PV generation, the Commission notes that the Regulations of some Commissions such as Delhi and Madhya Pradesh, and the more recent Regulations of the Joint Commission for Manipur and Mizoram, are applicable to other types of RE generation also.

The Commission is of the view that, while the Net Metering arrangement is likely to be used mainly for Solar PV energy, the principles and provisions of the Regulations may be also extended to include other RE (including Hybrid RE) generating systems.

The Commission proposes to expand the scope of the Net Metering Regulations accordingly. For this purpose, the amendments proposed to the existing Regulations include changes and additions to the present definitions and substitution of certain terms used in the Regulations so as to include all RE generation, as defined in the MERC (Terms and Conditions for Determination of RE Tariff) Regulations, 2015.

The draft amendments to the Net Metering Regulations have websites of the Commission for public comments, suggestions and	available	on	the