

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
**World Trade Centre, Centre No.1, 13th Floor,**  
**Cuffe Parade, Mumbai – 400 005**  
**Tel. 022 22163964/65/69 Fax 22163976**  
**Email: mercindia@mercindia.org.in**  
**Website: www.mercindia.org.in**

**Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, Its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016**

**STATEMENT OF REASONS**

**Date: 30 March, 2016**

Since the operative period of the earlier Regulations of 2010 is ending on 31 March, 2016, the Maharashtra Electricity Regulatory Commission ('MERC' or 'the Commission') has notified the MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016 ('the RPO Regulations, 2016') for the four financial years from FY 2016-17 to FY 2019-20.

The draft of the new Renewable Purchase Obligation (RPO) Regulations was based substantially on the Regulations of 2010, but with certain important modifications. The Commission had published the draft RPO Regulations on its websites and sought suggestions and objections by 19 January, 2016 through a Public Notice (in Marathi and English) in daily newspapers. Vide Public Notice dated 11 February, 2016, the Commission had extended the date upto 15 February, 2016. 19 entities responded to the Notice.

The main comments received during this public consultation process, and the revisions made by the Commission while finalising the new Regulations as notified are set out below, along some important differences as compared with the 2010 Regulations.

**1. Eligible Renewable Energy Sources (Regulation 4)**

Hybrid Renewable Energy (RE) Projects, which harness two or more forms of RE sources simultaneously, have considerable potential. Regulation 2.1(m)(x) of the MERC (Terms and Conditions for Determination of RE Tariff) Regulations, 2015 explicitly recognizes such Hybrid RE Projects.

While the RPO Regulations, 2010 do not exclude all Hybrid RE Projects inasmuch as those Regulations cover technologies approved by the Ministry of New and Renewable Energy (MNRE), Govt. of India/ the Commission, the RPO Regulations, 2016 now explicitly mention such Projects. However, for the purpose of energy accounting for RPO, electricity generation from the Solar and Non-Solar components of Hybrid RE Projects shall be metered separately or appropriate modalities for separate energy accounting shall be devised for the purpose of segregating Solar and Non-Solar RPO.

Regulation 4.2(h) provides that any particular RE technology or RE source not specifically mentioned may qualify as an Eligible RE source if recognized or approved by both MNRE and the Commission.

## **2. Obligated Entities (Regulation 5)**

Considering the difficulties experienced in Maharashtra and in other States in monitoring compliance of RPO of a very large number of Obligated Entities, the operational difficulties of smaller Entities and the fact it may be more productive to focus on larger potential contributors to renewable procurement to meet the objective of stipulating a RPO, the Commission has considered it appropriate to increase the minimum limit for fastening such Obligation from 1 MW installed capacity or 1 MVA Contract Demand to 5 MW and 5 MVA, respectively, for the time being, though the option of a different stipulation at a later date would be retained by the Commission.

In case of Captive Users and Open Access Consumers who are Obligated Entities, the RPO target (Solar and Non-Solar) shall be applicable only on their consumption from fossil fuel-based sources, considering the objective of the Regulations. Accordingly, Regulation 5(a) reads as follows:

*“Any person who owns a grid connected Captive Generating Plant based on conventional fossil fuel with installed capacity of 5MW and above, or such other capacity as may be stipulated by the State Commission from time to time, and consumes electricity generated from such Plant for his own use shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based captive source.”*

Similarly, Regulation 5(b) specifies that

*“Any person having a Contract Demand of not less than 5 MVA and who consumes electricity procured from conventional fossil fuel based generation through Open Access shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel based Open Access source.”*

Emergency back-up (or Stand-by) Captive Generating Plants shall not be subject to the condition under Regulation 5(a). The proviso for emergency back-up Captive Generating Plants, specified in the 2010 Regulations, has been retained. Further, no detailing of capacity limit, etc. is required.

### **3. Revision in RPO Targets (Regulation 7)**

#### ***RPO Targets***

The targets under the RPO Regulations, 2016 have been specified taking into consideration the four-year period from FY 2016-17 to FY 2019-20, coinciding with the new Multi Year Tariff Control Period.

The Commission has also taken into consideration the Tariff Policy, 2016 (notified in January, 2016, after the draft Regulations were published), the comments received during the public consultation process as well as other aspects such as availability of RE resources in the State and impacts on retail tariffs. While the draft Regulations also envisaged an upward trajectory for the RPO targets, a steeper target has been now set, particularly for the Solar RPO.

Accordingly, the revised RPO Targets are as follows:

Year	Quantum of purchase (in %) from RE sources (in terms of energy equivalent in kWh)		
	Solar	Non-Solar (other RE)	Total
	(a)	(b)	(c)
2016-17	1.00%	10.00%	11.0%
2017-18	2.00%	10.50%	12.50%
2018-19	2.75%	11.00%	13.75%
2019-20	3.50%	11.50%	15.00%

***Tolerance Band of +/- 5%***

The Commission has taken into consideration suggestions to allow deviations from the RPO targets within a specified range to take into account variations likely to arise due to factors such as change in sales trajectory and consumption mix, impact of Open Access, evolving nature of market operations, etc. which may be beyond the control of an Obligated Entity. Such suggestions have also been made by some Distribution Licensees during the proceedings for verification of RPO compliance. Accordingly a variation band of  $\pm 5\%$  of the RPO targets, subject to certain conditions, has been introduced.

### ***Composite vs. Separate Solar and Non-Solar Targets***

With certain exceptions, the Commission has continued to specify separate Solar and Non-Solar RPO targets, on the same considerations as in the past and in line with the RPO regime envisaged in the Tariff Policy. The MNRE has also set separate RE capacity addition targets.

Several stake-holders, particularly Captive Generators and Open Access Users, have expressed difficulties in complying with separate RPO targets (Solar and Non-Solar). Monitoring, reporting and enforcement related actions are also cumbersome and pose practical difficulties. In the draft Regulations, the Commission had proposed composite RPO targets in case of Captive Users of Captive Generating Plants with installed capacity upto 5 MW and Open Access consumers with Contract Demand upto 5 MVA. The Commission has now increased these limits to 10 MW and 10 MVA, respectively, as follows:

*“...Distribution Licensees with peak demand of 5 MW and above but less than 10 MW, a Captive User of a Captive Generating Plant with installed capacity of 5 MW and above but less than 10 MW and Open Access Consumers with Contract Demand of 5 MVA and above but less than 10 MVA, shall be required to meet only their composite RPO target... annually;”*

As explained at para. 2 above with regard to Obligated Entities, the minimum limit for fastening a RPO has been increased to 5 MW/MVA instead of 1 MW/MVA as in the 2010 Regulations, and this is also reflected in the modified provision quoted above.

### ***Mini/Micro Hydro Target***

In order to promote development of Mini/Micro Hydro resources in the State, a separate RPO sub-target of 0.2% within the overall Non-Solar RPO target for Distribution Licensees has been retained. However, some Licensees have expressed

(including during the proceedings for RPO compliance verification) difficulties in meeting the Mini/Micro Hydro targets due to inadequate availability of such resources and the absence of any alternate mechanism such as RECs specific to Mini/Micro Hydro power.

In order to address this difficulty, the RPO Regulations, 2016 specify that, if a Distribution Licensee is unable to meet its Mini/Micro Hydro target inspite of efforts, the shortfall may be met by purchase of Non-Solar RECs:

*“...in case a Distribution Licensee demonstrates that it is unable to meet the requisite target of 0.2% per year for procurement of power from Mini Hydro or Micro Hydro projects despite its best efforts, the Commission shall allow it to be met by way of purchase of Non-Solar RECs;”*

#### ***Tariff Rate for Procurement against RPO***

In addition to the provisions in Regulation 7.2 of the 2010 RPO Regulations and considering certain emerging models of RE procurement, a further proviso was added in the draft Regulations, which has been confirmed in the new Regulations as notified:

*“Provided further that procurement by a Distribution Licensee of RE power generated within Maharashtra under a scheme of or approved by MNRE may be considered by the State Commission as eligible quantum for fulfilment of the RPO of such Distribution Licensee considering the nature of such scheme.”*

#### **4. State Agency (Regulation 9)**

It has been expressed that, in order to simplify the RPO compliance reporting process without undermining its purpose, quarterly rather than monthly reporting should suffice. Accordingly, the RPO Regulations, 2016 provide that

*“The summary statement of RE procurement and RPO compliance by each Obligated Entity shall be published by the State Agency on a cumulative basis every quarter on its website.”*

#### **5. Captive Users and Open Access (Regulation 11)**

##### ***Applicability of RPO Target to Fossil Fuel-based Co-generation***

Clause 6.4(1) of the recent Tariff Policy, 2016 states that

*“...co-generation from sources other than renewable sources shall not be excluded from the applicability of RPOs.”*

Hence, the exemption of Captive Users of fossil fuel-based Co-generation from RPO contained in the proviso to Regulation 11.3 of the 2010 Regulations has been removed in the RPO Regulations, 2016.

## **6. RPO Regulatory Charges (Regulation 12)**

### ***RPO Regulatory Charges and Fund for shortfall in RPO Compliance***

For greater operational ease and clarity, the provisions of the 2010 Regulations regarding RPO Regulatory Charges and Fund have been revised to some extent and elaborated. The Charges shall be determined by the Commission on a case to case basis taking into consideration the highest applicable Preferential Tariff or Forbearance Price determined by the Central Commission, or such other rate as may be stipulated by the Commission. Further, Obligated Entities other than Distribution Licensees will have to deposit the Charges into a Fund to be maintained and administered by the State Agency or as may be directed by the Commission. In case of Distribution Licensees, the Fund shall continue to be maintained and operated by them. The provisions of the RPO Regulations, 2016 read as follows

*“If an Obligated Entity fails to comply with the RPO target specified in these Regulations in any year and fails to purchase the required quantum of RECs, the State Commission may direct it to deposit into a separate Fund, to be created and maintained by such Obligated Entity, such amount as the Commission may determine on the basis of the shortfall in units of RPO, RPO Regulatory Charges separately in respect of solar and non-solar RPO:*

*Provided that, in case of an Obligated Entity other than a Distribution Licensee, such Obligated Entity shall deposit the RPO Regulatory Charges in a Fund to be maintained and administered by the State Agency or as may be directed by State Commission.*

*Provided further that RPO Regulatory Charges shall be equivalent to the highest applicable preferential Tariff during the year for Solar or non-Solar RE generating sources, as the case may be, or Forbearance Price decided by the Central Commission, or any other rate as may be stipulated by the State Commission;*

*Provided further that the Fund so created shall be utilised as may be directed by the State Commission;*

*Provided also that the State Commission may not allow, upon considering the circumstances, all or part of the RPO Regulatory Charges and associated costs to be passed on to consumers.”*

## **7. Pricing Principles for RE Projects commissioned during the Operating Period (Regulation 14)**

Some suggestions were received to freely allow switching from the REC mechanism to the Preferential Tariff mechanism and vice versa. However, the option to choose one or the other mechanisms is available at the beginning of the Project. Besides, the Obligated Entities have to plan for their RPO compliance based on the contracting arrangements entered into with RE Generators from time to time. Therefore, as in the 2010 Regulations, and also keeping in view the thrust of its RE Tariff Regulations and past Orders, the Commission has not considered it appropriate to introduce such an option in the RPO Regulations, 2016 during the Tariff Period of a Project as per the approved contracting arrangements.

## **8. Practice Directions (Regulation 17)**

Neither the 2010 Regulations nor the draft of the new Regulations provided for the issue of Practice Directions by the Commission. The RPO Regulations, 2016 enable the issue of such Directions, along the lines of many of the other Regulations of the Commission.

**Sd/-  
Deepak Lad  
Member**

**Sd/-  
Azeez M. Khan  
Member**