

## TAMIL NADU ELECTRICITY REGULATORY COMMISSION

Draft Notification No. TNERC/RPO/ ..... dated 13-06-2023

(Comments/suggestions are invited on or before 14-07-2023)

In exercise of powers conferred by section 181 of the Electricity Act, 2003 (Central Act 36 of 2003) read with sections 61, 66 and 86(1)(e) and all other powers enabling it in this behalf, and after previous publication, the Tamil Nadu Electricity Regulatory Commission hereby makes the draft Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2023 for information of all persons likely to be affected thereby.

2. Notice is hereby given that the draft Regulations will be taken into consideration after the expiry of thirty days from the date of publication of this notification in the TNERC website and that any objection or suggestion, which may be received from any person before the expiry of the aforesaid period, will be considered by the Commission.

3. Objection or suggestion, if any, should be addressed in duplicate to the Secretary, Tamil Nadu Electricity Regulatory Commission, 4<sup>th</sup> floor, SIDCO Corporate Office Building, Thiru-Vi-Ka Industrial Estate, Guindy, Chennai – 600 032.

### **1. Short title and commencement.-**

(1) These regulations may be called the Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2023.

(2) These regulations shall come into force on the date of their publication in the Tamil Nadu Government Gazette.

### **2. Definitions.-**

(1) In these regulations, unless the context otherwise requires,-

- (a) **'Act'** means the Electricity Act, 2003 (Act 36 of 2003);
- (b) **'Central Agency'** means the agency operating the National Load Dispatch Centre (NLDC) or such other agency as the Central Commission may designate from time to time;
- (c) **'Central Commission'** means the Central Electricity Regulatory Commission as defined in Section 2(9) of the Act;
- (d) **'Certificate'** means the Renewable Energy Certificate (REC) issued by the Central Agency in accordance with the procedures prescribed by it and under the provisions specified in the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 as amended from time to time;
- (e) **'Commission'** means the Tamil Nadu Electricity Regulatory Commission;
- (f) **'Month'** means calendar month;
- (g) **'Obligated entity'** means the Distribution Licensees, consumers owning grid connected Captive Generating Plants (CGPs) and Open Access consumers in the State of Tamil Nadu, who have to mandatorily comply with Renewable Purchase Obligation under these Regulations subject to fulfillment of conditions outlined under Regulations 3 and 4;
- (h) **'Open Access Consumer'** means a consumer availing open access under subsection (2) of section 42 of the Act;
- (i) **'Pooled cost of power purchase'** means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation in the previous year from all the long-term energy suppliers, but excluding

those based on liquid fuel, purchase from traders, short-term purchases and renewable energy sources;

(j) **'Power Exchange'** means that power exchange which operates with the approval of the Central Commission;

(k) **'Renewable Sources'** means sources of energy as defined in the Regulation 2(1) (g) of the Power Procurement from New and Renewable Sources of Energy Regulations, 2008 issued by the Commission and Hydro Power Projects (including Pumped Storage Projects and small hydro projects);

(l) **'State Agency'** means the State Load Dispatch Centre of the State of Tamil Nadu as defined under Section 2(66) of the Act or the Agency so designated by the Commission under Regulation 6(7) of these Regulations;

(m) **'Year'** means a financial year commencing with the 1st April of the current year and ending with the 31st March of the succeeding year;

(2) Words and expressions used and not defined in these Regulations but defined in the Act or the Regulations issued by the Central Commission or any other Regulations issued by the Commission, shall have the meaning respectively assigned to them in the Act or such Regulations.

### **3. Applicability of Renewable Purchase Obligation (RPO).-**

The following entities are obligated to fulfill RPO under these Regulations, namely:-

(a) the Distribution Licensee;

(b) any person, consuming electricity procured from conventional sources (i.e. other than renewable energy sources) through open access or otherwise;

(c) any person who installs Captive Generating Plant, with an installed capacity exceeding 1 MVA, based on conventional technology (i.e. other than any renewable energy technology) and consumes electricity from such Plant purely for meeting his Standby (or emergency back-up) requirements in the exceptional circumstances of power cuts/ breakdown etc. in his normal source of power; and/or

(d) any person who installs Captive Generating Plant, with an installed capacity exceeding 1 MVA, based on conventional technology (i.e. other than renewable energy technology) and consumes electricity from such plant for meeting his normal requirements, apart from his standby (or emergency back-up) requirements:

Provided that the Captive Generating Plants will have same RPO as the Distribution Licensee;

Provided that, save as provided in Clause (b), (c) and (d), a retail consumer of Distribution Licensee shall not be considered as Obligated Entity, to the extent of its consumption in its capacity as a retail consumer of the Distribution Licensee.

Provided further that the applicability of the RPO to the obligated entities other than Distribution Licensee shall be subject to the outcome of the writ petitions pending before the Hon'ble High Court of Madras;

Provided further that if the RPO to the obligated entities during the previous years remains unfulfilled for any reasons including court cases it shall be fulfilled by the obligated entities for the respective years.

#### **4. Renewable Purchase Obligation.-**

(1) Every obligated entity shall purchase not less than defined minimum percentage of its consumption of energy from renewable energy sources under the Renewable Purchase Obligation (RPO) during a year as specified in the Annexure-I of this Regulation;

Provided further all the obligated entities in the area of the Distribution Licensee including the Distribution Licensee shall have the uniform RPO;

Provided that the consumption of renewable energy by the obligated entity from its own sources shall also be counted towards the fulfillment of RPO;

Provided further that the purchase of renewable energy by the obligated entity from power exchanges shall also be counted towards the fulfillment of RPO;

Provided further that the quantum of electricity generated by a Prosumer from the Grid Interactive Solar PV Energy Generating System (GISS) under the net metering / net feed-in arrangements shall qualify towards meeting of RPO of the Distribution Licensee, if such consumer is not an obligated entity;

Provided further that in case of banking arrangements of RE sources, the energy banked to the Distribution Licensee shall be considered as sale and accounted for RPO obligation;

Provided further that the purchases made from the GISS projects under the gross metering scheme, purchases made at mutually agreed prices/the rate fixed by the commission and all such renewable energy for which the generators/Prosumers do not claim RECs shall also be counted towards the fulfillment of RPO by the Distribution Licensee;

Provided further that the purchase of RECs issued under the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 as amended from time to time shall also be counted towards fulfillment of RPO by the obligated entity;

Provided further that if the obligated entity intends to fulfil the RPO for a particular financial year through self-retention of RECs obtained for that financial year, it shall apply to the State Agency for such self-retention;

Provided further that the renewable energy purchased shall be offset towards the RPO of the obligated entities, only if the generator(s) from whom the obligated entities purchases such energy do not claim RECs on such energy.

Provided also that the energy purchase agreements for the purchase of renewable energy sources already entered into by the distribution licensees shall continue to be made till their present validity, even if the total purchases under such agreements exceed the percentage as specified hereinabove.

Provided also that if the obligated entity has established the fact that the minimum quantum of power purchase from the Hydro Power/ storage power through solar/wind energy is not available in the market either in the form of Renewable Energy Certificate (REC) or energy in a particular year and the Commission is satisfied with the fact, then in such cases, the other renewable energy sources shall be purchased for fulfillment of the such RPO as mentioned in Annexure-I;

Provided also that such obligation to purchase renewable energy shall be inclusive of the purchases, if any, from renewable energy sources already being made by concerned obligated entity:

(2) If the RPO for any of the year is not specified by the Commission, the RPO specified for the previous year shall be continued beyond the period specified in the previous year till subsequent revision is effected by the Commission.

(3) Notwithstanding the above, the Commission may either on its own motion or on the recommendation of the State Agency or on guidelines issued by the Ministry of Power

or on receipt of an application from the Distribution Licensee, revise the RPO percentage specified in the Annexure-I of these Regulations as deemed appropriate.

#### **5. Certificates under the Regulations of the Central Commission.-**

(1) Subject to these regulations the Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2022 as amended from time to time shall be the valid instruments for the discharge of the mandatory obligations set out in these regulations for the obligated entities to purchase electricity from renewable energy sources:

(2) Subject to such direction as the Commission may give from time to time, the obligated entity shall act in consonance with the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2022 as amended from time to time in regard to the procurement of the certificates for fulfillment of the RPO under these regulations.

(3) The RECs purchased by the obligated entities from the power exchange or the purchase certificates issued by the State Agency in case of self-retention of RECs, shall be deposited by the obligated entities with the State Agency.

(4) Notwithstanding the above, the State Agency can also independently verify the RECs purchased by the obligated entities from power exchanges through the REC registry of India website and consider the same towards fulfillment of their RPO.

#### **6. State Agency.-**

(1) The State Agency shall be the agency for accreditation and recommending the renewable energy projects for registration and to discharge the functions under these regulations and Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2022 as amended from time to time.

(2) The State Agency shall, in consultation with the Commission, develop and maintain RPO Web-portal for registration by the Obligated Entities and for the compliance, monitoring and reporting etc. of RPO and simultaneously formulate suitable Procedures for smooth functioning of Web-portal in relation to such activities.

Provided that such development shall be suitably coordinated with the facility available/planned under the National Web-portal developed for the purpose.

(3) On application by the Obligated Entities for issuance of certificate, the State Agency shall, after satisfying itself, about the entitlement of that Obligated Entity initiate the process with regard to the accreditation of the Obligated Entity for issuance of certificates.

(4) The obligated entities shall submit the details of the compliance of RPO for every month by the end of the succeeding month and for the entire financial year including the last quarter by the end of July of the succeeding financial year to the State Agency.

(5) The State Agency shall submit quarterly status report to the Commission in respect of compliance of Renewable Purchase Obligation by the obligated entities and may suggest appropriate action to the Commission if required, for compliance of the renewable purchase obligation.

(6) The Commission may from time to time fix the remuneration and charges payable to the State Agency for discharge of its functions under these regulations.

(7) If the Commission is satisfied that the State Agency is not able to discharge its functions satisfactorily, it may by general or special order, and for reasons to be recorded in writing, designate any other agency to function as State Agency as it considers appropriate.



## **7. Eligibility and Registration for Renewable Energy Certificates.-**

(1) The eligibility and registration of certificates shall be governed by the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2022 as amended from time to time.

(2) The Obligated Entities, including those already registered off line with the State Agency, shall mandatorily register themselves online on RPO Web-portal within three months from the date on which the RPO Web-portal is declared, and shall also furnish requisite information, on quarterly and annual basis as per the Procedure, formulated by the State Agency. The State Agency shall formulate detailed procedure in this regard within 3 months of notification of these Regulations.

Provided that till such time the RPO Web-portal becomes fully operative, such information shall be submitted to the State Agency either by in person or by post or by e-mail.

(3) A generating company engaged in generation of electricity from renewable energy sources shall be eligible for obtaining accreditation from the State Agency if it fulfills the following conditions:

(a) It does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Commission or at the tariff determined through competitive bidding and approved by the Commission; and

(b) It sells the electricity generated either (i) to the distribution licensee in the State of Tamil Nadu at a price not exceeding the pooled cost of power purchase, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.

## **8. Determination of Pooled cost of Power Purchase.-**

For determination of pooled cost of power purchase for a particular financial year, the Distribution Licensee shall submit a petition for computation of pooled cost of power purchase to the Commission by 30<sup>th</sup> September of the succeeding financial year. Till the issue of order regarding the pooled cost of power purchase, the pooled cost of power purchase of the previous year shall continue to be valid as provisional pooled cost of power purchase. After the issue of the order for the pooled cost of power purchase by the Commission, the difference between the final pooled cost of power purchase and the provisional pooled cost of power purchase shall be adjusted equally in the bills of the next two months or as decided by the Commission in the order determining the pooled cost of power purchase for the financial year.

## **9. Consequence of default.-**

(1) If the obligated entities does not fulfill the RPO as provided in these Regulations or does not purchase the certificates as the case may be, the State Agency, on being directed by the Commission, shall serve notices to the obligated entities to deposit into a separate fund, to be created and maintained by the State Agency, such amount arrived on the basis of the shortfall in units of the RPO and the maximum REC price traded through the power exchanges during the corresponding year including taxes and levies, besides barring permission to the defaulting entities from availing power through Open Access;

Provided that the fund so created shall be utilized, as may be directed by the Commission, for purchase of the certificates by the State Agency:

Provided further that the Commission may empower an officer of the State Agency if required, to procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the fund:

Provided also that the distribution licensee shall be in breach of his licence condition if he fails to deposit the amount as directed by the Commission within 15 days of the communication of the direction.

(2) Where any obligated entities fails to comply with the obligation to purchase the required percentage of power from renewable energy sources or to purchase the renewable energy certificates, it shall also be liable for penalty as may be decided by the Commission under section 142 of the Act:

Provided that in case of bonafide difficulty in complying with the renewable purchase obligation owing to non-availability of certificates, it is open for the obligated entity to represent to the Commission requesting permission to carry forward of compliance requirement to the next year for consideration by the Commission on merit.

#### **10. Repeal and savings.-**

(1) Save as otherwise provided in these regulations, the Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2010 and all subsequent amendments thereto and Procedures thereof shall stand repealed from the date of coming into force of these regulations.

(2) Anything done or action taken or purported to have been done in pursuance of the provisions of the earlier Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2010 and its amendments shall be considered to be legal and valid.

(3) Any rights and liabilities arising out of the earlier Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2010 shall be settled within its framework.

### **11. Power to remove difficulties.-**

The Commission shall suo-motu or on an application from any person generating electricity from renewable sources or an entity mandated under clause (e) of sub-section (1) of section 86 of the Act to fulfil the renewable purchase obligation may review, add, amend or alter these regulations and pass appropriate orders to remove any difficulty in exercising the provisions of these regulations.

### **12. Miscellaneous.-**

(1) Nothing in these Regulations shall be deemed to limit or otherwise affect the power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuse of process of the Commission.

(2) Nothing in these Regulations shall bar the Commission from adopting a procedure that is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for doing so while dealing with such a matter or class of matters.

(By order of the Commission)

Sd/- dated 13-06-2023  
(Dr.C.Veeramani)  
Secretary  
Tamil Nadu Electricity Regulatory Commission.

**Annexure-I** ( Minimum percentage for Renewable Purchase Obligation)

(1) Every obligated entity including distribution licensee, consumers owning captive power plant and open access consumers including short term open access consumers in the state of Tamil Nadu, shall purchase energy from renewable energy sources under the Renewable Purchase Obligation (RPO) as under: -

Year	Wind RPO	HPO	Other RPO	Total RPO
2023-24	1.60%	0.66%	24.81%	27.08%
2024-25	2.46%	1.08%	26.37%	29.91%
2025-26	3.36%	1.48%	28.17%	33.01%
2026-27	4.29%	1.80%	29.86%	35.95%
2027-28	5.23%	2.15%	31.43%	38.81%
2028-29	6.16%	2.51%	32.69%	41.36%
2029-30	6.94%	2.82%	33.57%	43.33%

- (a) **Wind RPO** shall be met only by energy produced from Wind Power Projects (WPPs), commissioned after 31st March 2022. Further, Wind RPO may also be met from the wind energy consumed over and above 7% of the total energy consumption, from WPPs commissioned till 31.03.2022.
- (b) **Hydro power Purchase Obligation (HPO)** are to be met from Large Hydro Power Projects (LHPs) or Small Hydro Power Projects (SHPs) including Pumped Storage Projects (PSPs), commissioned after 8th March 2019.
- (c) **Other RPO** may be met by energy produced from any RE power project not mentioned in (a) and (b) above.

(2) From FY 2022-23 onwards, the energy from all Hydro Power Projects (HPPs) will be considered as part of RPO. The HPO trajectory, as has been notified earlier will continue to prevail for Hydro Power Projects (including PSPs and Small Hydro Projects (SHPs))

commissioned after 8th March 2019. Energy from all other HPPs including free power from HPPs commissioned before 8th March, 2019 will be considered as part of RPO under category of 'other RPO'.

(3) RPO shall be calculated in energy terms as a percentage of total consumption of electricity.

(4) HPO obligations may be met from the power procured from eligible Hydro Power Projects (including PSPs and Small Hydro Projects (SHPs)) commissioned on and after 8th March, 2019 to 31st March, 2030.

Large Hydro Power Projects (LHPs) means hydro Power Projects with more than 25 MW installed capacity and Small Hydro Projects (SHPs) means hydro power projects of installed capacity up to 25 MW.

(5) HPO obligation of the State/Distribution Licensee may be met out of the free power being provided to the State from Hydro Power Projects (including PSPs) and Small Hydro Projects (SHPs), commissioned after 8<sup>th</sup> March, 2019 as per agreement at that point of time excluding the contribution towards Local Area Development Fund (LADF), if consumed within the State/ Distribution Licensee. Free power (not that contributed for Local Area Development) shall be eligible for HPO benefit.

(6) In case, the free power mentioned above is insufficient to meet the HPO obligations, then the State would have to buy the additional hydro power to meet its HPO obligations or may have to buy the corresponding amount of Renewable Energy Certificate corresponding to Hydro Power.

(7) The above HPO trajectory shall be tried up on an annual basis depending on the revised commissioning schedule of Hydro projects.

(8) Hydro power imported from outside India shall not be considered for meeting HPO.

(9) Any shortfall remaining in achievement of 'Other RPO' category in a particular year can be met with either the excess energy consumed from WPPs, commissioned after 31st March 2022 beyond 'Wind RPO' for that year or with excess energy consumed from eligible Hydro Power Projects (including PSPs and Small Hydro Projects (SHPs)), commissioned after 8<sup>th</sup> March 2019 beyond 'HPO' for that year or partly from both. Further, any shortfall in achievement of 'Wind RPO' in a particular year can be met with excess energy consumed from Hydro Power Plants, which is in excess of 'HPO' for that year and vice versa.

(10) The following percentage of total energy consumed shall be renewable energy along with/through storage.

FY	Storage (On energy basis)
2023-24	1.0%
2024-25	1.5%
2025-26	2.05
2026-27	2.5%
2027-28	3.0%
2028-29	3.5%
2029-30	4.0%

(11) The Energy Storage Obligation in para (10) above shall be calculated in energy terms as a percentage of total consumption of electricity and shall be treated as fulfilled only when at least 85% of the total energy stored in the Energy Storage System (ESS), on an annual basis, is procured from renewable energy sources.

(12) The Energy Storage Obligation to the extent of energy stored from RE sources shall be considered as a part of fulfillment of the total RPO as mentioned in para 1 above.

(13) Minimum percentage for Renewable Power Purchase Obligation for each category mentioned in para 1 and para 10 of this Schedule shall have to be met separately subject to the conditions specified in the Regulations and this Schedule.

(14) The provisions contained in this Annexure shall, unless revised earlier by the Ministry of Power, Government of India, be applicable in respect of the period up to 31st March, 2030.



**Explanatory Statement explaining the reason and circumstances leading to the Draft Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2023.**

1. The Tamil Nadu Electricity Regulatory Commission (hereinafter referred as the "Commission") notified the Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2010 vide Notification No. TNERC/RPO/19/1, dated 07-12-2010, which were published in the Tamil Nadu Government Gazette on 22-12-2010 and subsequently also amended the same from time to time.
2. The Central Commission has notified Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 on 09-05-2022 repealing the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.
3. The Ministry of Power, Government of India in accordance with the provision of para 6.4 (1) of Tariff Policy, 2016 has notified the RPO trajectory beyond FY 2021-22 till FY 2029-30 vide F.No.09/13/2021-RCM, dated 22.07.22 and subsequent Corrigendum on 19-09-2022. The said MoP notification has redefined the RPO components besides adding energy storage obligation. The said notification also recommends the State Commissions to consider notifying the RPO trajectory including HPO and energy storage obligation for their respective states.
4. The Ministry of New and Renewable Energy vide D.O. letter dated 15-12-2022 addressed to the Commission has also requested to take necessary steps to align its RPO trajectory in line with the national RPO trajectory notified by MoP.

5. The Commission finds it appropriate to frame new RPO Compliance Regulations by taking into account the provisions provided in the CERC (Terms and Conditions for Renewable Energy Certificated for Renewable Energy Generation) Regulations, 2022 and RPO trajectory issued by the Ministry of Power on 22<sup>nd</sup> July, 2022.
6. In order to incorporate the RPO trajectory made by the Ministry of Power, Government of India, this Commission in exercise of powers conferred by section 181 of the Electricity Act, 2003 (Central Act 36 of 2003) read with sections 61, 66 and 86(1)(e) and all other powers enabling it in this behalf makes the draft Tamil Nadu Electricity Regulatory Commission (Renewable Energy Purchase Obligation) Regulations, 2023.
7. The question of imposition of RPO on the CGPs and OA consumers having reached finality before the Hon'ble Supreme Court of India in Hindusthan Zinc Vs RERC, the present draft Regulations are framed subject to the outcome of the writ petitions pending before the Hon'ble High Court of Madras;

(By order of the Tamil Nadu Electricity Regulatory Commission)

Sd/- dated 13-06-2023  
(Dr.C.Veeramani)  
Secretary,  
Tamil Nadu Electricity Regulatory Commission