# HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA Notification Shimla, the 24<sup>th</sup> February, 2023

**No. HPERC/438.-** The Himachal Pradesh Regulatory Commission, in exercise of the powers conferred by Sub-section (1) of Section 62, Section 66, Clauses (a),(b) and (e) of Section 86 and Clause (zi) of Sub-section (2) of Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, after previous publication, hereby makes the following Regulations, namely:-

## REGULATIONS

**1. Short title and commencement.-** (1) These Regulations may be called the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2023.

(2) These Regulations shall come into force from the date of their publication in the Rajpatra, Himachal Pradesh.

# 2. Definitions.-

- (1) In these Regulations, unless the context otherwise requires,
  - (a) **"Act"** means the Electricity Act, 2003 (36 of 2003);
  - (b) "Central Agency" means the agency as referred to in Regulation 3 of Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 hereinafter to be referred as CERC REC Regulations, 2022;
  - (c) **"Central Commission"** means the Central Electricity Regulatory Commission referred to in Sub-section (1) of Section 76 of the Act;
  - (d) "Certificate" means the renewable energy certificate issued by the Central Agency in accordance with the provisions specified in, including the procedure notified under the CERC REC Regulations, 2022 read with Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2022 and shall, wherever the context so requires, also include such certificates issued under CERC REC Regulations, 2010;
  - (e) **"CERC REC Regulations, 2010"** means Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time;

- (f) "CERC REC Regulations, 2022" means Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022;
- (g) **"Commission"** means the Himachal Pradesh Electricity Regulatory Commission;
- (h) "Hydro Power Projects" means all hydro electric power projects irrespective of capacity and shall also include pump storage plants for the purpose of these Regulations;
- (i) "Renewable Energy Certificate Mechanism' or 'REC mechanism" means the mechanism devised for the development of market in power from non-conventional energy sources by issuance of transferable and saleable credit certificates under the CERC REC Regulations, 2022 and under Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2022 hereinafter to be referred as RPPO Regulations, 2022;
- (j) "Renewable Energy Sources" or "RE Sources" means sources of renewable energy such as hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and such other sources as recognized or approved by the Central Government;
- (k) "Renewable Power Purchase Obligation" or "RPPO" means the renewable power purchase obligations to be met by the Obligated Entity as per the provisions of the RPPO Regulations, 2022;
- (l) "RPO Regulations, 2010" means Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010;
- (m) "Obligated Entity" means an entity which is mandated to fulfill renewable purchase obligation in accordance with Regulations 3 of these Regulations;
- (n) "State Agency" means the agency as referred to in the Regulations 7 of these Regulations; and
- (o) "Year" means a period commencing on 1<sup>st</sup> April of a calendar year and ending on 31<sup>st</sup> March of the immediately succeeding calendar year.

- (2) Words and expressions used in these Regulations and not defined herein but defined in the Act or the Regulations issued by the Central Commission or any other Regulations issued by the Commission, shall have the same meaning assigned to them respectively in the Act, or such other Regulations issued by the Central Commission or such other Regulations issued by the Commission.
- **3. Applicability of Renewable Power Purchase Obligation (RPPO).-** (1) The following entities are obligated to fulfill RPPO 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 5 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 1MVA, 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.
- (2) The Co-generation plants based on Waste Heat Recovery System (WHRS), irrespective of type of fuel used in such plants, shall be exempted from the applicability of Renewable Power Purchase Obligations provided in the Regulation 4 of these Regulations.
- (3) Save as provided in Sub-regulations (1) and (2) of this Regulation, 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.
- **4. Quantum of Renewable Power Purchase Obligation (RPPO**).- (1) The Obligated Entity shall, during each year, purchase or generate and consume such quantum of electricity (in kWh) from renewable sources as is not less than the quantum of electricity (in kWh), worked out as per provisions of Schedule:

Provided that the Captive Power Plants (CPPs) commissioned before 01.04.2016, RPO shall be at the level specified for the Financial Year 2015-16 by the Commission under RPO Regulations, 2010. For CPPs commissioned from 01.04.2016 onwards, the RPO level

shall be applicable as specified by the Commission for the respective financial year of commissioning of the CPP under RPO Regulations, 2010 and these Regulations. In case of any augmentation in the capacity of CPPs, the RPO for augmented capacity shall be the RPO applicable for that financial year in which the CPP has been augmented.

(2) Subject to the provisions contained in Regulation (3) of these Regulations, the consumption of the Obligated Entity shall be computed by taking into account the following, namely:-

- (i) the total energy purchased from various sources, interalia, including the purchases under Power Purchase Agreement(s), through energy exchanges, Unscheduled Interchange power and from joint sector projects etc. etc.;
- (ii) the energy generated (excluding auxiliary consumption) from the power plants, owned exclusively or jointly, by it. This shall include the standby generating set(s) also;
- (iii) the transmission and distribution losses (T&D losses for short) borne by it for conveyance of power from the point of purchase/ generation to the point of consumption in relation to Clause (i) and (ii);
- (iv) the sale of energy out of the energy so purchased/generated, interalia, including transmission and distribution losses borne by it for conveyance of power from the point of purchase/generation to the point of such sale shall be excluded:

Provided that in case it is not feasible to identify such losses separately, the average T&D losses as per Clause (iii) shall be considered.

(v) in case of the banking arrangement(s), the energy banked/ returned by the Distribution Licensee shall be considered as sale under Clause (ii), (iv) and the energy received shall be treated as purchased under Clause (i) and (iii).

(3) Any person/consumer, who consumes power from any source (generation/purchase), interalia, including purchase through Open Access, but other than in his capacity as a consumer of Distribution Licensee or by drawl from a Captive Generating Plant, the RPPOs at the rate(s) provided in Schedule under Sub-regulation (1) of this Regulation shall be applicable in respect of his consumption from such sources:

Provided that the energy purchased/generated by Obligated Entity, shall be considered to have been arranged from the sources other than the RE Sources, unless such Obligated Entity establishes to the satisfaction of the State Agency that such arrangement was arranged from RE Sources:

(4) The Commission may, keeping in view the power supply constraints or other factors beyond the control of the Obligated Entity(ies) or for any other reasons, Suo-Moto or at the request of an Obligated Entity, also revise the percentage targets or allow inter category adjustment over and above those permissible as per the schedule to these Regulations taking into account the non-availability of such renewable energy or RE certificates in respect of any one or more categories of the RPPO, for a year(s) for which Renewable Power Purchase Obligations have been fixed as per Schedule of these Regulations.

5. **Fulfillment of Renewable Power Purchase Obligations (RPPOs).-** (1) Each of the Obligated Entity shall meet, on yearly basis, the RPPOs separately under each of the categories (i.e. for Wind Energy, Hydro Power Purchase (HPO), other renewable energy as well as wind storage and solar storage renewable energy) as per Schedule of these Regulations:

Provided that the Obligated Entity shall endeavour to meet RPPOs under each category on quarterly basis.

(2) The Obligated Entity may meet its Renewable Power Purchase Obligation (RPPO), as specified in Regulation 4 and Schedule of these Regulations, from the renewable sources relevant to respective categories of RPPOs, including the following, namely.-

- (i) purchase of energy from generating stations, based on RE Sources;
- (ii) purchase of energy from any other person, or any platform facilitating exchange of power, which would arise from RE Sources;
- (iii) purchase of free power (royalty) of the State Government by the Distribution Licensee depending upon the renewable source from where such free power has arisen subject to the condition and limitation as may be prescribed by the Central Government from time to time;
- (iv) the energy generated from its own RE Sources, if any; and
- (v) receipt of energy under banking arrangement(s) which has, as per the agreement(s) arisen from RE Sources:

Provided that the T&D losses borne by the Obligated Entity in relation to procurement of energy shall also be included for computing the quantum of energy procured for each of such sources:

Provided further that the Obligated Entity may also meet RPPOs by redeeming, wherever permissible, the certificates already held by it: Provided further that the renewable energy sold, if any, by the Obligated Entity to any other entity out of availability as per Clause (i) to (v) as well as the T&D losses borne by the Obligated Entity from a point of purchase/generation to the point of such sale, shall not qualify for offsetting RPPOs:

Provided further the electricity purchased by the Obligated Entity under REC mechanism as per Regulation 10 of these Regulations shall not qualify for offsetting RPPOs:

Provided further that the quantum of electricity generated by the Consumer/Prosumer, being an Obligated Entity, through rooftop solar PV system under net metering/net billing/ group metering arrangements in any year, shall qualify towards compliance for RPPO of the Distribution Licensee or the Consumer/Prosumer, as the case may be, for that year in accordance with the provisions contained in Himachal Pradesh Electricity Regulatory Commission (Rooftop Solar PV Grid Interactive System) Regulations, 2015 renamed and amended from time to time.

- (vi) The Obligated Entity can also met their Renewable Purchase Obligation by purchasing green hydrogen or green ammonia and the quantum of such green hydrogen or green ammonia would be computed by considering the equivalence to green hydrogen or green ammonia produced from the one MWh of electricity from the renewable sources or its multiplies and norms in this regard as may be notified by the Central Commission.
- (vii) The procurement of green energy from the Distribution Licensee or any person other than the Distribution Licensee as per the Electricity (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022, by the open access consumer being an Obligated Entity, in excess of Renewable Purchase Obligation, shall be counted towards the Renewable Purchase Obligation Compliance of the Distribution Licensee.

(3) In case the Obligated Entity expects any shortfall in meeting RPPOs of one or more categories in a year, it shall meet such shortfall by procuring power, or certificates, from RE Sources based on respective technology (ies) before close of that year:

Provided that the shortfall for a category of RPPOs in a year may be offset, to the extent permissible under Schedule of these Regulations or as per Sub-regulation (4) of Regulation 4 of these Regulations, by adjustment of surplus availability under by other category of RE Sources: Provided further that in case the CERC REC Regulations, 2022 or the Procedure made thereunder, provide for inter category convertibility of certificates on the basis of Certificate multipliers and such multipliers shall also be applicable for the purpose of offsetting the shortfalls or computing surpluses. The shortfall in any category of RPPOs may be met by purchasing certificates related to other categories of RPPOs by suitably applying such Certificate multiplier fixed by the Central Commission.

(4) Failure on the part of any Obligated Entity to meet its RPPO in any financial year shall be dealt in accordance with the provisions contained in Regulation 9 of these Regulations.

6. Certificates under the Regulations of the Central Commission.- (1) Subject to the terms and conditions contained in these Regulations, the Certificates issued under the CERC REC Regulations, 2022 and CERC REC Regulations, 2010 shall be the valid instruments for the discharge of RPPO.

(2) Further, subject to the provisions of these Regulations and directions as the Commission may give from time to time, the Obligated Entity as well as the State Agency shall act in accordance with the CERC REC Regulations, 2022 and CERC REC Regulations, 2010 in regard to matter relating to the Certificates and fulfillment of RPPO.

(3) The details of Certificates, alongwith its source, purchased by the Obligated Entities from the Power Exchanges or through Electricity Traders, in terms of the Regulations of the Central Commission mentioned in Sub-regulation (1), shall be submitted to the State Agency.

(4) The Obligated Entity shall apply for the certificates, in accordance with the provisions of CERC REC Regulations, 2022, these Regulations and Procedure framed thereunder as well as the directions, if any, issued by the Commission, for such part of energy purchased/generated from the RE Sources of respective category which remains unadjusted/unsold in the year.

(5) The purchaser shall be exclusively entitled for offsetting the RPPO and getting RECs for surpluses, if any, for purchase of renewable energy, other than the purchases under REC mechanism.

(6) On application by the Obligated Entity 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.

(7) Renewable energy generator selling power to the Distribution Licensee under Power Purchase Agreement(s), other than those under REC mechanism, shall not be eligible for accreditation under the REC mechanism for issuance of Renewable Energy Certificates (hereinafter to be referred as 'RECs') in respect of the renewable energy against which the Obligated Entity is eligible to offset its RPPOs.

(8) The State Agency and the other concerned agency(ies) shall ensure that no permission is accorded under REC mechanism in favour of any renewable energy generator for accreditation under REC mechanism and also for issuance of RECs in respect of the energy for which they are not eligible for such accreditation as per the Sub-regulation (7) of this Regulation.

(9) The State Agency and the other concerned agency(ies) before according any permission, in favour of Renewable Energy Generator, for accreditation as well as issuance of RECs, shall also require such generator to provide a Certificate from the concerned entity, to whom such generator may be selling or otherwise providing power from his Renewable Energy project, to the effect that such energy has not been, and also shall not be, adjusted for offsetting the RPPOs or for getting Certificate as per the provisions of these Regulations.

**7.State Agency.-** (1) The Directorate of Energy, Government of Himachal Pradesh shall be the State Agency for the purpose of CERC REC Regulations, 2022 and these Regulations to cater the State specific issues without prejudice to the power and functions conferred under CERC REC Regulations, 2022:

Provided that the Commission may designate any other agency as State Agency after satisfying itself that such agency has a required capability of performing its functions provided under these Regulations and CERC REC Regulations, 2022 or procedure framed by the Central Agency under CERC REC Regulations, 2022.

(2) The State Agency shall function as per the provisions, including the Procedures, of CERC REC Regulations, 2022 read with these Regulations and directions, if any, issued by the Commission.

(3) (i) The State Agency shall, in consultation with the Commission, develop and maintain RPPO Web-portal for registration by the Obligated Entities and for the compliance, monitoring and reporting etc. of RPPOs and simultaneously formulate suitable Procedures for smooth functioning of Web-portal in relation to such activities. (ii) The State Agency shall, after the RPPO web-portal is developed and Procedures are formulated under Clause (i), through public notices, declare the Web-portal to be operative:

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

(4) (i) The State Agency shall, submit on quarterly as well as yearly basis status to the Commission in respect of compliance of renewable power purchase obligation by the Obligated Entity(ies) in the format as may be required by the Commission.

(ii) The State Agency may also recommend appropriate action to the Commission, if required, for compliance of the Renewable Power Purchase Obligation.

(5) 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 and CERC REC Regulations, 2022.

8. Registration and reporting by the obligated entities.-(1) The Obligated Entities, including those already registered off line with the State Agency, shall mandatorily register themselves online on RPPO Web-portal within three months from the date on which the RPPO Web-portal is declared, under Clause (ii) of Sub-regulation (3) of Regulation 7 to be operative, or from the date on which the entity qualifies for being an Obligated Entity under these Regulations whichever is later and shall also furnish requisite information, on quarterly and annual basis as per the Procedure, formulated by the State Agency under Clause (i) of Sub-regulation (3) of Regulation 7.

(2) The Obligated Entity shall have the exclusive right to adjust, in any sequence, the energy procured by it from RE Sources, as per Sub-regulation (2) of Regulation 5 of these Regulations for meeting its RPPOs for relevant category and also for procuring certificates for the surplus procurement of renewable energy, if any, after offsetting the RPPOs.

(3) The Obligated Entities shall submit, online, necessary details, duly taking into account the provisions specified under Regulations 4 and 5 of these Regulations, regarding total consumption of electricity, power purchased from RE Sources or Renewable Energy Certificate(s) procured and the shortfall, or surpluses as the case may be, in meeting the RPPOs alongwith the reasons for shortfalls, if any, and the plans for fulfillment of RPPO as well as any other information as the State Agency may require, on quarterly basis before the end of the sixth week of the succeeding quarter and annual consolidated report on or before the 15<sup>th</sup> May of the succeeding year:

Provided that till such time the RPPO Web-portal becomes fully operative under Clause (ii) of Sub-regulations (3) of Regulation 7, such information shall be submitted alongwith its hard copy to the State Agency.

(4) The State Agency shall get the data submitted as per Regulation (2) and (3) of this Regulation, to it by the Obligated Entities, other than the Distribution Licensee, verified from the appropriate authorities viz the Nodal Agency in case of Open Access Consumers and the officers designated by the Distribution Licensee in case of the Captive Consumers:

Provided that the State Agency, if it finds appropriate, may, in consultation with the Commission, also appoint the third party verifier, for verification of the data of the Obligated Entities.

(5) Save as provided in Sub-regulations (2), (3) and (4) of this Regulation, the Distribution Licensee shall also indicate, along with sufficient proof thereof, the estimated quantum of purchase from RE Sources, relevant to each category of RPPOs, for the ensuing year(s) in MYT tariff/ annual performance review petition in accordance with Regulations made by the Commission. The estimated quantum of purchase shall duly take into account the provisions of Regulation 4 of these Regulations.

(6) The State Agency shall host the status prepared by it, as per Clause (i) of Sub-regulation (4) of Regulation 7 on its website.

**9. Consequences of default.-** (1) Where, during any year, the Obligated Entity does not fulfill the renewable purchase obligation as provided in these Regulations and also does not purchase the certificates, the Commission may direct the Obligated Entity to deposit into a separate fund, to be created and maintained by such Obligated Entity or State Agency as the case may be, such amount as the Commission may determine on the basis of the shortfall in units of RPPO:

Provided that the fund so created shall be utilised, as may be directed by the Commission partly for purchase of the certificates and partly for development of transmission/sub-transmission infrastructure for evacuation of power from generating stations based on RE Sources:

Provided further that the Obligated Entities shall not be authorized to use the fund created in pursuance of these Regulations without prior approval of the Commission:

Provided further that the Commission may empower an officer of the State Agency to procure from the Power Exchange(s) or through Electricity Traders the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the amount available in the fund. (2) Where any Obligated Entity fails to furnish requisite information, as provided under Regulation 8, or fails to comply with the obligation to purchase the required percentage of power from RE Sources as provided under these Regulations or fails to purchase the Renewable Energy Certificates, it shall be liable for penalty as may be imposed by the Commission under Section 142 of the Act:

Provided that in case of genuine difficulty in complying with the Renewable Power Purchase Obligation because of non-availability of certificates, the Obligated Entity may approach, along with complete detail, to the State Agency or the Commission in case of Distribution Licensee, for allowing carry forward in the RPPO as per Sub-regulation (3) of Regulation 5 of these Regulations:

Provided further that where the Commission has consented to carry forward of compliance requirement, the provisions of Sub-regulation (1) or the provisions of Section 142 of the Act shall not be invoked.

**10.** Purchase of Electricity under REC Mechanism.- (1) The term, 'Energy Purchased under REC Mechanism', shall mean the energy purchased by an Obligated Entity from RE Sources, under the Power Purchase Agreement(s) or any other arrangement signed by it on or after, 18<sup>th</sup> January, 2010 with specific provisions that such purchase shall not entitle the Obligated Entity to deal with the green attributes for the quantum of energy so purchased.

(2) The Commission may, fix the rate and other associated conditions, by duly taking into account the Average Cost of Power Purchase by the Distribution Licensee, at such interval as it may consider appropriate, for purchase of electricity by the Distribution Licensee, under REC mechanism:

Provided that the rate fixed by the Commission for Average Pooled Purchase Cost (APPC) under REC mechanism vide its Order dated 03.01.2022 in Suo-Moto Petition No. 28/2021 shall be considered as the rate fixed under this Regulations for the period upto 31.03.2023.

- **11. Overriding effect.-** The provisions of these Regulations, including the orders or directions issued by the Commission under these Regulations, shall have effect notwithstanding anything inconsistent therewith contained in any other Regulations, framed by the Commission, relating to the determination of tariff, and/or making provisions for Open Access under the Act.
- **12.** Power to remove difficulties.- If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, either Suo-Motu or on an application made to it, by general or special order, direct the licensee/generator or any other person to take suitable action, not being

inconsistent with the Act, which appears to the Commission to be necessary or expedient for the purpose of removing the difficulty.

- **13. Issue of orders and directions.-** Subject to the provisions of the Act and these Regulations, the Commission may, from time to time, issue orders and practice directions with regard to the implementation of these Regulations and procedure to be followed for such implementation and matters incidental or ancillary thereto. Such direction(s) issued by the Commission shall be binding on the State Agency and the Obligated Entity.
- 14. Saving of Inherent Powers of the Commission.- Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission to adopt a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these Regulations.
- **15. Repeal and Savings.-** (1) Save as otherwise provided in these Regulations, the RPO Regulations, 2010 and all subsequent amendments thereto shall stand repealed from the date of coming into force of these Regulations.
  - (2) Notwithstanding such repeal:
    - (a) anything done or any action taken or required to be taken or purported to have been done or taken or permission granted or any document or instrument executed or any direction given under the repealed Regulations shall, in so far as it is not inconsistent with the provisions of these Regulation, be deemed to have been done or taken under the corresponding provisions of these Regulations;
    - (b) as far as treatment of Certificates issued under the provisions of repealed CERC REC Regulations, 2010 shall be governed as per the provisions of CERC REC Regulations, 2022.
  - **16. Interpretation.** All issues arising in relation to interpretation of these Regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

### By order of the Commission

Sd/-(Chhavi Nanta), HPAS **Secretary** 

#### Schedule

Table-1							
Year	Minimum Quantum of Purchase in percentage (%) from renewable sources (in terms of energy in kWh) of total consumption.						
	Wind	Hydro	Other	Total Renewable Purchase Obligation			
	Renewable	Power	Renewable				
	Purchase	Purchase	Purchase	(Total RPO)			
	Obligation	Obligation	Obligation				
	(Wind RPO)	(HPO)	(Other RPO)				
2022-23	0.81	0.35	23.45	24.61			
2023-24	1.60	0.66	24.82	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			

Minimum percentage for Renewable Power Purchase Obligation

- (i) Wind RPO shall be met by energy produced from Wind Power Projects (WPPs), commissioned after 31<sup>st</sup> March 2022 and the Wind Energy consumed over and above 7% from WPPs commissioned till 31<sup>st</sup> March, 2022.
- (ii) HPO shall be met only by energy produced from Hydro Power Projects (including PSPs) and Small Hydro Projects (SHPs) commissioned after 8th March 2019.
- (iii) Other RPO may be met by energy produced from any RE power project not mentioned in (i) and (ii) above.
  - (a) 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 8<sup>th</sup> March, 2019 will be considered as part of 'RPO' under category of 'other RPO'.
  - (b) RPO shall be calculated in energy terms as a percentage of total consumption of electricity.
  - (c) 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 8<sup>th</sup> March, 2019 to 31st March, 2030.
  - (d) HPO obligation of the 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 8th March, 2019 as per agreement at that point of time excluding the contribution towards LADF, if consumed within the State. Free power (not that contributed for Local Area Development) shall be eligible for HPO benefit.
  - (e) In case, the free power mentioned above is insufficient to meet the HPO obligations, then the Distribution Licensee 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.

- (f) The above HPO trajectory shall be trued up on an annual basis depending on the revised commissioning schedule of Hydro projects.
- (g) Hydro power imported from outside India shall not be considered for meeting HPO.
- (h) 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 31<sup>st</sup> 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.
- (i) The following percentage of total energy consumed shall be renewable energy alongwith/through storage.

FY	Storage (on Energy basis)		
2023-24	1.0%		
2024-25	1.5%		
2025-26	2.0%		
2026-27	2.5%		
2027-28	3.0%		
2028-29	3.5%		
2029-30	4.0%		

(j) The Energy Storage Obligation in para (i) 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 :

Provided that in case an Obligated Entity fails to meet its RPPO in this regard for any year, a quantum equivalent to the percentage as may be fixed by the Central Commission for such purpose, or in case no such % has been fixed, at 200%, of such shortfall for that year shall be added to the RPPOs of that Obligated Entity for that year and the quantum so added shall be further apportioned to various categories under Table -1 in the ratio of RPPOs for each category in respect of obligated entity for the relevant year.

**Illustration:** If the consumption of an Obligated Entity for the year 2023-24 is 1000 MU, its obligation under Para-(i) above for that year shall be 10 MUs. Depending on the quantum of energy actually met from the ESS by the Obligated Entity for that year, the adjustment shall be made on the following lines:-

Item	Description	Wind RPO (MUs)	HPO (MUs)	Other RPOs (MUs)	Total R (MU)
(I)	RPO for the Obligated Entity for 2023-24 for consumption of 1000 MUs as per Table-1	16	6.6	248.2	270
(II)	RPO from ESO included in item (I)	10A	10B	10C	10
(III)	If the energy actually met by that Obligated Entity from ESS for that year is 12 MUs (i.e. equal to or more than the RPO under Para (i) of this Schedule).	12A*	12B*	12C*	12
(IV)	Net RPPOs to be met under Table-1 after adjustment of RPOs met from ESOs if there is no shortfall under item (IV) above [Item (I)-(III)]	16-12A	6.6-12B	248.2-12C	270.8
	ario-II, if the RPPOs under P				l an Oblig
(I)	7 meets such RPPOs to the end RPO for the Obligated Entity for 2023-24 for consumption of 1000 MUs as per Table -1	16	6.6	248.2	270
(II)	RPO from ESO included in item (I)	10A	10B	10C	10
(III)	RPOs fulfilled from ESS by that Obligated Entity is 6 MUs (i.e. less than the RPO under para (i) of this Schedule).	6A*	6B*	6C*	6
(IV)	Adjustment on account of shortfall, if any, in meeting RPPOs from ESOs under para (I) of this schedule i.e. 200% of the shortfall.	8A	88	8C	8
(V)	The RPPOs to be met under Table-1 of the Schedule including energy actually met from ESS after adjustment of the shortfall in RPPOs under Para (i) of this Schedule [Item (I)-(II) +(IV)]	16-2A	6.6-2B	248.2-2C	270.8-2
Whe	ere A=16/270.8 B=6.6/270.8 C=248.2/270.8 A+B+C=1				

such segregation shall be done based on the such evidence, instead of proportionate adjustment as per item (III) under each of the two scenarios.

(b) The values of A, B and C, as given above, are based on the category wise RPPOs in respect of the year 2023-24 as per table-I. The values for the other years shall vary based on the category wise RPPOs applicable for respective years. Total (i.e. A+B+C) shall however always be equal to one.

(c) The RPPOs as per item (IV) in Scenario-I and item (V) in Scenario-II are to be met in addition to the energy actual consumed from ESS as per item (III) under both the Scenarios."

- (k) 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 Table-1 above.
- (l) Minimum percentage for Renewable Power Purchase Obligation for each category mentioned in Table-1 and para (i) of this Schedule shall have to be met separately subject to the conditions specified in the Regulations and this Schedule.
- (m) The provisions contained in this Schedule shall, unless revised earlier, be applicable in respect of the period upto 31<sup>st</sup> March, 2030:

Provided that in case the provisions for the period beyond 31<sup>st</sup> March, 2030 are not specified before the said date, the provisions relating to the year 2029-2030 shall continue to be applicable till the issuance of notification of such provisions for that period.