

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

Dated: 31-03-2017

NOTIFICATION

Regulation No. 1 of 2017

In exercise of powers conferred under sections 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf, the Andhra Pradesh Electricity Regulatory Commission hereby makes the following regulations for prescribing the obligation for purchase of Renewable Power and its compliance by purchase of Renewable Energy/Renewable Energy Certificates:

1. Short title and commencement:

(i) These regulations may be called the APERC Renewable Power Purchase Obligation (Compliance by purchase of Renewable Energy / Renewable Energy Certificates) Regulations, 2017.

(ii) These regulations shall come into force with effect from 1st April, 2017.

(iii) These Regulations shall apply throughout the State of Andhra Pradesh.

2. Definitions and Interpretation: In these regulations, unless the context otherwise requires,

(a) 'Act' means the Electricity Act, 2003 (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 referred to in sub-section (1) of section 76 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 recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time;

(e) 'Commission' means the Andhra Pradesh Electricity Regulatory Commission as referred to in subsection (1) of section 82 of the Act;

(f) 'Floor Price' means the minimum price as determined by the Central Commission in accordance with its (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation)

Regulations, 2010 as amended from time to time at and above which the certificate can be dealt in power exchange;

(g) **'Forbearance Price'** means the ceiling price as determined by the Central Commission in accordance with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time, within which only the Certificate can be dealt in power exchange;

(h) **'MNRE'** means the Ministry of New and Renewable Energy;

(i) **'Obligated Entity'** means an entity obligated to purchase renewable power under clause (3) of these Regulations;

(j) **'Open Access Consumer'** means a consumer availing open access under sub-section (2) of Section 42 of the Act;

(k) **'Pooled Cost of Power Purchase'** means the weighted average pooled price at which the distribution licensee has purchased electricity in the previous year from all the long-term energy suppliers excluding the purchases based on liquid fuel.

Provided that the purchases from traders, short-term purchases and purchases from renewable sources shall not be taken into account while determining Pooled Cost of Power Purchase;

(l) **'Power Exchange'** means any exchange operating as the power exchange for electricity in terms of the orders issued by the Central Commission;

(m) **'Renewable energy sources'** means renewable sources such as Co-generation (from renewable sources of energy like bagasse), Mini Hydel, Municipal Waste, Industrial Waste, Biomass, Wind, Solar including its integration with combined cycle, bio-fuel co-generation, Geo-thermal, Tidal and such other sources as recognized or approved by MNRE;

(n) **'State Agency'** means the State Load Despatch Centre of the State of Andhra Pradesh as defined under section 2(66) of the Act or the agency so designated by the Commission under Clause (5.4) of these Regulations to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these regulations;

(o) **'Year'** means a Financial Year;

(p) **'RPPO'** means Renewable Power Purchase Obligation prescribed under clause (3) of this Regulation;

(q) **'RESCO'** means Rural Electricity Supply Co-operative Society.

Words and expressions used in these Regulations and not defined herein, but defined in the Act or the rules 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 the rules or such Regulations issued by the Central Commission or such other Regulations issued by the Commission.

3. Renewable Power Purchase Obligation (RPPO):

3.1 Every distribution licensee shall purchase from renewable energy sources at the tariff determined by the Commission under Section 62 of the Act or at tariffs discovered through transparent process of bidding u/s 63 of the Act and adopted by the Commission, a minimum quantity of electricity expressed as a percentage of its consumption of energy, during FY2017-18 to FY2021-22 as specified in TABLE-I.

TABLE-I

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Non-Solar	6 %	7 %	8 %	9 %	10 %
Solar	3 %	4 %	5 %	6 %	7 %
Total	9 %	11 %	13 %	15 %	17 %

Provided further that the obligation will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power other than mini hydel sources of power;

Provided that the quantum of electricity generated by the Consumer from the Roof-top Solar PV System under the net metering arrangements shall, if such consumer is not an obligated entity, qualify towards meeting the Solar RPPO of the Distribution Licensee.

The Distribution Licensee shall install, at its own cost and with the consent of the Consumer, a Solar Generation Meter conforming to the applicable CEA Regulations at an appropriate location to measure the energy generated from the Roof-top Solar PV System if it desires that such energy be counted towards meeting its RPPO. The Solar Generation Meter shall be maintained by the Distribution Licensee at its cost.

Provided that the purchases made from solar roof-top projects (gross metering), the unutilized banked energy deemed to have been purchased by the Discoms from renewable energy projects under Open Access Regulations, purchases made at mutually agreed prices and all such other transactions for which the generator(s) does not claim RECs shall also be treated as fulfillment of the Renewable Power Purchase Obligation (RPPO) prescribed herein;

Provided further that the purchase of renewable power, by the distribution licensee, from other distribution licensees in the State of Andhra Pradesh shall also be taken into account for computing the fulfillment of Renewable Power Purchase Obligation (RPPO) by such a licensee;

Provided that the purchase of Renewable Energy Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate or Renewable Energy Generation) Regulations, 2010 as amended from time to time, shall also be treated as fulfillment of the Renewable Power Purchase Obligation (RPPO) prescribed herein;

Provided that in the event of the obligated entity, fulfilling the Renewable Power Purchase Obligation (RPPO) through self-retention of Renewable Energy Certificates as allowed by the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate or Renewable Energy Generation) Regulations, 2010 as amended from time to time, the application for self-retention shall be towards fulfillment of RPPO of that financial year only; And the obligated entity shall make an application accordingly.

Provided further that the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled through solar energy or solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled through non-solar energy or non-solar certificates. Notwithstanding the above, till such time the price of solar RECs is higher than that of non-solar RECs, the obligated entity can fulfill its non-solar RPPO through purchase or self-retention of equal number of solar RECs;

provided that consumption from cogeneration based generating stations is exempted from RPPO.

Provided further that distribution licensees shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own at the tariff determined by the Commission under Section 62 of the Act;

Provided further that the renewable power procured by the obligated entity(s) from renewable energy generating stations bundled with coal/lignite based thermal generation shall be considered as fulfillment of RPPO;

Provided further that the consumption of a Rural Electricity Supply Co-operative Society (RESCO), shall be taken into account for calculating the consumption of a distribution licensee for the purpose of these Regulations. There shall be no separate Renewable Power Purchase Obligation on the RESCOs;

Provided also that the Commission may, either on its own motion or on recommendation of the State Agency or on receipt of an application from the obligated entity(s) or eligible entity(s), revise for any year the percentage targets given herein above as deemed appropriate.

3.2 Every open access consumer in the State of Andhra Pradesh shall purchase from renewable energy sources, a minimum quantity of electricity expressed as a percentage of its consumption of energy, during FY2017-18 to FY2021-22 as specified in TABLE-I under clause 3.1 of this Regulation.

Provided that the obligation will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power other than mini hydel sources of power;

Provided that the quantum of electricity consumed by the Consumer from the Roof-top Solar PV System under the Net Metering Arrangement shall qualify towards his compliance of Solar RPPO, if such consumer is an obligated entity.

The Consumer shall install, at his own cost, a Solar Generation Meter conforming to the applicable CEA Regulations at an appropriate location to measure the energy generated from the Roof-top Solar PV System, if he is an obligated entity and desires that such energy be counted towards meeting its RPPO.

Provided that the power procured from 3rd party generators under Power Wheeling and Purchase Agreement (PWPA)s is exempted from RPPO.

Provided that the renewable power procured by the obligated entity(s) from that of renewable energy generating stations bundled with coal/lignite based thermal generation shall be considered as fulfillment of RPPO;

Provided that the renewable energy purchased shall be offset towards the RPPO of obligated entity only if the generator does not claim RECs on such energy.

Provided that the purchase of Renewable Energy Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate or Renewable Energy Generation) Regulations, 2010 as amended from time to time, shall also be treated as fulfillment of the Renewable Power Purchase Obligation (RPPO) prescribed herein;

Provided that in the event of the obligated entity, fulfilling the Renewable Power Purchase Obligation (RPPO) through self-retention of Renewable Energy Certificates as allowed by the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate or Renewable Energy Generation) Regulations, 2010 as amended from time to time, the application for self-retention shall be towards fulfillment of RPPO of that financial year only; And the obligated entity shall make an application accordingly.

Provided further that the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled through solar energy or solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled through non-solar energy or non-solar certificates. Notwithstanding the above, till such time the price of solar RECs is higher than that of non-solar RECs, the obligated entity can fulfill its non-solar RPPO through purchase or self-retention of equal number of solar RECs;

provided that consumption from cogeneration based generating stations is exempted from RPPO.

Provided further, that the Commission may, either on its own motion or on recommendation of the State Agency or on receipt of an application from the obligated entity(s) or eligible entity(s), revise for any year the percentage targets given herein above as deemed appropriate.

3.3 Every consumer owning a captive generating plant of installed capacity of One (1) MW and above and Connected to the Grid, shall purchase Renewable Energy Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time corresponding to a minimum quantity of electricity expressed as a percentage of its consumption of energy, during FY2017-18 to FY2021-22 as specified in TABLE-I under clause 3.1 of this Regulation.

Provided that the purchase of energy from renewable energy sources shall also be treated as fulfillment of the Renewable Power Purchase Obligation (RPPO) prescribed herein;

Provided that the obligation will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power other than mini hydel sources of power;

Provided that the quantum of electricity consumed by the Consumer from the Roof-top Solar PV System under the Net Metering Arrangement shall qualify towards his compliance of Solar RPPO, if such consumer is an obligated entity.

The Consumer shall install, at his own cost, a Solar Generation Meter conforming to the applicable CEA Regulations at an appropriate location to measure the energy generated from the Roof-top Solar PV System, if he is an obligated entity and desires that such energy be counted towards meeting its RPPO.

Provided that the renewable power procured by the obligated entity(s) from that of renewable energy generating stations bundled with coal/lignite based thermal generation shall be considered as fulfillment of RPPO;

Provided that the renewable energy purchased shall be offset towards the RPPO of obligated entity only if the generator does not claim RECs on such energy.

For the purpose of this clause, "Connected to the Grid" shall mean that the generating plant is being operated in parallel with the network, at the point of connection, of the Distribution Licensee or the Transmission Licensee, as the case may be.

Provided further that, any generating plant not meeting the eligibility condition for a Captive Generating Plant as prescribed in Indian Electricity Rules, 2005, but having self-consumption, is also required to meet RPPO.

Provided that in the event of the obligated entity, fulfilling the Renewable Power Purchase Obligation (RPPO) through self-retention of Renewable Energy Certificates as allowed by the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate or Renewable Energy Generation) Regulations, 2010 as amended from time to time, the application for self-retention shall be towards fulfillment of RPPO of that financial year only; And the obligated entity shall make an application accordingly.

Provided further that the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled through solar energy or solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled through non-solar energy or non-solar certificates. Notwithstanding the above, till such time the price of solar RECs is higher than that of non-solar RECs, the obligated entity can fulfill its non-solar RPPO through purchase or self-retention of equal number of solar RECs;

provided that consumption from cogeneration based generating stations is exempted from RPPO.

Provided further, that the Commission may, either on its own motion or on recommendation of the State Agency or on receipt of an application from the obligated entity(s) or eligible entity(s), revise for any year the percentage targets given herein above as deemed appropriate.

Note : - In case an obligated entity(s) intends to install a co-located renewable energy generating plant within the premises of consumption unit so as to utilize the consumption from such plant towards fulfillment of RPPO, then such entity(s) shall install meters of appropriate class of accuracy for measurement of gross generation, Auxiliary consumption & Captive Consumption, at appropriate locations and have them duly sealed by the concerned licensees for the purpose of measuring the generation and captive consumption. The concerned licensees shall take monthly readings, including MRI dumps, for all such meters, for the purpose of accounting the energy towards RPPO of the captive consumption unit.

4. Certificates under the Regulations of the Central Commission:

4.1 The procurement, by the obligated entity(s) of Renewable Energy Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time, shall be subject to such directions as the Commission may issue from time to time.

4.2 The Renewable Energy Certificates purchased by the obligated entity(s) from the power exchange, or the Purchase Certificate(s) issued by State Agency in case of self-retention of RECs, shall be deposited by the obligated entity(s) with the State Agency.

4.3 Notwithstanding the above, the State Agency can also independently verify the RECs purchased by the obligated entities from power exchanges, through Renewable Energy Certificate Registry of India website, and consider the same towards fulfillment of their RPPO.

5. State Agency:

5.1 The State Agency shall function in accordance with the directions issued by the Commission and shall act in consistence with the procedures / rules laid down by Central Agency for discharge of its functions under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time.

5.2 The State Agency shall submit quarterly status to the Commission in respect of compliance of Renewable Power Purchase Obligation by the obligated entities in the format as stipulated by the Commission and may suggest appropriate action to the Commission if required for compliance of the Renewable Power Purchase Obligation.

5.3 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.

5.4 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 by recording reasons in writing, designate any other agency to function as State Agency as it considers appropriate.

6. Eligibility and Registration for Certificates:

6.1 The eligibility and registration of certificates shall be governed by the Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for renewable energy generation) Regulations, 2010 dated 14.01.2010 as amended from time to time.

6.2 Determination of Pooled Cost of Power Purchase:

(1) For determination of Pooled Cost of Power Purchase for a particular year, DISCOMs shall submit a petition for computation of Pooled Cost of Power Purchase to the Commission by 30th April of that year. The Commission shall issue order relating to Pooled Cost of Power Purchase for the particular year within one month of acceptance of such petition. 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 order for the Pooled Cost of Power Purchase by the Commission, the difference with 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 that year.

(2) The standard PPA approved in terms of Note (2) at Regulation 6 (b) of Regulation 1 of 2012 shall continue to be applicable.

7. Consequences of default:

7.1 If the obligated entity(s) does not fulfill the Renewable Power Purchase Obligation as provided in clause (3) of these regulations during any year, the Commission may direct the obligated entity(s) to deposit into a separate fund, to be created and maintained by the State Agency, such amount as the Commission may determine on the basis of the shortfall in units of the Renewable Power Purchase Obligation and the forbearance price decided by the Central Commission;

Provided that the fund so created shall be utilized, for purchase of certificates or as may be directed by the Commission;

Provided further that the Commission may empower an officer of the State Agency 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 amount in the fund;

7.2 Where any obligated entity(s) fails to comply with the obligation prescribed in clause (3) of these Regulations, it shall, in addition to the compliance of the directions under clause (7.1) above, be liable for penalty as may be decided by the Commission under section 142 of the Act;

8. Saving:

8.1 Anything done or action taken or purported to have been done in pursuance of the provisions of the earlier Renewable Power Purchase Obligation (RPPO) Regulation 1 of 2012 and its amendments shall be considered to be legal and valid.

8.2 Any rights and liabilities arising out of the earlier regulation shall be settled within its framework.

9. Power to remove difficulties:

The Commission, 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 fulfill the Renewable Power 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.

10. Miscellaneous:

10.1 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.

10.2 Nothing in these regulations shall bar the Commission from adopting a procedure which 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 so dealing with such a matter or class of matters.

(By Order of the Commission)

Place : Hyderabad
Date : 31-03-2017

Dr. A. Srinivas
Commission Secretary (i/c)