

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

In the matter of draft amendment Regulations of the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2017.

CORAM:
S.K.B.S. Negi
Chairman

ORDER

The Himachal Pradesh Electricity Regulatory Commission (hereinafter referred as “the Commission”) notified the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010, which were published in the Rajpatra, Himachal Pradesh, dated 29th May, 2010 (hereinafter referred “the RPO Regulations, 2010”);

2. The Regulation 3 of the Principal RPO Regulations, 2010, provides that the said regulations will be applicable to the distribution licensee or any person, consuming electricity procured from conventional sources through open access, third party sale or person who installs Captive Generating Plant, with an installed capacity exceeding 5 MVA, based on conventional technology and consumes electricity from such Plant purely for meeting his Standby (or emergency back-up) requirements in the exceptional circumstances of power cuts/breakdowns etc. in his normal source of power; and/or 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 also;”
3. The Central Government notified the revised Tariff Policy which was published vide Gazette of India, Extraordinary, Part-1, Section-1 dated 28.01.2016;
4. The para 6.4(1) of the Policy provides that pursuant to provisions of Section 86(1) (e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such sources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long-term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE:

Provided that co-generation from sources other than renewable sources shall not be excluded from the applicability of RPOs.

5. Further, para 6.4 (1) (i) also provides that within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reached 8% of total consumption of energy, excluding Hydro Power, by March, 2022 or as notified by the Central Government from time to time;
- 6 In order to achieve the target of 1,75,000 MW renewable energy by March, 2022, the Ministry of Power in consultation with Ministry of New and Renewable Energy, GoI vide Order No. 23/3/2016-R&R dated 22.07.2016 has notified the Long-term growth trajectory of Renewable Purchase Obligations (RPOs) for Non-Solar as well as Solar Energy, uniformly for all States/Union Territories, initial for three years from 2016-17 to 2018-19. This has necessitated the amendment of Regulation 4 of the Principal RPO Regulations, 2010;
- 7 Taking into consideration the above, the Commission notified the draft amendment i.e. HPERC (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2016 on 11th August, 2016 and published the same in Rajpatra, Himachal Pradesh on 17th August, 2016 in exercise of the power, conferred under sub-section (1) of section 181 of the Electricity Act, 2003 (36 of 2003);
- 8 As required vide sub-section (3) of the section 181 of the Act, the Commission invited public objections and suggestions by way of insertions in two News papers i.e. “The Tribune” and “Divya Himachal” on 21st August, 2016 under Rule (3) of Electricity (Procedure of Previous Publication) Rules, 2005 and the full text of the draft amendment regulations was made available on the Commission’s website: www.hperc.org.
- 9 The Commission, vide letter dated 23.08.2016, requested the major stakeholders, including Industries Associations, Govt. of India, State Government, Directorate of Energy and Distribution Licensee to send their objections/suggestions as per the aforesaid public notice.
- 10 The following stakeholders have filed their objections/suggestions (**Annexed at Annexure- ‘A’**), on the aforesaid draft amendment regulations:-
 - (i) Himachal Pradesh State Electricity Board Limited (HPSEBL), Vidyut Bhawan, Shimla-171004 (H.P.).
 - (ii) M/s Adani Green Energy Limited, Adani House, Nr Mithakhali Six Roads, Navrangpura, Ahmedabad , Gujarat, India- 380009.
 - (iii) The National Solar Energy Federation of India, 702- Chiranjiv Tower, 43- Nehru Place, New Delhi-110019.
 - (iv) M/s Inox Air Products Ltd., Vill. Kunjahl, Industrial Area, Barotiwala, Distt. Solan – 174103 (HP).

- (v) M/s Birla Textile Mills, Sai Road, Bhatouli Khurd, P.O. Baddi, Distt Solan- 173205 (HP).
- (vi) M/s Winsome Textile Industries Ltd., 1-Industrial Area, Baddi, Distt. Solan- 173205 (HP).

11. Himachal Pradesh State Electricity Board:

The distribution licensee i.e. HPSEBL, an obligated entity has made a request to clarify in the draft amendment whether exclusion of hydro electric sources of power from total energy consumption is for both Non-solar & Solar obligations or only in case of Solar obligation. The HPSEBL has also made further submission to clarify whether all hydro-electric projects (including renewables) shall be excluded or only hydro-electric projects with capacity more than 25.00 MW.

12. M/s Adani Energy Limited and M/s National Solar Energy Federation of India:

M/s Adani Energy Limited and M/s National Solar Energy Federation of India have submitted that the long term RPO trajectory will be applicable on the consumption of electricity by the obligated entity, excluding consumption met from hydro electric sources of power. Whereas, the section 86(1) (e) of the Electricity Act, 2003 mandates SERCs to specify a percentage of total consumption of electricity in the area of distribution licensee to be purchased from renewable energy. The Stakeholders have further submitted that the share of hydro and thermal power is 76.66 % and 5.5% of total energy requirement portfolio of the State, which means RPO will be applicable for only 5.5% of total capacity and the same is practically not justified. The Stakeholders have made request to amend the Regulations in line with Electricity Act, 2003 and to specify Solar and Non-solar RPOs on total consumption of electricity by an obligated entity without excluding consumption met from hydro electric sources of power.

13. M/s Inox Air Products Ltd., M/s Birla Textile Mills & M/s Winsome Textile Industries Ltd.:

M/s Inox Air Products Ltd., M/s Birla Textile Mills & M/s Winsome Textile Industries Ltd. have made their submissions as per Annexure- 'A'. The crux of the submissions is that the proposed increase in RPOs is abrupt and not gradual. Any increase has to match with the development of solar generation in the State, so that ultimate product i.e. the cost of the electricity may not become unviable for the obligated entities.

14. **Commission's view:**

- (i) On the submissions, made by HPSEBL explained above, the Commission referred the matter to Joint Secretary, Ministry of Power, Govt. of India, New Delhi through its letters dated 09.09.2016, 11.11.2016 & 30.12.2016 to clarify

the para-4 of the Order No. 23/3/2016-R&R dated 22nd July, 2016, issued by the Ministry of Power, Govt. of India and the same is reproduced as under:-

“Now, in view of the above provisions and in order to achieve the target of 1,75,000 MW of renewable capacity by March, 2022, the Ministry of Power in consultation with Ministry of New and Renewable Energy, notifies the Long term growth trajectory of Renewable Purchase Obligations (RPOs) for Non-solar as well as Solar, uniformly for all States/Union Territories, initially for three years from 2016-17 to 2018-19 as under:-

Long term trajectory	2016-17	2017-18	2018-19
Non-Solar	8.75%	9.50%	10.25%
Solar	2.75%	4.75%	6.75%
Total	11.50%	14.25%	17.00%

The obligations will be total consumption of electricity by an obligated entity, excluding consumption met from hydro sources of power.”

(ii) The Ministry of Power (MoP), Govt of India (GoI) vide letter No. 23/3/2016-R&R dated 08.03.2017 has clarified, on the above references, as under:-

- (a) The exclusion of consumption of electricity met from hydro-electric sources of power from total consumption is applicable both in case of Solar and Non-Solar RPOs, which is the spirit of the long term RPO trajectory outlined in the order dated 22.07.2016.
- (b) The said exclusion of consumption met from hydro-electric sources of power is applicable for all types of hydro-electric sources irrespective of its capacity.

(iii) Keeping in view the above clarification from Ministry of Power, the Commission does not agree to the suggestions made by M/s Adani Green Energy Ltd. & National Solar Energy Federation of India i.e. not to exclude the hydro energy procurement from total energy consumption of an obligated entity, as far as Solar RPO Compliance is concerned. Moreover, the Electricity Act, 2003 does not speak a separate technology specific RPOs.

(iv) The Commission also does not agree on the apprehension shown by the other stakeholders that the proposed RPO trajectory is abrupt and not gradual. The proposed RPO trajectory is as per the order of Ministry of Power dated 22.07.2016 and the same was issued by the Ministry of Power as per the provisions of para 6.4 (1) of the Tariff Policy which provides that long growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

(v) The Commission after taking into consideration the objections/suggestions of the stakeholders, the provisions of para 6.4 (1) (i) of Tariff Policy dated 28.01.2016, order of MoP dated 22.07.2016 and further

clarification from MoP, GoI on 08.03.2017, decides to finalise the proposed draft amendments by slightly modifying the RPO targets of FY 2016-17 i.e. Non-solar & Solar RPO targets fixed as 9.5% and 2.5% respectively so the same are matched with the percentage renewable energy targets set up for the financial year 2016-17 in National Action Plan on Climate Change (NAPCC).

The draft amendment regulations are finalized and approved as such and be notified accordingly.

Place: Shimla.

Date: March, 2017.

(S.K.B.S Negi)

Chairman

COMMENTS/SUGGESTIONS OF STAKEHOLDERS:

1. Himachal Pradesh State Electricity Board Limited (HPSEBL).

HPSEBL sought clarification on the amendment as below:-

As per amendment, “the said obligations will be applicable on total consumption of electricity by an obligated entity, excluding consumption met from hydroelectric sources of power.”

- In the above quoted line, it is not clarified that the exclusion of hydro-electric sources of power from total consumption is for both Non-solar & Solar obligations or only in case of Solar obligation because as per MoP Order dated 22nd July, 2016, Point No. 3 & Tariff Policy dated 28.01.2016, Para 6.4 (1) (i), it is stated “Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.”

Therefore it is not clarified from amendment whether the exclusion of hydro electric sources of power from total consumption is for both Non-solar & Solar obligations or only in case of Solar obligation.

- In the above quoted line, it is not clarified that the mentioned hydro – electric sources are those hydro-electric projects whose capacity is more than 25.00 MW or all hydro-electric projects (including renewables).

HPSEBL has made above submissions to clarify whether all hydro electric projects (including renewables) shall be excluded or only hydro electric projects with capacity more than 25.00 MW.

2. M/s Adani Green Energy Limited & National Solar Energy Federation of India, 702- Chiranjiv Tower, 43- Nehru Place, New Delhi-110019.

M/s Adani Green Energy Limited & National Solar Energy Federation of India have submitted that in the draft regulations, the Commission proposed the same long term Renewable Purchase Obligation (RPO) trajectory as per the notification issued by the Ministry of Power on 22.07.2016 under the Tariff Policy provision. MoP in the said notification suggested to all States/ Union Territories to consider the same RPO targets for their respective States in line with uniform RPO trajectory. The long term RPO trajectory will be applicable on the consumption of electricity by an obligated entity, excluding consumption met from hydro-electric sources of power.

We would like to submit that the Section 86 (1) (e) of the Electricity Act, 2003 mandates SERCs to specify a percentage of the total consumption of electricity in the area of a distribution licensee to be purchased from renewable energy. The relevant section of the Act is reproduced as under:

“Section 86 (Functions of State Commission) :- (1) The State Commission shall discharge the following functions, namely
 (e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee”;

As per the CEA, in Himachal Pradesh the total installed capacity & allocated shares of power from various sources of Energy are given below (as on 31.03.2016).

Thermal	Nuclear	Hydro	Renewable Energy	Total (MUs)
213.90	34.08	3421.51	793.51	4463.00
4.79%	0.76%	76.66%	17.78%	

In view of above data, the share of hydro power is 76.66% of total capacity and the portion of thermal and other sources is only 5.5%. Therefore, as per the draft regulations, the Renewable Purchase Obligation will be applicable on only the installed capacity of 5.5% of total capacity, which is practically not justified.

The Stakeholders have made a request before the Commission to amend the regulations in line with the Electricity Act, 2003 and specify RPO/SPO on total consumption of electricity by an obligated entity as against the consumption of electricity excluding consumption met from hydro-electric sources of power.

3. M/s INOX AIR PRODUCTS LTD., M/s BIRLA TEXTILE MILLS, M/s WINSOME TEXTILE INDUSTRIES LTD. & M/s INOX AIR PRODUCTS LTD.

- (i) The above stakeholders have submitted the following objections/suggestions on the draft Regulations-HPERC (Renewable Power Purchase Obligations and its Compliance) (Third Amendment) Regulations, 2016:

Section 86 (1) (e) of the Electricity Act, 2003 provides for the functions of the SERC to promote generation of RE power and specifies for purchase of electricity from RE sources as a percentage of the total consumption. The Act reads as follows:

“86 (1) (e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.”

- (ii) The National Tariff Policy, 2016 under Clause 6.4 gives stress on Renewable sources of energy generation including Co-generation from renewable energy sources and reads as follows:

(1) Pursuant to provisions of Section 86 (1) (e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such sources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

- (iii) The Commission has been fixing the quantum of RPPO under the Regulations from time to time. The successive quantum, fixed by Commission has been as follows:

HPERC RPPO Regulations, 2010:

Year	Minimum quantity of purchase of RE power of total consumption (%)		
	Total	Non-Solar	Solar
2010-11	10.0	10.0	0.0
2011-12	11.1	11.0	0.1
2012-13	12.1	12.0	0.1

The RPPO specified for 2012-13 will continue beyond 2012-13 till any revision is effected by the Commission in this regard.

HPERC RPPO (First Amendment) Regulations, 2011:

Year	Minimum quantity of purchase of RE power of total consumption (%)		
	Total		Minimum Solar
2011-12	10.01		0.01
2012-13	10.25		0.25
2013-14	10.25		0.25
2014-15	10.25		0.25
2015-16	11.25		0.25
2016-17	12.25		0.25
2017-18	13.50		0.50
2018-19	14.75		0.75
2019-20	16.00		1.00
2020-21	17.50		2.00
2021-22	19.00		3.00

Draft HPERC RPPO (Third Amendment) Regulations, 2016:

Year	Minimum quantity of purchase of RE power of total consumption (%)		
	Total	Non-Solar	Solar
2016-17	11.50	8.75	2.75
2017-18	14.25	9.50	4.75
2018-19	17.00	10.25	6.75

(iv) Violation of National Tariff Policy:

From the above proposed trajectory, it is surprising that how the solar component has been abruptly changed, which is basically in violation of the National Tariff Policy also. The NTP puts two conditions while fixing the percentage of RPPO i.e. (i) availability of such resources, (ii) impact on retail tariffs.

(v) Availability of Solar Power Generation Sources in Himachal Pradesh:

If we look at the first consideration, there is hardly any Solar Power Generation in the State of Himachal Pradesh and in the States around. Secondly, any such abrupt increase will result in abrupt enhancement in the retail tariffs.

(vi) Present level of RPPO compliance and reasons for non-compliance:

We also need to consider the present compliance of the RPPOs in the State of Himachal Pradesh. The fact is that there is hardly any compliance, which we will not say is deliberate but the main reason is the non-availability of solar power in the State. The Commission needs to examine as to what action has been taken by it to pressurize the State Utility to enforce the RPPOs. It has to be appreciated that if the present lower percentage of RPPO could not be complied with by the Distribution Licensee then how the enhanced Obligation would be complied with which even if done will be at the ultimate loss of the consumers only.

(vii) Compliance through purchase of RECs:

One view could be that the Distribution Licensee could buy RECs to meet its RPPO. If we examine the impact, it will be substantial increase in the retail tariffs. The Solar RECs have a floor price of Rs. 3500 per certificate and looking at the proposed levels, the financial impact on the consumers would be enormous.

(viii) Present Glut of the RECs in the country:

As per the REC trade details based on bidding on 28.09.2016, the status of Sell Bids and Buy Bids for RECs was as follows:

Description	Non-Solar RECs		Solar RECs	
	IEX	PXIL	IEX	PXIL
Sell Bids (Nos.)	67,14,750	61,96,499	18,81,110	16,96,285
Buy Bids (Nos.)	91,355	84,170	15,123	16,598
Rate Discovered (Rs.)	1,500	1,500	3,500	3,500
No. of participants	819		464	

It would be observed that there is huge glut of RECs in the market and there are not many buyers. We can conclude that the RECs as an alternative to fulfill RPPOs have not been found an attractive mode.

(xi) Proposed trajectory should be gradual and not abrupt:

It is observed that the proposed increase in RPPO is abrupt and not gradual. Any increase has to match with the development of the Solar Generation in the

State. A status picture of various States throughout India is attached for favour of ready reference.

(x) Purchase from other States:

Although the Ministry of Power has given exemption from levy of the transmission & wheeling charges and transmission losses for the use of inter-State transmission system under the NTP, but similar exemption has not been given by the States. Therefore, any purchase of Solar Power from any other State will add up the intervening State's wheeling charges and losses. The power so purchased will become highly uneconomical for the Utility and ultimately to the consumers in the State.

(xi) Impact on the ultimate product cost to the consumers:

It needs to be appreciated that either Utility is asked to buy such high percentage of Solar Power or for the Open Access consumers, it is going to make the cost of electricity, as input to the manufacturing activity, non-competitive in the national and inter-national markets.

(xii) Impact on Open Access facility:

Any increase in the RPPO will affect the open access charges to increase for the OA consumers, which will make the open access power unviable and uneconomical. This will vitiate the very basis of the Electricity Act, 2003 and the NTP, which clearly provided for bringing in competition in the distribution business and make the power cheaper for the consumers. Not only the power purchased through open access will be costlier but the competition part will vanish.

(xiii) Proposed amendment under Reg. 4(1) (b):

The proposed amendment reads as under:

(b) the Captive and Open Access User(s)/Consumers(s) shall purchase electricity (in kWh) from renewable sources, at a minimum percentage of his total consumption including transmission and distribution losses, during a year:-

It needs to be appreciated that the electricity meters installed for the industrial consumers are either at the sending end substation or at the factory premises. In case the meter is installed at the factory premises, the energy recorded excludes the transmission and distribution losses, which is not so in the case of consumers metered from the substation end. This anomaly may please be addressed in the proposed Regulations.

The Stakeholders have made a request to review the proposed amendment in the RPPO Regulations taking into consideration the above submissions.