

**BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY
COMMISSION, SHIMLA**

Authentication of Renewable Energy Power Purchase (Non-Solar and Solar) for FY 2017-18 & FY 2018-19 under the provisions of Regulation 4(1) of the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010.

AND

In the matter of:-

The Himachal Pradesh State Electricity Board Limited
Vidyut Bhawan, Shimla-171004 (HP).

..... Petitioner

Versus

The Addl. Chief Secretary (Power/NES)
GoHP, Shimla-02

The Director,
Directorate of Energy,
Shanti Bhawan, Phase-III, New Shimla-09 (HP).

The Director,
HIMURJA, SDA Complex, Kasumpti, Shimla-09

.....Respondents

Petition No. 04 of 2021
(Decided on 19.08.2021)

CORAM

Shri Devendra Kumar Sharma
Chairman

Sh. Bhanu Pratap Singh
Member

Counsels/Representatives:-

for Petitioner:

Sh. Kamlesh Saklani
(Authorized Representative),
a/w Sh. Joginder Singh CE(SO)

for Respondents:

Sh. Shanti Swaroop (Legal Consultant)
Ms. Kamlesh Shandil (Advocate)

ORDER

(Last heard on 03.03.2021 and Orders reserved)

This order relates to the petition bearing No. 04/2021 filed by the Himachal Pradesh State Electricity Board Limited (hereinafter referred as “the HPSEBL” or

“the distribution licensee”), an Obligated Entity under the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (hereinafter referred as “the RPPO Regulations”) seeking authentication of Renewal Energy Purchase (Non-Solar and Solar) for FY 2017-18 and FY 2018-19.

2. Petitioners submissions:

- 2.1 The HPSEBL submitted that regulation 4(1) of the HPERC Renewable power Purchase Obligation and its compliance) (Third Amendment) Regulations, 2010 reads as under:-

“The distribution licensee shall during each financial year, purchase such quantum of electricity (in kWh) from renewable energy sources as is not less than the quantum of electricity (in kWh), worked out as per the Table below:-

Year	Minimum Quantum of purchase in percentage from renewable sources (*in terms of energy in kWh) of total consumption		
	Non-Solar	Solar	Total
2016-17	9.50%	2.50%	12.00%
2017-18	9.50%	4.75%	14.25%
2018-19	10.25%	6.75%	17.00%
The RPPO will be on total consumption of electricity by an obligated entity, excluding consumption met from hydroelectric sources of power.			

Accordingly, the HPSEBL has purchased power from renewable sources (Non-solar and Solar) in order to meet its obligation of 9.50 % from Non-solar and 4.75 % from Solar power for the FY 2017-18 and 10.25% from Non-solar and 6.75 % from Solar power for the FY 2018-19 respectively.

- 2.2 The details of net shortfall/surplus of the HPSEBL in respect of Non-solar RE obligations during FY 18 and FY 19 are as below:

Sr. No.	Description	Quantum (in MUs)	Quantum (in MUs)
1	Financial Year	2017-18	2018-19
2	a. HP's consumption within the State (including Hydro)	9351.38	10114.50
	b. Consumption met from hydro sources	7740.30	7300.52
	c. HP's requirement within the State excluding hydro	1611.35	2813.98
3	Non- Solar Renewable Power Purchase Obligations	9.50	10.25
4	Non- Solar Renewable Power Purchase Obligations (in MUs)	153.08	288.43
5	Detail of Purchase of Non-Solar R.E. Power by the HPSEBL including own generation		
	a. HPSEBL's own generation from 25MW and below projects (excluding free power).	326.46	336.01
	b. Power purchased (Net saleable energy) from IPP owned SHPs of 25 MW and below capacity (excluding projects under REC).	1171.68	1270.52

	c. Free power entitlement of GoHP in HPSEBL's SHPs of 25MW and below capacity.	24.84	29.39
	d. Free power entitlements of GoHP in IPP owned SHPs of upto 25MW capacity purchased by the HPSEBL	92.18	115.24
	Total Non-Solar R.E. purchased (a+b+c+d)	1615.16	1751.15
6	Non-Solar RE sold outside its area of supply as RE	1231.85	1480.15
7	Net Non-Solar RE available for supply and to meet own RPPO (5-6)	383.31	271.00
8	Net shortfall(-)/surplus (+) in meeting own Non Solar RE Obligation for FY 18 and FY 19 (7-4)	230.23	-17.43

- 2.3 In line with the HPERC Order dated 17.07.2017, regarding adjustment of surplus/shortfall of RE Certificates or renewable energy with respect to Renewable Purchase Obligation of FY 2016-17 in FY 2017-18, the HPSEBL submitted that the shortfall of 131.72 MUs in Non-Solar RPPO during FY 2016-17 may be adjusted against the surplus of 230.23 MUs for FY 2017-18. The balance surplus quantum of 98.51 MUs in respect of FY 2017-18 may be considered for issuance of RE Certificates for FY 2017-18 on purchase of RE Power (Non-solar) beyond its RPPO and to issue certificate as per the format devised by the Central Agency. Further, the HPSEBL approached this Commission to allow for the adjustment of deficit of 17.43 MUs for FY 2018-19 against the balance RE Certificates (Non-solar) of FY 2014-15.
- 2.4 In respect of Non-solar RPPO deficit of 164.59 MUs for FY 2015-16, the HPSEBL submitted that same may be adjusted against the RE Certificates (Non-solar) which the HPSEBL received against the surplus Non-solar Power of 182.77 MUs for FY 2014-15. It is pertinent to mention here that the HPERC vide its Order dated 05.01.2018 has allowed the adjustment of deficit of 164.59 MUs against the available inventory of RE Certificates (Non-solar) which the HPSEBL received for purchase of RE Power beyond Non-solar RPPO. However, the prevalent Regulations of HPERC have no provision for such adjustments and thus the same was not allowed by the State Agency, i.e.the Directorate of Energy. Accordingly, the HPSEBL sold the RE Certificates (Non-solar) for FY 2013-14 through IEX as the same were due for expiry in February, 2020. Accordingly, the HPSEBL made request before the Commission to consider the adjustment of deficit of 164.59 MUs in respect of FY 2015-16 against the RE Certificates (Non-solar) of 182.77 MUs for FY 2014-15. Out of the balance RE Certificates of 18.18 MUs (182.77 MUs- 164.59 MUs) of FY 2014-15, RE Certificates of 17.43 MUs has been proposed for adjustment against the deficit of FY 2018-19

and the balance RE Certificates of 0.75 MUs (18.18 MUs- 17.43 MUs) will be sold at the platform of IEX.

2.5 The details of net shortfall/surplus of the HPSEBL in respect of Solar RE obligations during FY 18 and FY 19 are as below:

Sr. No.	Description	Quantum (in MUs)	Quantum (in MUs)
1	Financial Year	2017-18	2018-19
2	a. HP's consumption within the State (including Hydro)	9351.38	10114.50
	b. Consumption met from hydro sources	7740.08	7300.52
	c. HP's requirement within the State excluding hydro	1611.35	2813.98
3	Solar Renewable Power Purchase Obligations	4.75	6.75
4	Solar Renewable Power Purchase Obligations (in MUs)	76.54	189.94
5	Detail of Purchase of Solar Power by HPSEBL		
	a. Purchased from SECI Solar power Project (M/s ACME Rajdhani Power Pvt. Ltd)	42.36	42.64
	b. Purchased from NTPC (Singrauli Solar Power Project)	21.33	20.42
	c. IPP Owned Solar Plants in HP through Long Term PPAs	0.36	15.30
	d. HPPCL owned Bera Dol Solar Plant through Long Term PPA	0.00	2.16
	e. Solar Rooftop in the State	0.82	0.78
	Total Non-Solar R.E. purchased (a+b+c+d+e)	64.86	81.09
6	Solar RE sold outside its area of supply as RE Power	0.00	0.00
7	Net Solar RE available for supply and to meet own RPPO (5-6)	64.86	81.09
8	Net shortfall (-)/ Surplus (+) in meeting own Solar RE Power Purchase Obligation for FY 18 & FY 19 (7-4)	-11.68	-108.85

2.6 The HPSEBL has a deficit in meeting its Solar RPPO during FY 18 and FY 19 to the tune of 11.68 MUs and 108.85 MUs respectively. The HPSEBL stated that the HPSEBL has Solar RE Certificates of 24.30 MUs (9.02 MUs against the surplus solar power of FY 2015-16 + 15.28 MUs against the surplus of solar RE Power of FY 2016-17). In respect of deficit of 11.68 MUs during FY 18, the HPSEBL proposed to meet this deficit against equivalent quantum of Solar RE Certificates available to the HPSEBL for surplus Solar power of FY 2015-16 & FY 2016-17. The balance Solar RE Certificates of 12.62 MUs (24.30 MUs- 11.68 MUs) are proposed to be adjusted against the deficit of FY 2018-19. Therefore regarding deficit of 108.85 MUs for FY 19, the HPSEBL requests the Commission to adjust shortfall of 108.85 MUs against the 12.62

MUs available surplus Solar RECs of FY 16 and FY 17 and to allow for the carry forward of the balance deficit of 96.23 MUs to the ensuing years. According to the HPSEBL, the main reasons for non-compliance of the RPPO are as detailed below:-

- The HPSEBL had issued consent letter to 16 Entrepreneurs (IPPs) for development of solar projects aggregating to 34.4 MW, upto December 2015. Thereafter, no consent has been given by the HPSEBL in compliance to the HPERC office letter dated 20.05.2016. The HPSEBL had received 209 applications from prospective Solar Developers, aggregating to 438 MW, for the consent of the HPSEBL. However, the consent was denied as the HPSEBL had enough tie- ups to meet the Solar RPPO.
- In addition to this, the HPSEBL gave consent to SECI during FY 2014-15 for procurement of 50 MW solar power. However, there was no development by SECI till 2019 and thus the consent was withdrawn by the HPSEBL on 06.08.2018.
- After the withdrawal of consent to SECI, it was decided that a new solar scheme would be floated by the GoHP and power from these projects shall be procured by the HPSEBL to meet out its Solar RPPO. Accordingly, in September 2018, HIMURJA launched a scheme for 20 MW solar power from the projects in capacity range of 250 kWp to 500 kWp. The scheme is under implementation currently and the HPSEBL has executed PPAs with the Project Developers. These projects were scheduled to be commissioned during 2019-2020 and thus the HPSEBL would have enough power to meet out its future Solar RPPO.
- The methodology of calculations of RPPOs on excluding hydro consumption instead of total consumption was notified on 24.03.2017 and the percentage RPPO was also revised. In view of increased RPPO, based on the revised RPPO targets, another scheme has been launched by HIMURJA for harnessing 28 MW of Solar Power through projects ranging from 250 kWp to 500 kWp. This scheme is under implementation and power from these projects is being procured by the HPSEBL. Thus, with the tied up solar power, the HPSEBL will have sufficient power to meet out its Solar RPPO.
- In addition to above, during FY 2018-19 the generation from hydro sources has reduced significantly compared to the anticipated generation targets of Tariff Order resulting in increase in excluding hydro

consumption of the State. The increased Non-hydro consumption has further increased the quantum of Solar and Non-solar RPPO.

The non-compliance of Solar RPPOs during FY 2018-19 was mainly on account of unforeseen circumstances and is not attributable to the HPSEBL. Thus, the HPSEBL requests the Commission to allow for the carry forward of balance deficit of 96.23 MUs of FY 2018-19 for ensuing years.

2.7 The HPSEBL through this petition has requested the Commission to:-

- (a) to allow for the adjustment of shortfall of 131.72 MUs in Non-solar RPPO during FY 2016-17 against the surplus of 230.23 MUs for FY 2017-18 and allow for issuance of RE Certificates of balance surplus, that is, 98.51 MUs for FY 2017-18 on purchase of RE Power (Non-solar) beyond its RPPO and to issue certificate as per format 3.1.1 devised by the Central Agency;
- (b) to allow for the adjustment of deficit of 164.59 MUs for FY 2015-16 against the RE Certificates (Non-solar) which the HPSEBL received against the surplus Non-Solar Power of 182.77 MUs for FY 2014-15;
- (c) to allow for the adjustment of deficit of 17.43 MUs for FY 2018-19 against the balance RE Certificates (Non-solar) of 18.18 MUs (182.77 MUs- 164.59 MUs) of FY 2014-15;
- (d) to allow for the adjustment of deficit of 11.68 MUs for FY 2017-18 in Solar RPPO against equivalent quantum of Solar RE Certificates available to the HPSEBL for purchase of surplus solar power of 24.30 MUs during FY 2015-16 & FY 2016-17 beyond its RPPO;
- (e) to allow deficit of 12.62 MUs out of total deficit of 108.85 MUs for FY 2018-19 with the balance 12.62 MUs Solar RECs available against the surplus solar power of FY 16 & FY 17 after aforesaid proposed adjustment;
- (f) to allow for the carry forward of deficit of 96.23 MUs (108.85 MUs-12.62 MUs) for FY 2018-19 to the ensuing years;
- (g) to condone any inadvertent omissions/errors/shortcomings and permit the petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date;
- (h) to allow further submissions, addition and alteration to this petition as may be necessitating from time to time;

- (i) to treat the filing as complete in view of substantial compliance as also the specific requests for waivers with justification placed on record; and
 - (j) to pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.
3. This Commission, taking note of the fact that the State Agency i.e. the Directorate of Energy, Govt. of Himachal Pradesh, is monitoring the RPPO compliance,impleaded the State Agency as the necessary party to this petition and directed the State Agency, and other stakeholders i.e. the Additional Chief Secretary (Power NES), GoHP, Director, Himachal Pradesh Energy Development Agency (HIMURJA) and the Consumer Representative to file their objections/suggestions or view points, on the prayer made by the petitioner HPSEBL, by the 1st March, 2021.

4. Respondents' replies

- 4.1 In response, the State Agency vide MA No. 33/2021 submits as under:-
- (i) as per HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010, the status of RPPO compliance by all designated consumers i.e. Captive Consumers, Open Access Consumers and State Discom are required to be submitted to the State Agency on quarterly basis. The quarterly submissions by the State Discom enables the State Agency, Directorate of Energy, in monitoring the compliance at all levels of reporting including in-line National Level portal. But the State Discom has been submitting its RPPO compliance status directly to the HPERC.
 - (ii) Since the compliance reports have been directly submitted by the Discom to the HPERC, the data furnished by Discom in thepetition of 2021 cannot be authenticated by the replying respondent i.e. the State Agency.
 - (iii) The State Discom has requested for adjustment of shortfall/surplus of Solar and Non-solar RPPOs in the previous years. The State Agency is of the view that any such adjustment regarding any shortfall/surplus may be considered as per availability of Solar and Non-solar quantum at power exchange in the respective year.
- 4.2 The Consumer Representative submits as under:-
- (i) that from the scrutiny of the Non-solar and Solar obligations for FY 2017-18, FY 2018-19 and FY 2019-20, it is evident that the distribution licensee has been able to meet its Non-solar obligations for FY 2017-18 and FY

2019-20 whereas it has a shortfall of 17.43 MUs for FY 2018-19 and the same has been proposed to be met from Non-solar RE certificates available with them from previous years i.e. FY 2014-15;

- (ii) that in respect of Solar obligation the Distribution Licensee has a short fall of 11.68 MUs and 108.85 MUs for FY 2017-18 & FY 2018-19 whereas there is surplus of solar obligations to the tune of 16.56 MUs for FY 2019-20. The distribution licensee has proposed to meet the shortfall for FY 2017-18 from the Solar RE Certificates available with them for previous years. They have also proposed to meet the shortfall 96.23 MUs, after adjustment of the RE Certificates from previous years, from the ensuing years. The reasons for shortfall explained appear to be genuine.

The Consumer Representative, therefore, suggested that the distribution licensee need not to be penalized for such shortfall. Any penalty, if imposed will further burden the consumers of the State with additional levels/increase in Tariff.

4.3 The Commission conducted a public hearing in the matter held on 03.03.2021, through video conferencing. The objections/suggestions filed by stakeholders were taken on record. The learned Counsel Ms. Kamlesh Shandil, representing the Respondent No. 3 i.e. HIMURJA, prayed for time to file the objections/suggestions in the matter. The Commission vide interim order dated 03.03.2021 directed the Respondent No.3 (HIMURJA) to file its objections/suggestions within two weeks. The Commission heard the parties/stakeholders and carefully considered their written submissions also.

5. Petitioner's observations on Respondent's response/objections

The petitioner filed its response to the objections raised/suggestions by the Respondents stating that the comments/suggestions of Consumer Representative are of suggestive nature and filed its response on the objections/suggestions made by the State Agency, as under:-

- (i) It is admitted that the Petitioner/ HPSEBL submits the annual compliance status of RPPO only before the HPERC for purpose of data authentication and fairly conceded that the HPSEBL, being DISCOM, is also required to furnish the RPO compliance report to the State Agency i.e. Directorate of Energy (DOE), Govt. of Himachal Pradesh as well on quarterly basis. There is lapse on the part of the HPSEBL and further undertakes to furnish, in

future, the quarterly compliance reports to the State Agency i.e. DoE on regular basis.

- (ii) The HPSEBL has requested for adjustment of shortfall of 131.72 MUs of the Non-solar RPO during FY 2016-17 with surplus Non- solar power of 230.23 MUs purchased by the HPSEBL during FY 2017-18, as per the Commission order dated 17.07.2017. The relevant extract of said order is reproduced hereunder;

“2. Adjustment of surpluses or deficits.-Renewable Power Purchase Obligations (RPPO) compliance for FY 2016-17. Notwithstanding anything in the procedures, practices, directions relating to the monitoring the implementation and compliance of the RPPOs, surpluses or deficits in the compliance of RPPOs for FY 2016-17, which could not be adjusted or complied by the obligated entity, as the case may be, till 31st March, 2017, the obligated entities may adjust or comply surpluses or deficits occurred consequent to the revision of RPPO targets under the Himachal Pradesh State Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2017, in the financial year 2017-18.”

Further all other adjustments for deficit in Non- solar RPPO proposed by the HPSEBL are against the available Non- solar RECs in its inventory. As far the Solar RPPO concerns, the HPSEBL has requested the Commission to allow the adjustment for this deficit against the Solar RECs available with the HPSEBL pertaining to prior periods. The shortfall in meeting the Solar RPPO during FY 2018-19 is mostly due to uncontrollable parameters which were not envisaged while the HPSEBL was making tie-ups with Solar generators for purchase of Solar power to meet its Solar RPPO and therefore, the HPSEBL has requested the Commission to allow the adjustment of this shortfall against the surplus purchase in ensuing years. The HPSEBL further submits that the HPERC vide Order dated 03.10.2011 had specified the RPPO upto FY 2021-22 and accordingly, the HPSEBL had made arrangements to meet these Solar RPPO which was envisaged to be met by the Solar power plants of 82 MW capacity. For this 15MW Solar power from NTPC, 20MW from SECI and had issued consents to various IPPs for 34.60 MW capacity. Out of this 34.60 MW of consented capacity, IPPs entered into PPAs with the HPSEBL for 25 MW capacity and out of this PPA capacity of 25 MW, Solar projects having aggregated capacity of 17 MW only stand commissioned so far. The remaining IPPs with aggregate capacity of 8 MW did not commission their solar projects even after lapse of three years of their registration and HIMURJA has recently cancelled their registration i.e. the PPAs also stand automatically cancelled. Further, the HPSEBL had also given consent to SECI for

purchase of 50 MW Solar power from them, however SECI did not supply this power and the consent so given was cancelled by the HPSEBL during FY 2018-19.

In the meantime, MNRE, Government of India revised the methodology for RPPO computation as well as RPPO percentage for FY 17 to FY 19 and accordingly based on the said methodology the RPPO percentage was also adopted by the HPERC at the end of FY 2016-17. This revised RPPO percentage (i.e. 2.50% to 6.75 % which was earlier 0.25% to 0.75 %) has resulted in significant increase in the Solar RPPO targets and now the HPSEBL has to tie up Solar power to the tune of about 120 MW against the earlier requirement of 82 MW as per the RPPO transactory notified by the Commission. To meet up this revised RPPO, the GoHP had formulated a scheme for harnessing 20 MW Solar power from projects ranging from 250 to 500 kWp capacity and PPA were executed accordingly with due approval from the HPERC. Out of this 20 MW power, only 8.25 MW capacity has been commissioned so far and registration of IPPs aggregating capacity of 1.4MW stands cancelled by HIMURJA as these IPPs failed to sign PPAs with the HPSEBL. Further in the meanwhile, the HPERC notified the RPPO targets upto FY 2021-22 and accordingly, the HIMURJA formulated another similar scheme for harnessing 28 MW of Solar power in the State. Against this 28 MW scheme, 43 Nos. IPPs with aggregated capacity of 19.30 MW had filed joint petitions for signing of PPAs with the HPSEBL and till date PPAs for capacity of 13.35 MW stand executed with these IPPs and the HPSEBL is in process of executing PPAs with remaining IPPs whose petitions were approved by the HPERC. Overall, the PPAs for Solar power of 84.75 MW stand executed between the HPSEBL and IPPs. Out of this Solar projects of 60.50 MW capacity have been commissioned so far and remaining capacity is envisaged to be commissioned by the next financial year and in addition some power will also be available from solar roof top. The HPSEBL is making all out efforts to tie up required 120 MW of Solar power capacity to meet its Solar RPPO from solar resources available at the best possible rates.

As is evident from the position explained hereinbefore, the short fall in meeting the Solar RPPO is mainly attributed to non-commissioning/ late commissioning of Solar power plants coupled with the cancellation of registration of some IPPs by HIMURJA. The shortfall in meeting Solar RPPO during FY 2018-19 has thus occurred due to uncontrollable

parameters and accordingly the HPSEBL has requested to allow this shortfall from surplus purchase in ensuing years.

- (iii) The HPSEBL has submitted the data related to compilation of Renewable Power Purchase Obligations of DISCOM for the authentication by the HPERC for discharge of obligations as specified under prevalent RPPO Regulations of the HPERC and further, to get authentication by surplus purchase on prescribed format i.e. format 3.1.1 from the HPERC which is essentially required for issuance of RECs as per the procedure laid down by the CERC for issuance of RECs.

6. Additional information sought by the Commission

- 6.1 The Commission vide its letter dated 06.05.2021 asked the petitioner to submit the project wise details of non commissioned/late commissioned Solar PV Projects which were scheduled to be commissioned during FY 2018-19, indicating the quantum of energy impact in the shape of non-fulfillment of Solar RPPO. The status of Solar REC inventory available in the power exchanges as on 31.03.2019 was also sought and the petitioner has furnished the details of non-commissioned/commissioned Solar PV Projects which were scheduled for commissioning during FY 2018-19 or before, as under:-

Sr. No.	Project Name	Capacity (MW)	Scheduled COD	Actual COD	Remarks
1.	Berra Dol	5.00	31-03-2018	04-01-2019	Commissioning delayed
2.	G.R. Enterprises	1.00	31-03-2018	24-04-2018	
3.	Lucky Brass	2.00	31-05-2018	02-12-2018	
4.	Haryana Powertech-II	1.00	31-03-2018	-	Non Commissioned
5.	Surya Ushma	5.00	25-03-2018	-	Non-commissioned and later cancelled by HIMURJA during FY 2020-21
6.	Haryana Powertech-I	1.00	31-03-2018	-	
7.	R.S.V. Solar	1.00	28-02-2019	-	
8.	Majhiar Solar	0.90	30.06.2019	-	
	Total Capacity(in MW)	16.90			

- 6.2 The HPSEBL had envisaged the Solar power of 50 MW from SECI to meet Solar RPPO for which the consent was given to SECI during FY 2014-15. However, there was no development by SECI till 2019 and thus the consent was withdrawn by HPSEBL on 06.08.2018. Consequent upon the withdrawal of consent, a new Solar scheme namely 'Scheme for 20 MW Solar Power' from the projects in capacity range of 250 kWp to 500 kWp was floated by HIMURJA in September, 2018 to meet out Solar RPPO of the HPSEBL. Accordingly, the HPSEBL has executed PPAs with the Project Developers registered under above scheme for the aggregated capacity of 18.40 MW. Out of this 18.40 MW capacity, the registration of 3 Nos. projects having aggregated capacity of

1.4MW stands cancelled by the HIMURJA on the request of the developers of these projects. All these projects were scheduled for commissioning during FY 2019-20. However, only 8.50 MW capacities have been commissioned so far against this scheme.

- 6.3 Further, the HIMURJA formulated another similar scheme for harnessing 28 MW of Solar Power in the State to meet the Solar RPPO targets of the HPSEBL upto FY 2021-22. Against this scheme, the PPAs have been signed by the HPSEBL with 34 Nos. of IPPs for 15.05 MW aggregated capacity and the remaining allottees have not approached the HPSEBL for signing of the PPAs within specified period. The commissioning of all these projects is scheduled upto July 2021 and Solar Projects of 1.75 MW aggregated capacity have already been commissioned till date against this scheme.
- 6.4 During FY 2018-19, the generation from hydro sources had reduced significantly compared to the anticipated generation targets of Tariff Order resulting increase in excluding hydro consumption of the State. This further resulted in increase in Solar and Non-solar RPPO quantum for the HPSEBL.
- 6.5 With regard to the Solar RECs inventory, the HPSEBL has total number of 24,300 Solar RECs in its inventory i.e. 9020 against surplus Solar power of FY 2015-16 and 15280 against surplus solar power of FY 2016-17. The validity of aforesaid 9020 Nos. RECs of FY 2015-16 was upto 21-03-2021 and the 15280 Nos. RECs are valid upto 25-08-2021. The HPSEBL has proposed for adjustment of these 24,300 Nos. RECs against the deficit of FY 18 and FY 19.

7. Commission's Analysis and Views

- 7.1 Section 86(1)(e) of the Electricity Act, 2003 provides the following as one of the functions of the State Electricity Regulatory Commission:-

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

- 7.2 The Commission has made the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010, specifying the minimum percentage of the total consumption, for Renewable Power Purchase Obligation (RPPO) for Non-solar and Solar energy for the distribution licensee, as well as the Captive and

Open Access Users/ Consumers, and provided that the certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2010 (“the REC Regulations”) shall be the valid instrument for the discharge of the mandatory obligation set out in these regulations for the obligated entities to purchase electricity from renewable energy sources during each financial year as specified by the Commission.

- 7.3 On 19th June, 2010, the Commission designated the “Directorate of Energy”, which is an authority created under the administrative control of the Government of Himachal Pradesh, as the State Agency for the purposes of the RPPO Regulations and the State Agency has to undertake functions under RPPO Regulations. The RPPO Regulations provide that the Captive and Open Access Consumer(s)/User(s) shall purchase renewable energy as stated in the table below regulation 4 thereof. If the Captive User(s) and Open Access Consumer(s) are unable to fulfil the criteria or if the distribution licensee fails to fulfil the minimum quantum of purchase from renewable sources, it shall be liable to pay compensation as per Regulation 9 of the RPPO Regulations (ibid), the shortfall of the targeted quantum would attract payment of compensation as per Regulation 9 of the RPPO Regulations (ibid).
- 7.4 In order to appreciate the submissions of the petitioner, it will be useful to set out the provisions of regulations 4 and 5 read as under:

“4.Quantum of Renewable Power Purchase Obligation (RPPO):-

(1) The distribution licensee shall, during each financial year, purchase such quantum of electricity (in kWh) from renewable sources as is not less than the quantum of electricity (in kWh), worked out as per the Table below:-

Table-Minimum percentage for Renewable Power Purchase Obligation

Year	Minimum Quantum of Purchase in percentage (%) from renewable sources (in terms of energy in kWh) of total consumption.		
	Non-Solar	Solar	Total
2016-17	9.50%	2. 50%	12.00%
2017-18	9.50%	4.75%	14.25%
2018-19	10.25%	6.75%	17.00%
The RPPO will be on total consumption of electricity by an obligated entity, excluding consumption met from hydro-electric sources of power.			

Provided that for computing the Renewable Power Purchase Obligation (RPPO) of the distribution licensee for a year under this sub-regulation, the following conditions shall also apply, namely:-

- (i) the total consumption of the distribution licensee for a year shall include the quantum of electricity purchased, alongwith electricity generated, by it from various sources, including the power purchased under REC mechanism for meeting its requirement for consumption of electricity, and shall also include the transmission and distribution losses, within the area of distribution licensee, for meeting such consumption in the State during that year but shall not include the electricity purchased for the trading purposes;
 - (ii) save as provided in the succeeding item (iii) under this sub-regulation, the quantum of electricity to be considered as utilized by the distribution licensee from hydro-electric sources for meeting its consumption during a year shall be computed at such percentage of the total consumption in that year as is equal to the percentage derived from the quantum of electricity purchased, including generated, from hydro-electric sources, as envisaged in the tariff order for that year, for meeting the estimated requirement for consumption in the State vis-a-vis the total estimated requirement for that year for consumption in the State; and
 - (iii) the consumption of electricity to be considered as met from hydro-electric sources shall not exceed the electricity purchased (in kWh), including electricity generated, by the distribution licensee from hydro-electric sources in that year, after excluding the dedicated sale of power to any person, other than its consumers, by the distribution licensee specifically earmarked out of any such purchase from hydro-electric sources.
- (2) Each Captive and Open Access User/Consumer shall, during the respective financial year, purchase such quantum of electricity (in kWh) from the renewable sources, which shall not be less than the quantum of electricity (in kWh), worked out as per the Table given in sub-regulation (1):

Provided that for computing the Renewable Power Purchase Obligation (RPPO) of such obligated entities for a year under this sub-regulation, the following conditions shall also apply, namely:-

- (i) the total consumption of any such obligated entity shall include the quantum of electricity purchased, including electricity generated, by it from various sources, including the power purchased under REC mechanism for meeting its requirement for consumption of electricity, and shall also include the transmission and distribution losses incurred within the State for meeting such consumption in the following manner, namely:-
 - (a) in case the electricity is purchased by such obligated entity from sources outside the State, the electricity purchased at the State periphery shall be considered as the consumption of the obligated entity from such sources;
 - (b) in case the electricity is purchased, or generated, from generating sources located within the State, the electricity (in

- kWh) injected for such obligated entity at the generating bus bar shall be considered as its consumption;
- (ii) the energy consumed by obligated entity, other than the distribution licensee, shall be considered to have been consumed from the sources other than the hydro-electric sources, unless such obligated entity establishes to the satisfaction of the State Agency that such consumption was made from hydro-electric sources.
- (3) The obligated entities may meet their Renewable Power Purchase Obligation (RPPO) as per sub-regulations (1) and (2) of this regulation from any renewable sources, including-
- (i) purchases from generating stations, based on renewable energy sources;
 - (ii) purchases from any other distribution licensee, which would arise from renewable energy sources; and
 - (iii) the energy generated from its own renewable sources, if any, by the obligated entity:

Provided that the electricity purchased at pooled cost, as specified in the Central Electricity Regulatory Commission (Terms and Conditions of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, shall not be taken into account for offsetting such obligations:

Provided further that the Solar power purchase obligation shall be fulfilled from the generation based on Solar sources only:

Provided further that the quantum of electricity generated by the consumer through roof-top Solar PV system under net metering arrangement in any year, shall qualify towards compliance for Solar RPPO of the Distribution Licensee or the consumer, 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 Systems based on Net Metering) Regulations, 2015:

Provided further that the power purchases under the power purchase agreements from 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 hereinbefore.

- (4) The Commission may, keeping in view the power supply constraints or other factors beyond the control of the distribution licensee or for any other reasons, suo-moto or at the request of an obligated entity, also revise the percentage targets for a year(s) for which Renewable Power Purchase Obligations have been fixed as per sub-regulations (1) and (2) of this regulation.”

Regulation 5: Certificates under the regulations of the Central Commission.-

- (1) *Subject to the terms and conditions contained in these regulations, the Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 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:

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based solar as renewable energy source can be fulfilled by purchase of solar certificates only and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates.

- (2) Subject to such direction as the Commission may give, from time to time, the obligated entity shall act consistent with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, notified by the Central Commission in regard to the procurement of the certificates for fulfillment of the Renewable Power Purchase Obligation under these regulations.*
- (3) The Certificates purchased by the obligated entities from the power exchange in terms of the regulations of the Central Commission mentioned in sub-regulation (1) shall be deposited by the obligated entities with the Commission in accordance with the detailed procedure issued by the Central Agency.*

7.5 The sub-regulation (1-A) added to Regulation 5 of the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (the REC Regulations), vide 3rd Amendment Regulations, 2014, w.e.f. 1st January, 2015 dealing with the conditions for registration with the Central Agency and for issuance and obtaining of certification from the Commission by the obligated entities which have procured renewable energy in excess of RPPO target fixed by the Commission, reads as under:-

“(1A) A distribution licensee shall be eligible to apply for registration with the Central Agency for issuance of and dealing in Certificates if it fulfills the following conditions:-

- (a) It has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher:

Provided that the renewable purchase obligation as may be specified for a year, by the Appropriate Commission should not be lower than that for the previous financial year:

Provided further that any shortfall in procurement against the non-solar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, shall be adjusted first and only the remaining additional procurement

beyond the threshold renewable purchase obligation-being that specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher-shall be considered for issuance of RECs to the distribution licensees.

- (b) It has obtained a certification from the Appropriate Commission, towards procurement of renewable energy as provided in sub-clause (a) of this regulation.”

7.6 The format 1.4 (2.4/3.1.1) of model procedure/guidelines for accreditation of renewable energy generation project or distribution licensee, as the case may be, under REC mechanism by the State Agency dated 5th November, 2015 on which the Commission is required to recommend the case for issuance of RECs to the distribution licensee, also reiterates the similar conditions as laid down vide 3rd amendment of REC Regulations, the same are reproduced as below:-

“It is certified that;

1. Distribution Company has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher.
2. The renewable purchase obligation as specified for a year, by the State Electricity Regulatory Commission is not lower than that for the previous financial year.
3. Any shortfall in procurement against the non-solar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, has been adjusted first and only the remaining additional procurement beyond the threshold renewable purchase obligation-being that specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher-has been considered for recommending for the purpose of issuance of RECs to the distribution licensees.”

7.7 For self retention of RECs, the Central Electricity Regulatory Commission (CERC) has approved the following procedure:-

- (i) The eligible entity interested in retaining their Renewable Energy Certificates may apply to the host State Agency, where the eligible entity is located.
- (ii) The eligible entities may apply online from 1st to 5th of every month and mention the quantity of RECs for which they want to retain and the name of their plant and the State for which the eligible entity wants to retain the application signed and stamped to the

host State Agency in such a way so that it shall reach the office of State host agency latest by 12th of every month.

- (iii) The host State Agency shall check the proposed volume for each eligible entity the quantity of valid RECs for that entity for both 'Solar' and 'Non-Solar' Certificates by 18th of every month.
- (iv) In case the retained volume placed exceeds the quantity of valid RECs held by the eligible entity as per the records of the REC Registry, then, the State Agency shall limit the RECs that can be retained by the eligible entity to the number of valid RECs as per the records of REC Registry.
- (v) The State Agency shall send the final list of certificates to be retained for eligible entities to the Central Agency for extinguishing the RECs. The certificates will be extinguished by the Central Agency in the 'First-in-First-out' order by 22nd of the every month.
- (vi) The State Agency shall issue the purchase certificate to the eligible entities.

7.8 From the statutory provisions set out in the preceding sub-paras, it can be observed that:-

- (a) The distribution licensee is eligible for RECs, if it fulfills the conditions given in sub-regulation (1A) of regulation 5 of the REC Regulations.
- (b) Regulation 4(1) of the RPPO regulations provides that the distribution licensee shall purchase the quantum of the electricity (in kWh) from renewable sources, at a minimum percentage (as specified in the Table) of the total consumption excluding the consumption met from Hydro-Electric sources of power. The Solar Power Purchase Obligation is to be fulfilled from the generation based on Solar Sources only.
- (c) Regulation 5 provides that the certificates issued under the Central Regulations (i.e. REC Regulations) shall be valid instrument for the discharge of the mandatory obligations, set out in the RPPO Regulations for the obligated entities, to purchase electricity from renewable energy sources. In the event of the obligated entity fulfilling the renewable purchase obligation by procuring certificates, the obligation to purchase electricity from solar based generation can be fulfilled by purchasing the Solar certificates (Solar RECs) only and the obligation to purchase electricity from generation based on renewable energy other than Solar, can be fulfilled by purchase of Non-solar certificates.
- (d) Regulation 5 (IA) of the REC Regulations lays down the conditions for registration with the Central Agency for issuance of certificates and the provisions for obtaining certification from the Commission by the obligated entities, which have procured renewable energy in excess of the RPPO target fixed by the Commission. While recommending the case for issuance of RECs to the distribution licensee, the State Commission needs to ensure that the conditions/guidelines laid down are duly complied with.
- (e) The Central Commission has already approved the procedure for self retention of RECs which means that if any obligated entity has inventory of RECs, the same may be utilised to fulfill their RPO compliance, by following the aforesaid procedure.

7.9 The Commission, while framing the RPPO Regulations, has already specified the minimum percentage for Renewable Power Purchase Obligation from Renewable Sources (including Solar Energy) for period of 3 years (i.e. FY2016-17 to FY 2018-19). Per regulation 4 of the RPPO Regulations, the HPSEBL i.e. the distribution licensee is to comply with Solar and Non-solar and RPPO as per the Table given as under:-

Year	Minimum Quantum of Purchase in percentage (%) from renewable sources (in terms of energy in kWh) of total consumption.		
	Non-Solar	Solar	Total
2016-17	9.50%	2.50%	12.00%
2017-18	9.50%	4.75%	14.25%
2018-19	10.25%	6.75%	17.00%
The RPPO will be applicable on total consumption of electricity by an obligated entity, excluding consumption met from hydro electric sources of power.			

7.10 Non-Solar RPO Compliance.-

- 7.10.1 (i) During FY 2013-14, the HPSEBL had net surplus of 541.09 MUs of Non-solar RE power after meeting own obligations and accordingly RE certificates for this surplus quantum were got issued by the HPSEBL.
- (ii) During FY 2014-15, the HPSEBL had net surplus of 182.77 MUs of Non-solar RE power after meeting own obligations and accordingly RE certificates for this surplus quantum were got issued by the HPSEBL.
- (iii) During FY 2015-16, the HPSEBL had deficit of 164.60 MUs in meeting its Non-solar RPO obligation and the HPERC vide its Order dated 05.01.2018 has allowed for adjustment of this deficit of 164.60 MUs against the available inventory of RE certificates (non-solar) which the HPSEBL received for purchase of RE power beyond non-solar RPPO.
- (iv) During FY 2016-17, the HPSEBL had deficit of 131.73 MUs in meeting its Non-solar RPO obligation. HPSEBL had filed petition No. 65/2017 for RPPO of FY 2016-17 and the HPERC vide Order dated 07.04.2018 approved the said deficit of 131.73 MUs for adjustment with REC (Non-solar) Certificates which the HPSEBL received against the surplus non-solar power of 541 MUs during FY 2013-14.
- (v) During FY 2017-18, the HPSEBL had net surplus of 230.23 MUs of Non-solar RE power after meeting own obligations.
- (vi) During FY 2018-19, the HPSEBL had net shortfall of 17.43 MUs of Non-solar RE power.
- (vii) The summary of the surplus/shortfall of Non-solar RPPO is as under:

Year	Demand (MUs)	Demand excluding Hydro (MUs)	Non-Solar RPPO % age	Total Obligation MUs	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
2014-15	8831.63		10.00	883.16	1066.25	+182.77
2015-16	8800.33		11.00	968.04	803.44	-164.59
2016-17	8896.90	1815.42	9.50	172.47	40.74	-131.73
2017-18	9351.38	1611.35	9.50	153.08	388.31	+230.23
2018-19	10114.50	2813.98	10.25	288.43	271.00	-17.43

7.10.2 As per the Petition, Non-solar RPO compliance Orders, for FY 2015-16 issued on 05.01.2018 in petition No. 25 of 2017 and for FY 2016-17 issued on 07.04.2018 in petition No. 65 of 2017 by the Commission, may require modification, for which, the petitioner i.e. the HPSEBL has requested that:-

- (i) the Non-solar shortfall (Deficit) of FY 2015-16 (i.e.164.60 MUs) may be adjusted against the Non-solar RECs inventory of FY 2014-15 (i.e. 182.77 MUs equivalent RECs).
- (ii) for FY 2016-17, the Non-solar energy deficit (i.e. 131.72 MUs) may be adjusted against the Non-solar energy surplus of FY 2017-18 (i.e. 230.23 MUs) as per the Commission's Order dated 17.07.2017.
- (iii) the surplus Non-solar energy of FY 2017-18 after the adjustment i.e. 98.51 MUs (230.23-131.72) may be considered for issuance of certificates enabling the HPSEBL to get issued Non-solar RECs from NLDC.
- (iv) the deficit of 17.43 MUs for FY 2018-19 may be allowed to adjusted against the balance surplus quantum of 98.51 MUs of FY 2017-18 or with equivalent certificates.

7.10.3 The Commission's Order dated 17.07.2017 i.e. HPERC (Adjustment of Surplus/Shortfall of Renewable Energy Certificates or Renewable Energy with respect to Renewable Purchase Obligation of FY 2016-17 in FY 2017-18) Order, 2017, stipulates as under:-

"Adjustment of surpluses or deficits.- Renewable Power Purchase Obligations (RPPO) compliance for FY 2016-17. Notwithstanding anything in the procedures, practices, directions relating to the monitoring the implementation and compliance of the RPPOs, surpluses or deficits in the compliance of RPPOs for FY 2016-17, which could not be adjusted or complied by the obligated entity, as the case may be, till 31st March, 2017, the obligated entities may adjust or comply surpluses or deficits occurred consequent to the revision of RPPO targets under the Himachal Pradesh State Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) (Third Amendment) Regulations, 2017, in the financial year 2017-18."

7.10.4 As per the Commission Order dated 05.01.2018 in petition No. 25 of 2017, the status of non-solar RPO compliance of the HPSEBL (obligated entity) is as under:-

Year	Demand (MUs)	Non-Solar RPPO	Total Obligation	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
		% age	MUs		
2014-15	8831.63	10.00	883.16	1066.25	+182.77
2015-16	8800.33	11.00	968.04	803.44	-164.59

The Commission in aforesaid Order found the HPSEBL (obligated entity) eligible for getting Commission's certificate of recommendation for issuance of Non-solar RECs for excess Non-solar energy purchased i.e. 182.77 MUs beyond renewable purchase obligation target for FY 2014-15. For the deficit of FY 2015-16, Commission has allowed the HPSEBL for self retention of Non-solar RECs equivalent to shortfall of 164.59 MUs for FY 2015-16, from the available inventory of Non-solar RECs of FY 2013-14.

7.10.5 As per the Commission Order dated 07.04.2018 in petition No. 65 of 2017, the status of non-solar RPO compliance of the HPSEBL (obligated entity) is as under:-

Year	Demand (MUs)	Demand excluding Hydro (MUs)	Non-Solar RPPO % age	Total Obligation MUs	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
2016-17	8896.90	1815.42	9.50	172.47	40.74	-131.73

As per the aforesaid order, for the deficit of FY 2016-17, the Commission has allowed the HPSEBL for self retention of Non-solar RECs equivalent to shortfall of 131.73 MUs for FY 2016-17, from the available inventory of Non-solar RECs.

7.10.6 As per the submission of distribution licensee i.e. the HPSEBL regarding compliance of Non-solar RPPO for FY 2017-18 and FY 2018-19, the shortfall/surplus are as under:-

Year	Demand (MUs)	Demand excluding Hydro (MUs)	Non-Solar RPPO % age	Total Obligation MUs	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
2017-18	9351.38	1611.35	9.50	153.08	388.31	230.23
2018-19	10114.50	2813.98	10.25	288.43	271.00	-17.43

7.10.7 The Non-solar RPO compliance status of the obligated entity is now as follows:-

Year	Demand (MUs)	Non-Solar RPPO	Total Obligation	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
		% age	MUs		
2014-15	8831.63	10.00	883.16	1066.25	+182.77
2015-16	8800.33	11.00	968.04	803.44	-164.59

Year	Demand (MUs)	Demand excluding Hydro(MUs)	Non-Solar RPPO % age	Total Obligation MUs	Total non-solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
2016-17	8896.90	1815.42	9.50	172.47	40.74	-131.73
2017-18	9351.38	1611.35	9.50	153.08	388.31	+230.23
2018-19	10114.50	2813.98	10.25	288.43	271.00	-17.43

7.10.8 While recommending the case for issuance of RECs to the distribution licensee, the Commission has to satisfy the following conditions as per Central Commission REC Regulations and model procedure/guidelines issued thereunder :-

- (i) Distribution Company has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher.
- (ii) The renewable purchase obligation as specified for a year, by the State Electricity Regulatory Commission is not lower than that for the previous financial year.
- (iii) Any shortfall in procurement against the non-solar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, has been adjusted first and only the remaining additional procurement beyond the threshold renewable purchase obligation-being that specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher-has been considered for recommending for the purpose of issuance of RECs to the distribution licensees.

As per the condition (iii), any shortfall in procurement against the non-solar or Solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, has to be adjusted first.

7.10.9 The matter regarding seeking retention of Non-Solar REC's equivalent to shortfall of 164.59 MU's for Financial Year 2015-16 and 131.73 MU's for Financial Year 2016-17 from the available inventory of Non-Solar REC's, the

Commission vide Order dated 05.01.2018 in Petition No. 25/2017 & Order dated 07.04.2018 in Petition No. 65/2017 had clarified HPSEBL to follow the procedure laid down by the Central Electricity Regulatory Commission.

7.10.10 Sub-regulation(3) of regulation 8 of the CERC REC Regulations, 2010 provides for self-retention of RECs, by an eligible renewable energy generator, for offsetting its own RPO, as under:-

“An eligible renewable energy generator including an eligible captive generating plant shall be permitted to retain the certificates for offsetting its renewable purchase obligation as a consumer subject to certification and verification by the concerned State Agency.”

7.10.11 The self-retention of RECs is to be carried out at on-line platform through the State Agency (DoE), but the provision for self-retention of RECs by the Discom(s) has not been provided in the CERC REC Regulations, 2010 and accordingly, has not been incorporated in the procedures made by the Central Agency i.e. NLDC in their on-line software approved by the Central Commission. The State Agency i.e. DoE has taken up the matter with NLDC to add the option for DISCOM for self-retention of certificates in their software. The HPERC has also taken-up the matter with the Central Commission to incorporate the provision of self-retention of RECs by the Discom through amendment of their regulations or direct the Central Agency to modify their procedures to accommodate such retention. The matter is still pending with the Central Commission. Due to this, as per the submission, the HPSEBL has sold the RE certificates (Non-solar) for FY 2013-14 through power exchange as the same were due for expiry in February, 2020.

7.11 Solar RPO Compliance:-

- 7.11.1(i) The HPSEBL has got issued Solar RECs equivalent to 9.02 MUs surplus of FY 2015-16 and 15.28 MUs surplus of FY 2016-17.
- (ii) The HPSEBL has shortfall of 11.68 MUs of Solar energy in FY 2017-18, as per their submission. For solar RPO compliance of FY 2017-18 it is requested that the REC equivalent to 9.02 MUs of FY 2015-16 and balance 2.66 MUs (11.68-9.02) equivalent certificate may be adjusted from FY 2016-17.
- (iii) With adjustment as preceding per sub-para (ii), the HPSEBL has 12.62 MUs (15.28-2.66) equivalent energy Solar RECs balance available for next year adjustment.

(iv) The HPSEBL has shortfall (deficit) of 108.85 MUs Solar energy in FY 2018-19. The HPSEBL has prayed that balance Solar RECs i.e. 12.62 MUs equivalent energy may be adjusted against the shortfall and remaining deficit of 96.23 MUs (108.85-12.62) may be allowed as carry-forward, to be adjusted in the ensuing years.

(v) The summary of the surplus/shortfall of Solar RPPO is as under:

Year	Demand (MUs)	Demand excluding Hydro (MUs)	Solar RPPO % age	Total Obligation MUs	Total Solar RE available for supply to the consumers (MUs)	Surplus/shortfall (MUs)
2015-16	8800.33		0.25	22.00	31.02	9.02
2016-17	8896.90	1815.42	2.50	45.39	60.67	15.28
2017-18	9351.38	1611.35	4.75	76.54	64.86	-11.68
2018-19	10114.50	2813.98	6.75	189.94	81.09	-108.85

7.11.2 The HPSEBL has inventory of Solar RECs equivalent to 9.02 MUs of FY 2015-16 and 15.28 MUs of FY 2016-17 respectively. But as discussed in preceding paras of this Order, the matter regarding self retention of RECs by the Discom(s) is still pending with the Central Commission.

7.11.3 The HPSEBL has mentioned that based on the status of allotment of solar projects in the State of Himachal Pradesh, the shortfall in Solar RPO compliance is also on account of non-commissioning of such allotted/envisaged RE projects and has requested for carry forward of deficit Solar RPOs.

8.1 **Conclusion:**

8.1.1 The Commission takes note that the HPSEBL had earlier intended to retain a part of the RECs inventories for Non-Solar RPO in respect of the financial year 2013-14 to offset the deficits for the subsequent years. However, it could not materialise such adjustment due to reasons explained hereinbefore in this Order. The HPSEBL has again proposed to offset the deficits for the RECs obtained by it in respect of the financial years 2014-15 (+182.77 MUs) for Non-solar surplus and 2015-16 (+9.02 MUs) and 2016-17 (+15.28 MUs) for Solar.

8.1.2 The Commission feels that in view of the reasons similar those responsible for non-adjustment of the deficits against the RECs of 2013-14, the adjustments against the RECs of 2014-15 (Non-solar), 2015-16 and 2016-17 (Solar) may also not materialise. However, the Commission will have no objection if the HPSEBL succeeds in materialising such adjustments on the

on-line platform through the State Agency (DoE) or otherwise sells in the market in case such adjustment does not materialise.

8.1.3 The Commission also observes that in case such adjustment materialises, hardly any deficit, atleast in case of Non-solar RPOs would have remained unadjusted, for the period upto 31.03.2019. As regards, deficit in Solar RPOs, the HPSEBL has explained various reasons for not meeting the RPOs. Accordingly, taking a reasonable view and by exercising provisions of Regulation 13 of the RPPO Regulations, the Commission decides to consider the status of deficits, Solar as well as Non-solar RPOs, upto financial year 2018-19 without considering any adjustment against the inventory of RECs available with the HPSEBL and to fix a deadline by which the entire deficit upto financial year 2018-19 must be offset through any of the available means. The net deficit, when computed on above lines, upto 31.3.2019 in respect of Non-solar RPOs and Solar RPOs works out to 83.52 MUs (-164.59-131.73+230.23-17.43) and 120.53 MUs (-11.68-108.85) respectively.

8.1.4 The Commission directs the HPSEBL to offset these deficits, latest by 31st March, 2022, through any of the available means i.e.

- (i) by adjustment against surpluses, if any, for the financial years 2019-20 and 2020-21;
- (ii) by procurement of RECs;
- (iii) by procurement of additional power during the remaining part of the current financial year dedicated for adjustment of this deficit;
- (iv) by adjustment against the REC inventory, if feasible; and/or
- (v) by any other available mean.

In case HPSEBL fails to offset any part of the deficit, as quantified above by 31.03.2022, it shall not only be liable to be penalized under Regulation 9 (2) of the RPPO Regulations but may also have to face action under section 142 of the Act.

8.1.5 The Commission also directs HPSEBL to file a fresh petition by 30th June, 2022, indicating the updated status in respect of the RPOs upto 31.03.2021 as well as the provisional status for financial year 2021-22.

8.1.6 This petition is disposed of in the terms of this Order.

8.1.7 The Commission also directs the petitioner to properly plan as to how it would meet its Solar and Non-solar RPO judiciously well in advance taking into cognizance of procurement of Renewable Energy from existing and

upcoming firm sources through preferential as well as through other modes so that such a situation may not arise in future.

- 9 Before parting with this Order, the Commission would like to record that despite of its best efforts, the Commission could not make and pronounce this Order immediately after the date on which the matter was last heard and orders were reserved because the details of Solar RPPOs for the financial years 2017-18 and 2018-19 submitted by the HPSEBL on that date required further examination with reference to the data available from the relevant sources and further due to imposition of restrictions by the State Government on account of COVID-19.

Sd/-
(Bhanu Pratap Singh)
Member

Sd/-
(Devendra Kumar Sharma)
Chairman