

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

In the matter of:-

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

..... Petitioner

Versus

The Director,
Directorate of Energy,
Shanti Bhawan, Phase-III,
Sector-6, New Shimla-171009 (HP).

..... Respondents

Petition No. 30 of 2016
(Decided on **14th February, 2017**)

CORAM:
S.K.B.S NEGI
CHAIRMAN

Counsels/Representatives:-
for petitioner:

Sh. Ramesh Chauhan
(Authorized Representative),
Er. Sunneel Grover, CE(SO),
Er. K.L. Gupta, Dy. CE (SERC),
Er. R.K. Punshi (Consultant).

for respondent :

Sh. Rajender Chauhan, Dy (DA),
Sh. Manoj Kumar, Senior Xen (E).

ORDER

(Last heard on 09.12.2016 and Orders reserved)

The petition bearing No. 30 of 2016 has been 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.

2. The briefs of the petition filed by HPSEBL are as under:

- (i) That in compliance to the HPERC (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 and the HPERC (Renewable Power Purchase Obligation and its Compliance)(First Amendment) Regulations, 2011, the HPSEBL is to comply with the Solar RPPO as per the Table given hereunder:

Year	RPPO %		Estimated Energy for RPPO (MUs)	
	Non Solar	Solar	Non Solar	Solar
2011-12	10.00	0.01	824.40	0.80
2012-13	10.00	0.25	874.80	22
2013-14	10.00	0.25	916.80	23
2014-15	10.00	0.25	915.92	23
2015-16	11.00	0.25	1069	24
2016-17	12.00	0.25	1237	26
2017-18	13.00	0.50	1420	55
2018-19	14.00	0.75	1620	87
2019-20	15.00	1.00	1839	123
2020-21	15.50	2.00	2013	260
2021-22	16.00	3.00	2200	413

- (ii) That in order to meet the solar RPPO obligations, the HPSEBL had executed an agreement dated 21.11.2011 with the National Thermal Power Corporation (NTPC) for the procurement of solar energy from their 15.00 MW Anta Solar Power Project, proposed to be set-up. However, in view of unavoidable circumstances being claimed by the NTPC for supplying power from the Anta Solar Power project, the HPSEBL signed another agreement dated 19.12.2012 with the NTPC for procurement of electricity from the Singrauli Solar PV Power Project having capacity of 15.00 MW, which was initially expected to be commissioned in December, 2013, subsequently postponed to March 2014 and then once again the commissioning of the project was extended by the NTPC to June, 2014 and finally it was commissioned on 31.12.2014 and the entire capacity is being procured by the HPSEBL.
- (iii) That due to delay in commissioning of Singrauli Solar PV Project and unavoidable circumstance claimed by the NTPC, for supplying power from Anta Solar Power Project, there is shortfall in the targets of Solar RPPOs for the FY 2012-13, FY 2013-14 and FY 2014-15.
- (iv) That the Solar RPPO/shortfall of 0.74 MUs for the FY 2011-12 and 18.4 MUs for the FY 2012-13 has already been ordered by the Himachal Pradesh Electricity Regulatory Commission (HPERC) to be met during the year 2015-16 and 2016-17 respectively. A penalty of Rs.17.23 Crore was

imposed upon the HPSEBL for non-compliance of Solar RPPOs during 2013-14.

- (v) That the status of Solar RPPOs in FY 2014-15 in respect of HPSEBL is as under:

Year	Demand (MUs)	Solar RPPO		Achieved (MUs)	Shortfall (MUs)
		% age	MUs		
2014-15	8806.09	0.25	22.02	2.70	19.32

- (vi) During the year 2014-15, the HPSEBL was unable to fulfill its minimum Solar RPPO due to the following constraints:-

(i) HPSEBL had initially signed Power Purchase Agreement dated 21.11.2011 with the NTPC for their Anta Solar Thermal Power Project (15.00 MW) to fulfill its Solar RPPO. However, due to certain road blocks faced by the NTPC for the commissioning of Anta Solar Plant as claimed by the NTPC vide their letter dated 01.11.2012, the HPSEBL signed Supplementary Agreement with the NTPC on 19.12.2012 for purchase of power from Singrauli Solar PV Project (15.00 MW). The expected commissioning of the project was informed as December, 2013.

Due to non commissioning of the project as per above schedule, the matter was taken up with the NTPC. The NTPC vide letter dated 08.07.2013 informed that the above mentioned project was likely to be awarded in July, 2013 and was expected to be commissioned by March, 2014. For achieving solar RPPO targets, HPSEBL again took up the matter with the NTPC vide letter dated 10.03.2014. In compliance to above, the NTPC vide letter dated 21.03.2014 informed that Singrauli Solar PV Project (15.00 MW) had been awarded during August, 2013 to M/s BHEL with commissioning schedule stated to be of 8 months. However, due to delayed supplies and slow progress, the anticipated commissioning schedule was revised to June, 2014.

(ii) Further due to delayed commissioning of the project, the HPSEBL again took the matter repeatedly with the NTPC vide letters dated 21.06.2014 and 15.07.2014, wherein, the seriousness of delay in commissioning of the project was conveyed and it was appraised that the HPERC has viewed it seriously and finally vide letter dated 28.10.2014, the NTPC was communicated that any further delay in the commissioning of the project will force the HPSEBL to move out of the Power Purchase Agreement (PPA). In response to which the NTPC vide their letters dated 17.11.2014 and 27.11.2014, informed that project shall be commissioned by 4th December, 2014. Finally, Singrauli Solar PV Project was commissioned on 31.12.2014 and the HPSEBL started availing the entire quantum of solar power from this project.

- (iii) That in addition to above, the HPSEBL vide letters dated 01.11.2013, 12.03.2014 and 10.07.2014 also requisitioned 20.00 MW solar power under Batch 1, Phase II of the JNNSM Scheme of the Government of India. The HPSEBL was allocated 20.00 MW power under Batch 1, Phase II of the JNNSM Scheme of MNRE, GoI w.e.f 04.06.2015.
- (iv) That due to delay in commissioning of Singrauli Solar PV Project (15.00 MW) and allocation of solar power by MNRE, GoI, HPSEBL, also explored purchase of solar power from open market by floating tenders. However, no bidder offered solar power in spite of repeatedly extending the date of receipt of tender.
- (v) That in the year 2015-16, the HPSEBL was expected to over-achieve the Solar RPPOs specified by the State Commission including the carrying forward for the year 2011-12 and continue the same for the next year 2016-17. The shortfall in the procurement of the solar power during the year 2014-15 was only due to the excessive delay in commissioning of Singrauli Solar PV Project (15.00 MW) which was beyond the control of HPSEBL and partially due to delay in allocation of power by MNRE, under Batch I, Phase II of the JNNSM Scheme of the MNRE, GoI.
- (vi) That the HPSEBL has filed the above submission to the Hon'ble APTEL in Appeal No. 54 of 2015 that in the FY 2015-16, it is expected to overachieve the RPPO Targets given by the State Commission including the carrying forward the shortfall for the previous financial years.
- (vii) That in order to meet year-wise targets of Solar RPPOs, the HPSEBL has also entered into contract for purchase of solar power from Solar Energy Corporation of India (SECI) for 20.00 MW capacity.
- (vii) The Table below provides the snapshot of the RPPO targets as well as the solar power available for FY 16 and FY 17:-

Table : Solar RPPOs Available for FY16 & FY 17

Particulars	FY 16	FY 17
Total Power consumption in the State (MU)	9364.01	9872.14
Solar RPPOs (%)	0.25 %	0.25 %
Solar RPPOs (MUs)	23.4	24.7
Solar Power Availability (MUs)		
SECI	29.0	33.3
Singrauli Solar Power	27.2	25.0
Surplus available after meeting RPPOs for the previous years	32.8	33.6

From the Table, it is clear that the petitioner would be able to meet its solar RPPOs from the solar power projected to be available for FY 16 and FY 17. The HPSEBL states that even after meeting its estimated Solar RPPOs for FY 16 & FY 17; the petitioner would be left with sufficient solar power to meet the unmet obligations for the previous years.

- (viii) The Commission in its order on the **Suo-Moto case No. 93 (A)/ 2013 dated 29th July, 2013** observed that the petitioner has not met the Solar RPPOs for FY 12 and FY 13. The shortfall in Solar RPPOs for FY 12 and FY 13 was 0.74 MUs and 18.4 MUs respectively. The Commission in the said Order directed the petitioner to meet the shortfall of the Solar RPPOs of the respective years. The relevant extract of the Order is as below:-

“(i) the shortfall of Solar RPPOs for FY 2011-12 and FY 2012-13 shall now be met during the FY 2015-16 and FY 2016-17 respectively in addition to the Solar RPPOs of those years. In other words during FY 2015-16, the distribution licensee shall meet the shortfall of Solar RPPO of 0.74 MUs of FY 2011-12 plus its Solar RPPO target of 0.25% for FY 2015-16. Similarly during the FY 2016-17, the distribution licensee shall meet the shortfall of Solar RPPO of 18.4 MUs of FY 2012-13 plus its Solar RPPO target of 0.25 % for FY 2016-17.....”.

- (ix) That for the financial year 2015, the Solar Power Purchase Obligation was 22.02MUs (0.25% of 8806.09 MUs purchased for consumption in the State) and HPSEBL, the petitioner had not been able to completely meet the solar obligation of 22 MUs for FY 2015 and the shortfall in the purchase was 19.32 MUs. The petitioner further submitted that the aforesaid shortfall of 19.32 MUs is proposed to be met by surplus solar power of FY 16 & FY 17 even after meeting the obligations of respective years as well as those of FY 12 & FY 13.
- (x) That in the modification of REC Procedure in Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificates for Renewable Energy Generation) (Third Amendment) Regulations, 2014, the following is specified in Format 1.4 (Recommendation by the State Electricity Regulatory Commission for issuance of REC):-

Any shortfall in procurement against the Non-Solar or Solar Power Procurement Obligation set up by the Appropriate Commission in 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 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 recommending for the purpose of issuance of REC to the Distribution Licensee.

- (xi) That HPSEBL shall file the RPP0 Compliance Report for FY 2014-15 alongwith report for FY 2015-16 and FY 2016-17 after duly accounting any surplus and deficit for these years in accordance with the procedure specified by the Central Electricity Regulatory Commission (CERC).
 - (xii) That the shortfall of 19.32 MUs of FY 15 is to be met as under: -
 - (a) 13.6 MUs in FY 16; and
 - (b) 5.72 MUs in FY 17.
3. The HPSEBL, in view of the justification given above, prays that:-
- (i) for not fulfilling the Solar RPP0 for the year 2014-15, the Commission may allow to carry forward the Solar RPP0s for FY 2014-15 to FY 2015-16 and 2016-17 without imposing any penalty as the reasons are not attributed to the HPSEBL;
 - (ii) the HPSEBL may be allowed to file its RPP0 Compliance Report for FY 2014-15 alongwith report for FY 2015-16 and FY 2016-17 after duly accounting any surplus and deficit for these years in accordance with the procedure specified by the Central Electricity Regulatory Commission (CERC).
4. The Commission has made the Himachal Pradesh Electricity Regulatory Commission (Renewable Power Purchase Obligation and its Compliance) Regulations, 2010 (hereinafter referred as “the RPP0 Regulations”), specifying the minimum percentage of the total consumption, for Renewable Power Purchase Obligation (RPP0) for Non-solar and Solar energy for the distribution licensee, as well as the Captive and Open Access Users/ Consumers, and providing that 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 (hereinafter referred as “the REC Regulations”) shall be the valid instruments for the discharge of the mandatory obligation set out in these regulations for the obligated entities to purchase electricity from renewable energy sources.

5. 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 to promote power generation, 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. 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).
6. The Commission took Suo-Motu note of the matter regarding compliance of RPPOs for the FY 11, FY 12 and FY 13 and observed that the distribution licensee has fully met and in fact exceeded the specified targets in respect of Non-Solar RPPOs for the last three years, but has not met the Solar RPPOs for the FY 2012 and FY 2013. The Commission, therefore, vide its order dated 29th July, 2013 passed in Suo-Motu Case No. 93(A)/2013, ordered that short fall of Solar RPPOs for FY 2011-12 and FY 2012-13 shall now be met during the FY 2015-16 and FY 2016-17, respectively in addition to the Solar RPPOs of those years. The Commission issued the detailed advisories to the HPSEBL to enable it to meet its minimum solar RPPO for the future.
7. The Commission in petition No. 129 of 2013-M/s Ujaas Energy Limited V/s HPSEBL and others, rendered its judgment on dated 10th November, 2014 related to Solar RPPO Compliance of FY 13-FY 14 by the distribution licensee as under:
- “31 The shortfall of 0.74 MU and 18.4 MU in the Solar RPPO during FY 2012 and FY 2014 has already been ordered to be met during the FY 16 and FY 17. In the MYT Order the Commission has already approved the purchase of Solar power by the HPSEBL during the Third Control Period (i.e. FY 14 to FY 2019) to meet its solar RPPOs.*

32 Keeping in view the import of the **judgement of Hon'ble APTEL dated 25.4.2014 rendered in Appeal No. 24 of 2013-Indian Wind Energy Association V/s Gujarat Electricity Regulatory Commission & others (Supra)**, the obligated entity cannot be directed to purchase electricity from renewable energy sources, to meet the shortfall of 2013-14 nor there can be direction for purchase of REC in 2014-15 against shortfall of 2013-14. Also since RECs were available, targets cannot be carried forward to future year(s).

33 In the light of above discussion, the Commission is of the view that the HPSEBL should deposit the compensation amount of Rs.17.23 Crore in a separate fund to be created by the HPSEBL in its accounts as RPPO Compensation Fund for non-compliance of RPPO in 2013-14. Renewable sources of energy are highly dispersed in the State and creation of sub-transmission system infrastructure is of paramount importance for promotion of renewable. Currently the HPSEBL is facing liquidity problems and creation of such infrastructure does not find desired impetus. Therefore, the Commission directs that this amount shall be utilised as HPSEBL's share in project financing (10% share) to create sub-transmission infrastructure (11 kV and 33kV) during the next two years, the HPSEBL will deposit Rs.5.00 Crores this year which will be provided by the Commission in the true up order for FY 2013-14 and balance amount will be provisioned in the ARR of the FY 2015-16. This fund will be treated as grant/consumer contribution and, therefore, will not be admissible for depreciation and any other interest/return.”

8. During the hearing of this petition, the representative of State Agency i.e. Directorate of Energy stated that the Commission may take action as per the provisions of the RPPO Regulations, as far as non-fulfilment of Solar RPPOs for FY 2014-15 by the distribution licensee is concerned.
9. In order to appreciate the submissions of the petitioner i.e. HPSEBL, it will be useful to set out the provisions of Regulations 4, 5, 7, 9 and Annexure-1(i.e. estimated solar and non-solar renewable energy requirement (MUs) of the distribution licensee) of the RPPO Regulations to the extent as these are relevant to adjudicate this petition. These provisions read as under:

Regulation 4:

Quantum of Renewable Power Purchase Obligation (RPPO).- “(1) As specified in the Table below,-

(a) the distribution licensee shall purchase electricity (in kWh) from renewable sources, at a minimum percentage of the total consumption including transmission and distribution losses, within area of the distribution licensee, during a year; and

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

Table-Minimum percentage for Renewable Power Purchase Obligation

Year	Minimum Quantum of Purchase (in %*) from renewable sources (in terms of energy in kWh) of total consumption.	
	Total RPPO %age	Minimum Solar RPPO %age of the total purchase
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

* The estimated Minimum Quantum of Purchase (in MU(s) from renewable sources is given in Annexure-I to these regulations:

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

Provided further that such obligation to purchase renewable energy shall not include the power purchased at pooled cost as specified in the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, but shall be inclusive of .-

- (i) purchases from generating stations based on renewable energy sources,
- (ii) purchases from any other distribution licensee, which would arise from renewable sources,
- (iii) the energy generated from its own renewable sources, if any, by the obligated entity:

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

- (2) Keeping in view supply constraints or other factors beyond the control of the licensee, the Commission may, suo-motu or at the request of a licensee, revise the percentage targets for a year as per sub-regulation (1) 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.

Regulation 7:

Distribution Licensee.- (1) *Each distribution licensee shall indicate, along with sufficient proof thereof, the estimated quantum of purchase from renewable sources for the ensuing year in tariff/annual performance review petition in accordance with regulations notified by the Commission. The estimated quantum of purchase shall be in accordance with sub-regulation (1) of regulation 4 of these regulations. If the distribution licensee is unable to fulfill the obligation, the shortfall of the specified quantum of that year would be added to the specified quantum for the next year.*

(2) Despite availability of energy from renewable sources under the Power Purchase Agreements or the power exchange mechanism or from its own renewable sources, if the distribution licensee fails to fulfill the minimum quantum of purchase from renewable sources, it shall be liable to pay compensation as per Regulation 9 of these regulations.

Regulation 9:

Consequences of default.- (1) *Where the obligated entity does not fulfil the renewable purchase obligation as provided in these regulations during any year and also does not purchase the certificates, the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by such obligated entity, such amount as the Commission may determine on the basis of the shortfall in units of RPPO and the forbearance price decided by the Central Commission:*

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

Provided further that the obligated entities shall not be authorized to use the fund created in pursuance of regulation without prior approval of the Commission:

Provided further that the Commission may empower an officer of the State Agency to procure from the Power Exchange the required number of certificates

to the extent of the shortfall in the fulfillment of the obligations, out of the amount in the fund:

Provided further that the distribution licensee shall be in breach of its licensee conditions if it fails to deposit the amount directed by the Commission within 15 days of the communication of the direction.

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

Provided that in case of genuine difficulty in complying with the renewable power purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission to carry forward the compliance requirement to the next year:

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

*Annexure-1
[see Regulation 4(1)]*

Estimated RPPO (in MUs) from renewable sources				
<i>Financial year</i>	<i>Years</i>	<i>Total Energy Requirement in MUs including T&D Losses</i>	<i>Minimum Solar Power purchase Obligation in MUs</i>	<i>Total Renewable Power purchase Obligation in MUs</i>
<i>FY 12</i>	<i>2011-12</i>	<i>8244.00</i>	<i>0.82</i>	<i>825.22</i>
<i>FY 13</i>	<i>2012-13</i>	<i>8748.00</i>	<i>21.87</i>	<i>896.67</i>
<i>FY 14</i>	<i>2013-14</i>	<i>9168.00</i>	<i>22.92</i>	<i>939.72</i>
<i>FY 15</i>	<i>2014-15</i>	<i>9159.20</i>	<i>22.89</i>	<i>938.81</i>
<i>FY 16</i>	<i>2015-16</i>	<i>9719.37</i>	<i>24.30</i>	<i>1093.42</i>
<i>FY 17</i>	<i>2016-17</i>	<i>10312.40</i>	<i>25.78</i>	<i>1263.26</i>
<i>FY 18</i>	<i>2017-18</i>	<i>10926.18</i>	<i>54.63</i>	<i>1475.03</i>
<i>FY 19</i>	<i>2018-19</i>	<i>11575.04</i>	<i>86.81</i>	<i>1707.31</i>
<i>FY 20</i>	<i>2019-20</i>	<i>12260.97</i>	<i>122.60</i>	<i>1961.75</i>
<i>FY 21</i>	<i>2020-21</i>	<i>12986.08</i>	<i>259.72</i>	<i>2272.56</i>
<i>FY 22</i>	<i>2021-22</i>	<i>13752.57</i>	<i>412.57</i>	<i>2612.98</i>

10. Regulation 9 of the CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (the REC Regulations), as amended by the Second Amendment Regulations, 2013. w.e.f. 11.07.2013 provides for determining the forbearance and floor price for solar or non solar certificates, the relevant provisions are given as under.-

“9 Pricing of Certificate:

(1) The price of Certificate shall be as discovered in the Power Exchange:

Provided that the Commission may, in consultation with the Central Agency and Forum of Regulators from time to time provide for the floor price and forbearance price separately for solar and non-solar Certificates.

(2) The Commission while determining the floor price and forbearance price, shall be guided inter alia by the following principles:

(a) Variation in cost of generation of different renewable energy technologies falling under solar and non-solar category, across States in the country:

(b) Variation in the Pooled Cost of Purchase across States in the country;

(c) Expected electricity generation from renewable energy sources including:-

(i) expected renewable energy capacity under tariff, for sale of electricity to an obligated entity for the purpose of meeting its renewable purchase obligations, determined under Section 62 or adopted under Section 63 of the Act by the Appropriate Commission.

(ii) expected renewable energy capacity under mechanism of certificates;

(d) Renewable purchase obligation targets set by various State Commissions.”

11. Further, the sub-regulation (I-A) added to Regulation 5 of the REC Regulations vide Third Amendment Regulations, 2014 w.e.f. 01.01.2015 deals with issuance of certification by the Commission to the obligated entities those have procured excess renewable energy than the target fixed by the Commission, the relevant provisions for the same are 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.”

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

- (a) 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 including transmission and distribution losses within the area of the distribution licensee and the Captive and Open Access Users shall purchase electricity (in kWh) from renewable sources at a minimum percentage of the total consumption during a year. The estimated minimum quantum of purchase (by the Distribution Licensee) in Mu(s) from the Renewable sources is given in Annexure-I to the RPPO Regulations. The Solar Power Purchase obligation is to be fulfilled from the generation based on Solar Sources only.
- (b) Sub-regulation 4 (2) of the RPPO Regulations provides that keeping in view supply constraints or other factors beyond the control of the licensee, the State Commission may, Suo-Motu or at the request of the licensee, revise the percentage targets specified under sub-regulation 4(1).
- (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 purchase certificates, the obligation to purchase from generation based solar as renewable energy 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.
- (d) Regulation 7 of the RPPO Regulations provides for inclusion of estimates of the Renewable Energy Purchase in the tariff/annual performance review. The distribution licensees have to indicate along with proof, the estimated quantum of purchase from renewable energy sources for the ensuing year in Tariff/APR petition. The Tariff/Annual Performance Review Petition is mandatorily subjected to public notice and public hearing under Section 64 of the Electricity Act, 2003. Thus, in the RPPO Regulations there is an inbuilt mechanism for planning and review of RPPO being subjected to public hearing. The distribution licensees have

to indicate the estimated quantum of purchase from renewable energy sources for the ensuing year in tariff petition and the review of RPPO in the APR which is also a part of the petition. The stakeholders can file suggestions and objections regarding the proposal of the licensee for the ensuing year and in APR. This mechanism would ensure that the State Commission after considering the suggestions and objections of stakeholders could give directions to the distribution licensees for corrective action, if any, at the beginning of the ensuing year.

Thus the State Commission is to consider the proposal of the licensee for compliance of the RPP Obligation for the ensuing year in the tariff petition and review of RPPO in Annual Performance Review (APR) proceedings to enable the public to offer their suggestions and objections. After completion of the financial year, the State Commission has to review the actual performance of the RPPO and pass necessary direction as per regulations either suo-motu or on a petition filed by a party.

- (e) Regulation 9 of the RPPO Regulations provides for consequences of default, whereunder, if the distribution licensee and other obligated entities do not fulfil the specified RPPO (Renewable Power Purchase Obligation) during a year and do not purchase the Renewable Energy Certificates, the State Commission may direct the licensee/obligated entity to deposit in a separate account such amount as determined by the State Commission on the basis of the shortfall in units of the RPPO and forbearance price decided by the Central Commission which shall be utilized by the State Commission for purchase of RECs and for development of transmission infrastructure for evacuation of power from renewable sources of energy.
- (f) The Central Commission in exercise of powers vested in it under regulation 9 of the Central Electricity Regulatory Commission (Terms & Conditions for recognition and issuance of Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2010 (REC Regulations), vide its Order dated 30.12.2014 has fixed the solar REC floor and forbearance price for dealing in the Solar Renewable Energy Certificates under REC Regulations, for a control period from the date of Order and upto 31st March, 2017 as under:-

Price	Solar REC (Rs. /MWh)
Forbearance Price	5800
Floor Price	3500

However, in case of any genuine difficulty in meeting RPPO due to non availability of power from renewable sources or the REC, the State Commission may carry forward the shortfall to the next year.

- (g) The provisions of Regulation 5 (IA) of the REC Regulations come into force in the cases where the SERCs have to exercise their power for grant of certificate to the distribution licensee, for excess Renewable Energy procurement than the RPO target(s) in the respective financial year, enabling the distribution licensee to get RECs from the Central Agency.

- 13 While framing the RPPO Regulations, the Commission has already specified the minimum percentage for Renewable Power Purchase Obligation and estimated RPPO of the distribution licensee (in MUs) from Renewable Sources (including Solar Energy) for period of 10 years (i.e. FY 2012 to FY 2022). 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:-

Financial Year	Minimum Quantum of Purchase (in %*) from renewable sources (in terms of energy in kWh) of total consumption.		
	Total RPPO % age	Minimum Non-Solar RPPO % age of the total purchase	Minimum Solar RPPO % age of the total purchase
2010-11	10.00	10	0.00
2011-12	10.01	10	0.01
2012-13	10.25	10	0.25
2013-14	10.25	10	0.25
2014-15	10.25	10	0.25
2015-16	11.25	11	0.25
2016-17	12.25	12	0.25
2017-18	13.5	13	0.5
2018-19	14.75	14	0.75
2019-20	16	15	1
2020-21	17.5	15.5	2
2021-22	19	16	3

14. As per the submission of the distribution licensee regarding compliance of Solar RPPO for FY 2014-15, the shortfall is as under:-

Year	Demand (MUs)	Solar RPPO		Achieved (MUs)	Shortfall (MUs)
		% age	MUs		
2014-15	8806.09	0.25	22.02	2.70	19.32

15. The Commission while deciding the **Suo-Moto Case No. 93(A)/2013**, in its Order dated 29.07.2013 had observed that HPSEBL had fully met and in fact exceeded the specified target in respect of Non-Solar RPPOs for the last three years but was unable to meet the Solar RPPOs for the FY12 and FY13. There

was a shortfall of 0.74MU and 18.4MU in the Solar RPPOs during FY12 and FY13. The Commission in the Order decided that the shortfall of Solar RPPOs for FY12 and FY13 shall be met during the FY16 and FY17 respectively, in addition to the Solar RPPOs of those years.

16. The consequences of default on the part of the obligated entity to fulfil its RPPO are dealt with in Regulation 9 of the RPPO Regulations. If the distribution licensee fails to fulfil its RPPO, then it shall be liable to pay compensation as per Regulation 9 of the RPPO Regulations. Thus, in terms of Regulation 9, the State Commission may direct the distribution licensees/other obligated entities to deposit into a separate fund the amount, as may be determined by the State Commission on the basis of the shortfall in units of the RPPO and forbearance price decided by the Central Commission, which shall be utilized partly for purchase of REC and partly for development of transmission infrastructure for evacuation of power from renewable sources of energy. However, in case of any genuine difficulty in meeting RPPOs due to non-availability of power from renewable sources or the REC, the State Commission may carry forward the shortfall to the next year.
17. In the present case, there is shortfall of Solar RPPOs of 19.32 MUs in the FY 2014-15 and the obligated entity has also failed to purchase the Solar RECs available in the power exchanges; the obligated entity is liable to pay compensation in terms of Regulation 9 of the RPPO Regulations, where-under the State Commission may direct the obligated entity to deposit such compensation into a separate fund as may be determined by the State Commission on the basis of the shortfall in units of RPPO and forbearance price decided by the Central Commission, which is to be utilized by the State Commission partly for purchase of RECs and partly for development of transmission infrastructure for evacuation of power from renewable sources of energy.
18. The Central Commission, in exercise of powers vested in it under Regulation 9 of the REC Regulations has fixed Rs. 3500/ MWh as floor price and Rs. 5800/ MWh as the forbearance price for dealing in Solar Renewable Energy Certificates (Solar RECs) under REC Regulations. The Commission, after

having considered the circumstance explained in the para 2 of this Order, works out the compensation of Rs. 6.762 Crores, under Regulation 9 of RPPO Regulations for shortfall of 19.32 MUs in the financial year 2014-15, on the basis of the shortfall in Solar RPPOs and floor price fixed by the Central Commission, because had the HPSEBL purchased RECs in end of March, 2015, it would have been available at floor price.

19. The Commission has already made following observation in its Order dated 10.11.2014, titled **M/s Ujaas Energy Ltd. V/s HPSEB Ltd. and others**, in petition No. 129/2013:

“32 keeping in view the import of **the judgment of Hon’ble APTEL dated 25.04.2014 rendered in Appeal No. 24 of 2013-Indian Wind Energy Association V/s Gujarat Electricity Regulatory Commission & others (Supra)**, the obligated entity cannot be directed to purchase electricity from renewable energy sources, to meet the shortfall of 2013-14 nor there can be direction for purchase of REC in 2014-15 against shortfall of 2013-14. Also since RECs were available, targets cannot be carried forward to future year(s).”

As per the aforesaid observation of the Hon’ble APTEL, the Commission can allow carry-forward of RPPO compliance of particular financial year to next financial year(s) if, RECs are not available in the market or before allowing carry-forward, as the non-availability of RECs is a pre-requisite condition, to allow carry-forward.

20. The Hon’ble APTEL made following observation, in Order dated 10.12.2015, in Appeal No. 54/2015, **titled Green Energy Association V/s HPERC and others**, on the impugned Order of the Commission dated 30.11.2014 in petition No. 129/2013, wherein Commission allowed the compensation amount of Rs. 17.23 Crore to be deposited in separate fund (to be utilized for some transmission network for power evacuation from Renewable Energy Project(s) in the State) on account of non-compliance of Solar RPPOs by the distribution licensee for FY 2013-14, reproduced as under:

“11..... We have considered the possible pros and cons of such kind of orders as the present one. If such kind of orders are allowed in future by any Commission then the whole default amount or the amount of compensation shall possibly be directed to be utilized for the development of transmission or sub-transmission infrastructure for evacuation of power from generating stations based on renewable energy sources and the same shall frustrate the purpose of the proviso added to Regulation 9. The strong possibility or likelihood is that if the State Commission is allowed to pass such kind of order in future, namely directing utilization of the entire default amount or amount of compensation only for the development of transmission or sub-transmission infrastructure without allocating even a fraction of the default amount, the whole purpose of insertion of the proviso to Regulation 9 shall stand frustrated or discouraged. The purpose and intention behind insertion

of Regulation 9 appears to be to give discretion to the State Commission to decide the percentage which can be directed to be utilized for purchase of renewable energy certificates by the distribution licensee from the renewable energy developers. The original purpose of such kind of Regulation was to encourage the renewable energy developers or non-conventional energy developers to continue generation of renewable energy, hence the DISCOMs were required to purchase RECs, in case of shortfall in RPPOs that was towards the fulfillment of the encouragement given to the renewable energy developers.”

21. The first proviso to sub-regulation (1) of Regulation 9 of the RPPO Regulations provided that the compensation fund created on account shortfall in Solar RPPOs shall be utilized, as may be directed by the Commission partly for purchase of certificates and partly for development of transmission/sub-transmission infrastructure for evacuation of power from generating station based on renewable energy sources.
22. The ground taken by the distribution licensee to allow carry-forward of Solar RPPOs as per the procedures notified by the CERC for dealing with issuance of certificate by the Commission to the distribution licensee for excess procurement of renewable energy than the RPPO target(s), as per Regulation 5 (IA) of the REC Regulations is not be a appropriate ground, as the said provisions of the REC Regulations come into force only while the SERCs have to exercise their power for grant of certificate to the obligated entity i.e. the distribution licensee, for excess Renewable Energy procurement beyond threshold RPPOs specified by the Appropriate Commission for respective financial year, enabling the distribution licensee to get RECs from the Central Agency.
23. In the light of above discussion, the Commission is of the view that the HPSEBL should deposit the compensation amount of Rs. 6.762 Crore, for shortfall of Solar RPPOs for FY 2014-15, in the fund already created by the HPSEBL in its accounts as RPPO Compensation Fund, for non-compliance of Solar RPPOs in FY 2013-14. Renewable sources of energy are highly dispersed in the State and creation of sub-transmission system infrastructure is of paramount importance for promotion of renewable. The HPSEBL is facing liquidity problems and creation of such infrastructure does not find desired impetus. Therefore, the Commission directs that 80% of the compensation amount i.e. Rs. 5.410 Crore

shall be utilised as the HPSEBL's share in project financing (10% share) to create sub-transmission infrastructure (11 kV and 33kV) during the next two years. Further 20% of the compensation amount i.e. Rs. 1.352 Crore shall be utilized before 31st March, 2017 for purchase of Solar RECs at the rate of floor price determined by the Central Commission. The fund amounting Rs. 5.410 Crore will be treated as grant/consumers contribution and, therefore, will not be admissible for depreciation and any other interest/return. Financial implication on purchase of Solar RECs as well as further utilization of compensation fund for renewable energy infrastructure, if prudently incurred, may be allowed as pass through in the ARR of FY 2017-18 and FY 2018-19 respectively.

24. This petition is disposed of in the terms of this Order.
25. 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 FY 2015-16 and FY 2016-17 submitted by the HPSEBL on that date required further examination with reference data available from the relevant sources, include the State Agency i.e. Directorate of Energy.

Place: Shimla.
Date: 14th February, 2017.

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(S.K.B.S Negi)
Chairman