

**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO. 220-221, SECTOR 34-A, CHANDIGARH**

Petition No. 61 of 2016
Date of Order: 21.03.2017

Present: Shri D.S. Bains, Chairman
Shri S.S. Sarna, Member

In the matter of: Petition under section 86(1)(e) of the Electricity Act, 2003 read with Regulation 6(2) and Regulation 7 of the PSERC (RPO & its compliance) Regulations, 2011 for carrying forward of shortfall of Renewable Purchase Obligation (RPO) for FY 2015-16 specified in Regulation 3 (1) to FY 2016-17.

And

In the matter of: Punjab State Power Corporation Limited (PSPCL),
The Mall, Patiala.

.....Petitioner

Versus

Punjab Energy Development Agency (PEDA), Plot
No.1-2, Sector 33-D, Chandigarh.

.....Respondent

ORDER

Punjab State Power Corporation Limited (PSPCL) filed this petition on 23.08.2016 under section 86(1)(e) of the Electricity Act, 2003 (Act) read with Regulation 6(2) and Regulation 7 of the Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation & its compliance) Regulations, 2011 (RPO Regulations) for carrying forward the net shortfall of 1498.56 MU from non-solar sources and 79.09 MU from solar sources of energy for RPO compliance for FY 2015-16 to FY 2016-17.

2. After hearing the petitioner on 04.10.2016, the petition was admitted and PEDDA was impleaded as respondent. PEDDA was directed to file reply by 08.11.2016 with a copy to PSPCL. PSPCL was directed to file rejoinder to the reply of PEDDA, if desired, by 22.11.2016 with a copy to PEDDA. The next date for hearing the arguments was fixed as 29.11.2016 vide Commission's Order dated 07.10.2016.

3. A public notice inviting suggestions and objections of the public and other stake holders was issued and published in various newspapers viz. The Tribune, Hindustan Times and Indian Express on 08.11.2016. The last date for filing the suggestions and objections was 29.11.2016. Mandi Gobindgarh Induction Furnace Association (MGIA), PHD Chamber of Commerce and Industry, Chandigarh (PHDCCI) and Indian Wind Power Association (IWPA), New Delhi filed their respective suggestions/objections. A public hearing in this connection was scheduled to be held on 12.12.2016 which was postponed and held on 14.12.2016 as 12.12.2016 was declared a public holiday. The public hearing was attended by PSPCL and IWPA.

4. When the petition came up for hearing on 29.11.2016, PEDDA during the hearing prayed for a week's time to file the reply. Acceding to the prayer of PEDDA, the Commission directed PEDDA to file the reply by 02.12.2016. PSPCL was directed to file the rejoinder, if desired, by 16.12.2016. The next date for hearing the arguments was fixed as 22.12.2016 which was preponed to 20.12.2016 and all parties were informed accordingly.

5. PEDA filed its reply dated 02.12.2016 to the petition. PSPCL filed the rejoinder dated 16.12.2016 to the reply of PEDA. PSPCL vide letter dated 22.12.2016 filed its response to the suggestions/objections filed by Mandi Gobindgarh Induction Furnace Association, PHD Chamber of Commerce and Industry and IWPA. The arguments of PSPCL and PEDA were heard at length on 20.12.2016. The Order was reserved.

6. The submissions in the petition are summarized hereunder:

- i) The Commission specified the RPO for FY 2011-12 to FY 2019-20 in the RPO Regulations. PSPCL endeavoured its best to ensure its compliance but experienced difficulties to comply with the same. The Commission vide Order dated 28.07.2015 (wrongly mentioned as 28.05.2015) had allowed PSPCL to carry forward the RPO short fall of 772.57 MU (non-solar) and 1.68 MU (solar) for FY 2014-15 to be complied with by 31.12.2015 which was fully complied with by the due date.
- ii) The Commission specified the RPO for FY 2015-16 as 4.9% [3.9% (non-solar) and 1% (solar)]. PEDA being the nodal agency for the development of renewable energy projects in the State of Punjab, in the review meeting held in the office of the Commission on 09.12.2015, informed about the projected renewable capacity addition in FY 2015-16 (including spillover of FY 2014-15) as 556.10 MW i.e. 145.10 MW (non-solar) [72 MW (Biomass), 17.4 MW (Co-generation), 53.7 MW (Small Hydro), 2 MW (Biogas/Waste to Energy)] and 411 MW (solar).

However, the capacity commissioned during FY 2015-16 was only 5.40 MW (non-solar) and 231 MW (solar) i.e. 139.70 MW (non-solar) and 180 MW (solar) projected capacity could not be commissioned.

- iii) PSPCL is purchasing all the power from new and renewable sources of energy (NRSE) which is offered to it by the projects developed through PEDDA. As on date, the total renewable energy capacity for which PSPCL has executed power purchase agreements (PPAs) is more than 550 MW, which was expected to be commissioned by 2015-16. However, there has been shortfall in actual delivery of renewable energy to PSPCL resulting in constraints in meeting the specified RPO which was fixed by the Commission on the basis of information furnished by PEDDA with regard to the projects to be added in future and projects in the pipeline.
- iv) The actual renewable energy capacity addition has been much less than projected due to slippage in the capacity addition by the developers, non-commissioning of projected capacity additions during the years from 2009 to 2015 and cancellation of the NRSE projects by PEDDA. The projects in operation also did not generate power to their full capacity due to various reasons.
- v) The primary obligation of PSPCL is to procure power from RE sources in physical form as it is in the best interest of the public at large and ensures availability of electricity while promoting renewable energy capacity addition in the State. The fulfillment

- of the RPO by the alternative mechanism of renewable energy certificates (RECs) is not in the interest of the consumers at large which is best served in procuring the electricity in physical form and consuming the same.
- vi) PSPCL has already entered into PPAs for substantial capacity for procurement of electricity from renewable sources. It has been complying with the RPO to a large extent and being under financial constraints in the last six months of FY 2015-16 could not purchase non-solar RECs for the short fall for an amount of ₹ 84 crore.
- vii) PSPCL acted in a bonafide manner and made all efforts to procure renewable energy for fulfillment of RPO and also sought to procure renewable energy on short term basis from the sources outside the State of Punjab. Tenders were floated on 31.10.2015 for purchase of NRSE power from sources situated outside Punjab, however only one tender was received and the last date for submission of tender was extended to 03.12.2015. As no further response was received, the date was further extended to 18.12.2015. Due to no response, the procurement of NRSE power from outside Punjab could not be proceeded with.
- viii) The details of renewable energy purchased/procured during FY 2015-16 after complying with the shortfall of FY 2014-15 are as under:

S. No.	Description	
1	Input Energy (FY 2015-16) (MU)	46389
2	RPO specified for FY 2015-16	
	i) Non-Solar (%)	3.9
	ii) Solar(%)	1
	iii) Non-Solar (MU)	1809.17
	iv) Solar (MU)	463.89
3	NRSE Power Purchased during FY 2015-16	
	i) Non-Solar (MU)	1083.18
	ii) Solar (MU)	386.48
4	RECs Purchased in FY 2015-16	
	i) Non-Solar (MU)	0
	ii) Solar (MU)	0
5	Total NRSE Power Purchased in FY 2015-16 (3+4)	
	i) Non-Solar (MU)	1083.18
	ii) Solar (MU)	386.48
6	Net NRSE power available for compliance of RPO for FY 2015-16 after compliance of carry forward of shortfall of FY 2014-15 [772.57 MU (non-solar) and 1.68 MU (solar)]	
	i) Non-Solar (MU)	310.61
	ii) Solar (MU)	384.80
7	Shortfall in compliance for FY 2015-16 (2 - 6)	
	i) Non-Solar (MU)	1498.56
	ii) Solar (MU)	79.09

An amount of ₹ 242.80 crore was provided in the Tariff Order for PSPCL for FY 2016-17 for meeting the shortfall in RPO compliance.

ix) In the review meetings during FY 2015-16, PSPCL brought out the efforts made by it for achieving RPO as well as the constraints being faced by it. The RPO specified by the Commission could not be fully complied with due to reasons beyond the reasonable control of PSPCL.

x) It is prayed to the Commission to carry forward the shortfall in RPO compliance of 1498.56 MU (non-solar) and 79.09 MU (solar) for FY 2015-16 to FY 2016-17.

7. PEDA's reply dated 02.12.2016 to the petition is summarized as hereunder:

i) PEDA allocates renewable energy projects after seeking inputs from PSPCL, being a member of project allotment committee. After following the due process, Implementation Agreements (IAs) are signed by PEDA with the successful developers. Since the power from the projects is to be purchased by PSPCL, Power Purchase Agreements (PPAs) are signed by PSPCL with the successful developers.

ii) PEDA has been consistently making its best efforts for promotion of the NRSE sector in the State of Punjab. Seven biomass based power projects of capacity 62.5 MW and 32 mini hydro projects of capacity 38 MW have been added upto FY 2015-16. However, despite the best efforts, few projects have come-up due to lesser interest shown by the developers as these projects are highly technical in nature. Also, the existing developers face difficulties in arranging biomass fuel.

No response to the bidding process initiated by PEDDA in November 2013 and February 2014 was received for setting up 300 MW biomass based power projects.

- iii) PEDDA invited competitive bids in September 2015 (Phase-I) for setting up 100% rice straw based power projects of total capacity 200 MW out of which it has allotted 30 MW capacity in February 2016. These projects are scheduled to be commissioned in 24 months after signing the PPAs with PSPCL.

In another similar attempt in May 2016 (Phase-II), PEDDA has allotted 152.50 MW capacity of 100% rice straw based power projects in May 2016 which are also scheduled to be commissioned in 24 months after signing the PPA with PSPCL.

In response to the Request for Proposal (RfP) recently floated by PEDDA for setting up 100 MW rice straw based biomass power projects on BOO basis under phase-III, PSPCL, vide its letter dated 01.11.2016 has informed that there is hardly any need of costlier RE power (non-solar) by PSPCL.

- iv) PSPCL signed IAs cum PPAs for 12 nos. 12 MW each rice straw thermal plants in FY 2003-04, however, only one project of 12 MW capacity was commissioned. The remaining 11 projects of total capacity of 132 MW have neither come up nor any action to cancel their IAs cum PPAs has been taken by PSPCL. These projects would have contributed 810 MU (approx.) of non-solar RE power and contributed towards RPO compliance for FY 2015-16.

- v) As per the directives issued by Hon'ble APTEL in its judgment dated 20.04.2015 in OP No.1, 2 and 4 of 2013, the carry forward/review of RPO should be allowed strictly as per provisions of the Regulations. The Commission in its Order dated 28.07.2015 in petition no.38 of 2015 held that PSPCL must comply with the RPO for a particular year in the same year itself.
- vi) PSPCL has repeatedly sought carry forward of the shortfall of RPO compliance to next year. PSPCL has not utilized amount provided in the Tariff Order for purchasing RECs or RE power from outside the state. PSPCL has the option to comply with the RPO through alternate means such as setting up of RE projects, re-commissioning of existing non-operational RE projects, maximizing generation from UBDC as well as purchase of RECs and purchase of RE power from other states.

8. The contents of the rejoinder by PSPCL to the reply of PEDDA in brief are as under:

- i) PSPCL intends to procure power in physical form instead of purchasing expensive RECs due to the interest of consumers at large.
- ii) PSPCL is not seeking a waiver, but only intends that carry forward in the shortfall of RPO compliance be allowed as per the provisions in the RPO Regulations of the Commission.

- iii) PSPCL has given substantial thrust to solar generation which will compensate for shortfall in non-solar purchase.
- iv) PSPCL needs support from PEDDA to ensure that the projects are commissioned on time and PSPCL can subsequently fulfill its RPO.
- v) PSPCL being a distribution licensee does not have the responsibility of commissioning of the projects. The responsibility of PSPCL is only to enter into PPAs with the generating companies/developers. It is the responsibility of PEDDA to ensure that the developers who were allotted the projects are commissioning the same on time. The delays caused by the developers in commissioning of the projects are beyond the control of PSPCL.
- vi) UBDC and Ropar projects were in operation during FY 2015-16 at around 39% PLF which is significantly higher than the requisite PLF as per CERC guidelines. The Letter of Awards to operationalize 3 nos. micro hydro projects have been issued and negotiations for the 4th project are under process. It is expected that all the projects shall be commissioned in the next financial year.
- vii) Regulation 6(2) of the PSERC RPO Regulations provides that the Commission has the power to carry forward the RPO compliance to the next year in case of genuine difficulty in complying with the RPO. PSPCL is not seeking any right contrary to the Regulations, but only invoking the jurisdiction of the Commission under the Regulations.

viii) Hon'ble APTEL vide its order dated 14.05.2015 in IA No.187 of 2015 (wrongly mentioned as IA No. 186 of 2015) in Appeal No. 258 of 2013 and 21 of 2014 has held that all the relevant factors shall be considered by the State Commission while deciding to revise the RPO. PSPCL has only prayed for carry forward of RPO compliance due to genuine difficulties and not a revision of RPO.

ix) PEDDA may be directed to coordinate with the renewable energy project developers and ensure that the projects are commissioned on time and the commissioned projects are generating adequate power in consonance with their capacity.

9. The suggestions/objections by Mandi Gobindgarh Induction Furnace Association (MGIA) in brief are as under:

i) PEDDA is not able to get the NRSE projects commissioned on schedule from private developers and PSPCL has failed to make the micro hydel projects operational and commission 18 MW Mukerian Hydel Project as per schedule. PEDDA has no control on the generation of the private NRSE projects for their less generation. PSPCL has not been able to run its UBDC projects to their optimum capacity. As such, both PEDDA and PSPCL are equally responsible for non compliance of RPO.

ii) PSPCL has made bonafide actions to meet RPO and purchased all the NRSE power offered to it. Also, PSPCL made sincere efforts to purchase NRSE power from outside the State.

Purchasing RECs for RPO compliance increases the ARR of PSPCL.

- iii) Keeping in view the limitation on increase of tariff for agriculture, railway traction, domestic and tariff of new LS consumers restricted to ₹ 4.99 per kWh for the next five years etc., the major burden of increase in tariff is borne by the existing industrial consumers. The 66/11 kV industrial consumers are already paying much more than the cost of supply being calculated by the Commission in the Tariff Orders. The products manufactured in Punjab are not able to compete with the products of other states and countries like China and Taiwan. Therefore, there is urgent need to reduce the ARR of PSPCL by all possible means.
- iv) The Act mandates the Commission to safeguard the interest of the consumers while finalizing the ARR of the State licensees while determining the tariff of consumers.
- v) It is necessary to minimize the purchase of RECs and instead purchase NRSE power at generic tariff.
- vi) The petitioner may be allowed to carry forward the shortfall in RPO compliance to the next year.

10. PSPCL in its rejoinder dated 22.12.2016 to the suggestions and objections of MGIA requested the Commission to consider the submissions made by MGIA to minimize the purchase of RECs and instead promote the purchase of renewable energy in physical form in the Tariff Order.

11. The suggestions/objections by PHD Chamber of Commerce Industry (PHDCCI) in brief are as hereunder:

- i) The Commission is requested to allow PSPCL to carry forward the shortfall in RPO compliance. The Tariff Policy 2016 provides to exclude hydro power from the consumption of the Discom for calculation of RPO. Proposals are under consideration to treat the hydro power projects above 25 MW also as NRSE power.
- ii) With the upcoming rooftop solar PV power projects under net metering policy, commissioning of 18 MW Mukerian Hydel Project and 100% rice straw based power projects coming up in the State in near future etc., the RPO for the current year and ensuing years is likely to be met. As such, PSPCL may be allowed to carry forward the shortfall in the RPO compliance.

12. PSPCL in its rejoinder dated 22.12.2016 to the suggestions and objections of PHDCCI reiterated its submissions made in the rejoinder to the suggestions and objections of MGIA.

13. The suggestions/objections by Indian Wind Power Association (IWPA) in brief are as hereunder:

- i) Section 61(h) and section 86(1)(e) of the Act enjoin CERC and SERCs to promote co-generation and generation of the electricity from renewable resources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, also specify, for purchase of electricity from such sources, a percentage of the total consumption of

- electricity in the area of a distribution licensee. Section 86(4) of the Act provides that the State Commission in discharge of its functions shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy, which provide for procurement of power from renewable sources of energy at preferential tariff.
- ii) The obligated entities in the State of Punjab, including the distribution licensee, are repeatedly failing in their obligation to meet their RE procurement targets within the same year as directed by the Commission. The Commission allowed the RPO carry forward to PSPCL upto 31st December of subsequent year. The grounds mentioned by PSPCL for seeking relief during all these years are mostly the same. The yearly RPO shortfall is increasing every year. Also, the renewable energy purchase by PSPCL has not changed much since 2012-13. The combined effect may lead to an irredeemable situation for PSPCL with respect to RPO compliance.
 - iii) PSPCL has not mentioned whether it considered the directions for purchase of RECs despite the Commission having made relevant provision in the Tariff Order for PSPCL. PSPCL failed to comply with the instructions of the Commission.
 - iv) PSPCL diverted the RE power purchased for RPO compliance of FY 2015-16 to comply with the shortfall of previous year FY 2014-15. PSPCL has not established that the RPO compliance for FY 2014-15 was achieved before the specified deadline of 31.12.2015.

- v) During each of these years, the Commission made provision for purchase of RECs and factored in the cost during determination of retail tariff. The amount approved in Tariff Order of FY 2015-16 has already been recovered from the consumers by PSPCL. As such, PSPCL cannot claim that it could not purchase RECs due to financial constraints.
- vi) An alternative mechanism for purchase of RECs was created for RPO compliance. Hon'ble APTEL in its judgment dated 16.04.2015 in appeal no. 258 of 2013 and appeal no. 21 of 2014 and IA no. 28 of 2014, while referring to various Supreme Court judgments, has emphasized to give effect to the REC mechanism. Hon'ble APTEL in its judgment dated 20.04.2015 in OP No. 1 of 2013 & IA No. 291 & IA No. 420 of 2013, OP No. 2 of 2013 & OP No. 4 of 2013 issued directions under section 121 of the Act for compliance of RPO Regulations of the State Commission.
- vii) The Commission, in the RPO Regulations, recognized the REC mechanism as valid means to comply with RPO. PSPCL is violating the Regulations as well as directions of Hon'ble APTEL.
- viii) PSPCL is not entitled for carry forward of RPO as RECs are available at the floor price. Carry forward of RPO should not be allowed which will defeat the purpose of the RPO Regulations. PSPCL has taken advantage of the lenient approach by the Commission of not taking penal action.

ix) PSPCL may be directed to submit the RPO compliance report at the end of each quarter and the same be uploaded on PSPCL/PEDA website.

14. The contents of the rejoinder by PSPCL to the suggestions and objections of IWPA in brief are as under:

- i) There is no merit in the submissions made by IWPA. The entire objective of the objector appears to promote the market for RECs as against the supply of renewable power in physical form.
- ii) PSPCL is not seeking a waiver, but only want to carry forward the shortfall in RPO. The compliance of RPO is beyond the control of PSPCL if the RE projects do not generate sufficient power or delay their commissioning by as long as 5 years in some cases and the cancellation of various projects by PEDA.
- iii) The RPO compliance can not be fulfilled as there are inadequate resources in the State for generation of RE power. Hon'ble APTEL in IA No.187 of 2015 in appeal no. 258 of 2013 and 21 of 2014 has held that in case the State Commission decides to revise targets due to inadequate capacity addition in the State, the same may be done keeping in view overall availability of renewable energy resources in the State.
- iv) The major reason for the shortfall in the compliance of RPO was due to the cancellation of large number of projects, being unduly delayed, by PEDA.

- v) PSPCL intends to procure power in physical form instead of purchasing expensive RECs.
- vi) The revenue requirement of PSPCL is regulated by the Commission. PSPCL is not misusing money of the consumers as this exercise is fairly conducted by the Commission during the true-up of the ARR of PSPCL.
- vii) Hon'ble APTEL's judgment dated 20.04.2015 in OP No. 1 of 2013 & IA No. 291 & IA No. 420 of 2013, OP No. 2 of 2013 & OP No. 4 of 2013 does not help the case of IWPA in any manner. The proviso to Regulation 6(2) of the PSERC RPO Regulations, 2011 empowers the Commission to allow the carry forward of RPO compliance requirement to the next year in case of genuine difficulty faced by the obligated entity.
- viii) Hon'ble APTEL in its judgment dated 16.04.2015 in appeal no.258 of 2013 has held that the procurement of RECs is the commercial decision of the distribution licensees and not a direction to procure the same.
- ix) The objections raised by IWPA are vague and baseless. IWPA is only challenging the bonafide intention of the petitioner.

Commission's Observations, Findings and Decision

15. The Commission has carefully gone through the petition, reply of PEDDA, suggestions/objections of MGIA, PHDCCI & IWPA and rejoinders thereto by the petitioner. The observations, findings and decision of the Commission are as hereunder:

- i) PSPCL submitted that it has taken necessary steps to procure renewable energy for RPO compliance, but there has been some shortfall due to reasons beyond its control and has prayed for carry forward of the shortfall in RPO compliance for FY 2015-16 to FY 2016-17. PSPCL has referred to Regulation 6(2) and 7 of the RPO Regulations, wherein it has been provided that in case of genuine difficulty the obligated entity can approach the Commission for carry forward of RPO compliance requirement to the next year. PSPCL also submitted that although the Commission allowed ₹ 84 crore in the tariff order for PSPCL for FY 2015-16 for purchase of RECs, it could not purchase RECs for RPO compliance in FY 2015-16 due to funds constraint. PSPCL further submitted that it is seeking carry forward because it is attempting to procure electricity in its physical form so that the consumers at large stand benefitted whereas purchase of RECs only results in revenue expenditure without there being the benefit of the electricity or the capacity benefit in the state of Punjab. PSPCL submitted that it is purchasing all the power from new and renewable sources of energy (NRSE) which is offered to it by the projects developed through PEDDA. However, there has been shortfall in actual delivery of renewable energy from RE projects to PSPCL due to less generation resulting in constraints in meeting the specified RPO. Also, there has been less capacity addition than that projected by PEDDA. PSPCL submitted that it has been making efforts to revive the 10 MW biomass based plant at Jalkheri. The various hydel projects

(micro/small hydro-electric projects) aggregating to 12.90 MW capacity are likely to operationalise by December, 2017.

- ii) PEDA submitted that due to its efforts seven biomass projects of 62.5 MW capacity and 32 mini hydro projects of 38 MW capacity have been commissioned uptill FY 2015-16 thereby making the total capacity of small hydro projects as 132 MW, which contribute to non-solar RPO by PSPCL. Keeping in view the shortfall in the non solar RPO, PEDA carried out competitive bidding twice, in November, 2013 and February, 2014 for setting up of 300 MW biomass power projects, but no response to the same was received. Thereafter, in September, 2015, PEDA, under Phase-I, invited proposals from developers for setting up 200 MW 100% rice straw based biomass power projects, against which 30 MW capacity could be allocated in February, 2016, which is scheduled to be commissioned in 24 months from the date of signing of the PPAs. PEDA also invited proposals, under Phase-II, for allocation of 200 MW capacity for setting up of 100% rice straw based biomass power projects in May, 2016 and out of the same, 152.50 MW capacity has been allocated to successful developers, which is scheduled to be commissioned in 24 months from the date of signing of the PPAs. Similarly, under Phase-III, PEDA invited proposals for allocation of 100 MW capacity for setting up of 100% rice straw based biomass power projects which is under process. Earlier, fewer projects came up as investors had shown lesser interest due to difficulty being faced by the

existing plants in the arrangement of respective biomass fuel and the projects being typical in nature. PEDDA, in its reply, requested to decide the matter as deemed fit by the Commission.

- iii) The MGIA in its suggestions/objections dated 21.11.2016 submitted that PEDDA has no control on the generation of NRSE projects and cannot be blamed for less generation. PSPCL failed to operationalize 18 MW MHP & other Micro Hydel Projects and has not been able to run its UBDC projects at optimum capacity. PEDDA/PSPCL are equally responsible for non-compliance of RPO. Keeping in view, the various NRSE projects likely to come up in the State, the RPO in the current year and ensuing years is likely to be met. Purchasing REC's for RPO compliance would increase the ARR of PSPCL, which would affect the tariff of industrial consumers. Therefore, PSPCL may be allowed to carry forward the shortfall in RPO compliance to the next year in the interest of the consumers.

The PHDCCI in its suggestions/objections dated 25.11.2016 made identical submissions to that of MGIA as summarized above.

The Commission in the various review meetings taken with PSCL and PEDDA constantly exhorted them both to make all out efforts to comply with the RPO specified by the Commission in the RPO Regulations. The suggestions made by MGIA & PHDCCI with regard to allowing PSPCL to carry forward the shortfall in RPO compliance to the next year would

be considered by the Commission keeping in view the likely commissioning of various NRSE projects in near future, relevant provisions in the RPO Regulations and various submissions made by PSPCL.

iv) IWPA vide its objections dated 24.11.2016 has objected the carry forward of the shortfall in RPO compliance. In summary, IWPA submitted that PSPCL has failed to comply with the directions of the Commission regarding RPO compliance. IWPA further submitted that even as per Hon'ble APTEL judgment dated 16.04.2015 in Appeal No. 258 of 2013 and Appeal no. 21 & IA no. 28 of 2014, the petitioner is required to purchase RECs which is deemed as purchase of energy from RE sources for RPO compliance. The relevant part of the aforesaid Hon'ble APTEL Order as submitted by IWPA is as below:

“71. Summary of our finding:

(i) The National Tariff Policy and the Regulation of the Central Commission and the State Commission recognize REC as valid instrument for fulfilling Renewable Purchase Obligation cast upon the obligated entities under Section 86(1)(e) of the Electricity Act, 2003. Purchase of REC would be deemed as purchase of energy from renewable energy source for fulfilling RPO obligation.”

IWPA further submitted that the petitioner has been allowed to carry forward the RPO shortfall for the previous three consecutive years. Strict action is required to be taken against the defaulting obligated entities as per the provisions of the RPO Regulations.

In the rejoinder dated 22.12.2016 to the objections of IWPA, PSPCL submitted that the reliance on the decisions of Hon'ble

APTEL in its judgment dated 16.04.2015 in Appeal no. 258 of 2013 and Appeal no. 21 & IA no. 28 of 2014 is misplaced. After the above decision, a clarification was sought from Hon'ble APTEL in regard to the cases in which such relaxation/revision of RPO targets could be made. The said application being IA No. 187 of 2015 in Appeal no. 258 of 2013 and 21 of 2014 was disposed of by Hon'ble APTEL as under:

“We feel that in the present case where we have described various conditions under which the Commission may revise RPOs targets, it is necessary for us to give the clarification regarding implementation of the judgment without any way changing the findings in the judgment. We, therefore, clarify that in case the State Commission decides to revise targets due to inadequate capacity addition in the State the same may be done keeping in view overall availability of renewable energy resources in the State and other relevant factors and after hearing all concerned and not merely on the basis of actual RPO achievement by the various entities. With this clarification the application is disposed of.”

PSPCL submitted that it is seeking the carry forward of shortfall in RPO because it attempted to procure electricity in physical form so that the consumers at large stand benefited. It did not formally fulfill the RPO by purchasing RECs as it only results in revenue expenditure without any benefit of electricity or capacity building in the State. It is in the interest of State if renewable energy is procured instead of RECs as sufficient capacity of the same is being built up in

the State in near future. PSPCL also submitted that it has complied with the RPO for FY 2014-15 upto 31.12.2015 as allowed by the Commission.

The Commission is of the view that PSPCL approached it by way of filing the petitions in the last three consecutive years praying for carry forward of RPO for the respective years to the next year due to the genuine difficulties faced by it in complying with the RPO specified by the Commission. The Commission allowed the RPO carry forward as per the provisions in its RPO Regulations while considering the genuine difficulties faced by PSPCL as detailed in the relevant Orders of the Commission in this regard. PSPCL complied with the RPO within the stipulated time as allowed by the Commission in the respective Orders in petition no. 36 of 2013, 34 of 2014 & 38 of 2015. Accordingly, RPO specified by the Commission upto FY 2014-15 stands complied with by PSPCL as on 31.12.2015 as submitted by PSPCL.

The Commission notes that on perusal of Hon'ble APTEL judgment dated 16.04.2015 in Appeal No. 258 of 2013 and Appeal no. 21 & IA no. 28 of 2014, it emerges that the main issue involved in the aforesaid appeal pertained to revision/waiver of RPO in the context of the relevant Regulations of Gujarat State Electricity Regulatory Commission, whereas the present petition pertains to the carry forward of shortfall in RPO compliance for the year 2015-16 to 2016-17. The relevant provision to Regulation 9 of Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010, which is pari materia to Regulation 6(2) of Punjab State Electricity

Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011, runs as under:

“Provided that in case of any genuine difficulty in complying with the renewable purchase obligation because of non-availability of power from renewable energy sources or the RECs, the obligated entity can approach the Commission to carry forward the compliance requirement to the next year:”

The relevant provision in Regulation 6(2) of the PSERC RPO Regulations, 2011 is as under:

“6(2) Where any obligated entity fails to comply with the obligation to purchase the required percentage of electricity from renewable energy sources or the renewable energy certificates, it shall also be liable for penalty as may be decided by the Commission under section 142 of the Act;

Provided that in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates or otherwise, the obligated entity can approach the Commission for carrying forward of compliance requirement to the next year”

It can be safely inferred from above that in the case of aforesaid Gujarat Regulations, genuine difficulty in complying with the RPO is confined to non availability of power from renewable energy sources or the RECs only, whereas, in Punjab RPO Regulations, genuine difficulty in complying with the renewable purchase obligation covers non-availability of certificates (RECs) or ‘otherwise’.

Besides the aforementioned provisions under Regulation 6(2) of the PSERC RPO Regulations, 2011, it is further provided thereunder:

“.....

Provided that on being so approached, the Commission may review the fulfillment of the renewable purchase obligation by the obligated entity, keeping in view its performance and allow the shortfall to be carried forward to the next year in addition to the renewable purchase obligation for that year. At the end of 3 years period, the Commission may, if deemed appropriate, review the fulfillment of renewable purchase obligation by the obligated entity and pass suitable order(s).”

Further para 6.4 of the Revised Tariff Policy notified by Govt. of India on 28.01.2016, provides that pursuant to provisions of section 86(1)(e) of the Act, the appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, ‘taking into account availability of such resources’ and ‘its impact on retail tariffs’. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs.

As regards provision of an amount of ₹ 84 crore for purchase of RECs to fulfill the shortfall in RPO compliance in the Tariff Order of PSPCL for FY 2015-16, PSPCL submitted that it could not purchase the RECs for RPO compliance due to funds constraint in the last six months of FY 2015-16. The plea of PSPCL in this regard is corroborated by the following facts:

- a) The Commission in the Tariff Order of PSPCL for FY 2016-17 determined the subsidy payable to PSPCL by Govt. of Punjab for FY 2015-16 as ₹ 5872.80 crore (inclusive of interest on delayed payment of subsidy) against which Govt. of Punjab paid subsidy of ₹ 4847.00 crore. As such, there was shortfall of ₹ 1025.80 crore in subsidy payment by GoP during FY 2015-16.
- b) PSPCL in the 'Balance Sheet as at 31st March 2016 (provisional)' submitted in the Aggregate Revenue Requirement & Tariff Petition upto FY 2016-17 and MYT Petition for the Control Period from FY 2017-18 to FY 2019-20 has shown ₹ 2398.14 crore as 'Trade Payables' as at 31.03.2016, which includes liability for purchase of power as ₹ 1671.86 crore.

Thus, there appears a genuine funds constraint faced by PSPCL during FY 2015-16 and the Commission tends to agree with the same.

The Commission notes that total power purchase/generation from renewable sources during FY 2015-16 comes to 1469.66 MU [1083.18 MU (Non-Solar) and 386.48 MU (Solar)]. PSPCL has submitted that out of this 772.57 MU of Non-Solar and 1.68 MU of Solar power has been accounted for meeting the shortfall in RPO compliance for FY 2014-15 allowed by the Commission to be carried forward to FY 2015-16 and remaining 695.41 MU [(310.61 MU (Non-Solar) and 384.80 MU (Solar))] are to be accounted towards the RPO compliance for FY 2015-16. The

energy input of PSPCL for FY 2015-16 in its area of distribution of electricity is 46389 MU as approved by the Commission in the Tariff Order dated 27.07.2016 for PSPCL for FY 2016-17. The shortfall in power from renewable energy sources for complying with the RPO for FY 2015-16 which has been specified as 4.9% i.e. 2273.06 MU [3.9% (1809.17 MU) (Non-Solar) and 1% (463.89 MU) (Solar)] comes to 1577.65 MU [1498.56 MU (Non-Solar) and 79.09 MU (Solar)].

The Commission observes that the major reasons for the shortfall in RPO compliance brought out as above and in the petition are as under:

- a) Delay in commissioning of the new NRSE Projects by the developers resulting in slippage of capacity addition of 319.70 MW (Non-Solar 139.70 MW, Solar 180 MW). Targets projected by PEDDA for capacity addition for FY 2015-16 were 145.10 MW for Non-Solar projects and 411 MW for Solar projects. As against above projected capacity addition, only 5.40 MW capacity has been added for Non-Solar projects and 231 MW for Solar projects.
- b) RECs of ₹ 84 crore could not be purchased due to alleged financial constraints faced by PSPCL.
- c) The projects in operation did not generate RE power as per their full capacity. The existing NRSE projects generated 1083 MU against the expected generation of 1592 MU resulting in shortfall in RPO compliance of FY 2015-16.
- d) Cancellation of the NRSE projects by PEDDA, which were to contribute towards fulfillment of RPO targets. Non-solar projects of 58 MW capacity were cancelled by PEDDA.

- e) **The following NRSE projects being developed/refurbished by PSPCL are in the process of being commissioned and were expected to be commissioned in FY 2015-16 but their date of commissioning rolled over to FY 2016-17:**
- i) 18 (2 x 9) MW MHP Stage-II, Distt. Hoshiarpur**
 - ii) 4 nos. micro hydel power projects with total capacity of 3.9 MW**
 - iii) 10 MW rice straw based power project at Jalkheri**

The Commission further observes as under:

- a) The Commission allowed the carry forward of shortfall in RPO compliance every year in the last three years to the next year, which PSPCL complied within the period as allowed by the Commission in the respective orders. As such, the RPO shortfall requested by PSPCL to be carried forward to FY 2016-17 pertains to FY 2015-16 only and not cumulative for the previous three consecutive years.**
- b) One unit out of 2 x 9 MW, MHP Stage-II project in district Hoshiarpur is likely to be operationalized by 31.03.2017 and the second unit by next year. Further, micro-hydel projects of 3.9 MW are likely to be operationalized by March, 2018, which would contribute around 55 MU towards generation of non-solar RE power.**
- c) PEDDA allocated 30 MW and 152.5 MW, 100% rice straw based biomass power projects, under phase-I and phase-II respectively for which implementation agreements have been signed by PEDDA. These projects are likely to come up in the next 1½ years. The normative PLF of such project is 60% during first 6 months of operation, 70% during remaining 6 months of the first year of operation and 80% thereafter as per CERC RE Tariff Regulations, 2012 duly adopted by the Commission and these projects are likely to contribute 1040 MU (approx.) in the first year and thereafter**

1270 MU (approx.) per year towards non-solar RPO compliance by PSPCL. Further, PEDDA is in the process to allocate another 70 MW 100% rice straw based power projects under phase-III, which are likely to contribute additional 490 MU (approx.) per year towards non-solar RPO compliance by PSPCL.

- d) As per the information submitted by PEDDA in various other matters to the Commission, the solar capacity by the end of March, 2017 would be around 1054 MW. This capacity would contribute around 1750 MU per year towards solar RPO compliance by PSPCL.**

As viewed by the Commission earlier also, PEDDA in so far as follow up with developers for timely execution/commissioning of the allotted projects is concerned, has not been able to perform upto the mark. Definitely more efforts are required to be made by PEDDA in this regard. PEDDA needs to ensure that new projects in pipeline are commissioned in time. PEDDA needs to investigate reasons for less generation from existing NRSE projects and take necessary measures. Further, it is advised that PEDDA and PSPCL have to work in tandem, being right and left arm of the GoP in so far as NRSE matters are concerned, so as to achieve the desired targets.

The Commission notes that PSPCL has been making efforts to operationalize the plants lying closed for the last many years. The micro-hydel projects at Thuhi, Nidampur and Daudhar have been allocated by PSPCL on ROT basis (Renovate-Operationalize-Transfer). These projects are expected to be operationalized by December, 2017. Efforts are being made by PSPCL to award the Rohti micro-hydel project on similar pattern.

One unit out of 2 x 9 MW, MHP Stage-II project in District Hoshiarpur is near commissioning and second unit also is likely to be commissioned soon. It is learnt that PSPCL is also considering to operationalise the 10 MW rice straw based biomass power project at Jalkheri, lying un-operational for last many years.

The Commission also notes that PEDDA allocated 30 MW and 152.5 MW 100% rice straw based biomass power projects under phase-I and phase-II and 70 MW 100% rice straw based biomass power projects are likely to be allocated under phase-III thereby making the total capacity allocated of such projects under non-solar category as 252.5 MW. The Commission has recently determined the tariff for 100% rice straw based biomass power projects vide its Order dated 23.11.2016 in petition no. 55 of 2016 (Suo-Motu) due to which PEDDA has been successful in signing IAs for 118.5 MW and is in the process of signing IAs for the balance capacity of 64 MW. PSPCL is in process of signing the PPAs for the aforesaid projects of 118.5 MW capacity with the respective developers. These projects of 252.5 MW are likely to contribute approximately 1760 MU (approx.) per year towards non-solar RPO compliance by PSPCL. Also sufficient solar capacity has been added which is likely to touch 1054 MW by 31.03.2017 and would contribute around 1750 MU per year towards solar RPO compliance by PSPCL.

The Commission duly acknowledges its directions with regard to compliance of RPO by PSPCL in the same year in its Order dated 28.07.2015 in petition no. 38 of 2015. However, the

Commission feels, PSPCL faced numerous hurdles in RPO compliance during FY 2015-16 i.e. slippage of substantial capacity addition by the developers as projected by PEDDA and cancellation of projects by PEDDA, existing projects not generating to their optimum capacity and PSPCL's own small/micro hydel projects getting delayed in commissioning/refurbishment, notwithstanding substantial funds constraints to the tune of ₹ 1025.80 crore on account of non-payment of subsidy by GoP and ₹ 2398.14 crore as 'Trade Payables' which includes ₹ 1671.86 crore liability for purchase of power during FY 2015-16.

Furthermore, a substantial capacity of 252.5 MW is being contracted by PEDDA/PSPCL for 100% rice straw based biomass power projects out of which 118.5 MW has already been contracted by PEDDA. These projects are likely to come up in the next 2-3 years in addition to the capacity already in the pipeline/under execution. Also, PSPCL's 2 x 9 MW MHP Stage-II Project is likely to be commissioned next year besides refurbishment of 3.9 MW micro hydel projects of PSPCL. This is likely to generate additional 55 MU (Non-Solar) considering the normative capacity utilization factor of 30% for such projects. As regards solar capacity, the same is likely to be 1054 MW by 31.03.2017 as per reports submitted by PEDDA from time to time, which would be sufficient enough to meet with the Solar RPO, rather more.

The Commission notes that under the 1st and 2nd provisos of Regulation 6(2) in the RPO Regulations, 2011, it is provided

that in case of genuine difficulty in complying with the RPO because of non-availability of RECs or otherwise, the Obligated Entity, can approach the Commission for carrying forward of the compliance requirement to the next year and the Commission may review the fulfillment of the RPO, keeping in view its performance, and allow the shortfall to be carried forward to the next year in addition to the RPO of that year.

The Commission opines that difficulties faced by PSPCL including the substantial funds constraints as brought out above during FY 2015-16 were genuine and beyond the reasonable control of PSPCL. Also, in the opinion of the Commission the development with regard to allocation/contracting sufficient non-solar capacity by PEDA/PSPCL likely to come up in next 2 to 3 years and more than sufficient solar capacity likely to be in place by 31.03.2017, as brought out above, is quite encouraging.

In view of the above, the Commission is inclined to allow the prayer of PSPCL to carry forward the shortfall in RPO compliance of FY 2015-16 to FY 2016-17. Accordingly, the Commission allows PSPCL to carry forward the shortfall in RPO compliance of 1577.65 MU [1498.56 MU (Non-Solar) and 79.09 MU (Solar)] for FY 2015-16 to FY 2016-17, failing which further action as per Regulations may be initiated. This shall be in addition to the RPO compliance for FY 2016-17 specified in the RPO Regulations, 2011 read with Amendment-1 notified by the Commission on 06.05.2015.

It would not be out of place to point out that the Commission has initiated suo-motu proceedings in petition no. 8 of 2017 in the matter of compliance of renewable purchase obligation and related/consequential matters for review and comprehensive action.

PSPCL and PEDDA are directed to continue to forthwith submit the RPO compliance (Non-Solar and Solar) at the end of each quarter of the year in the first week of the month following that quarter.

The petition is disposed of in terms of above.

Sd/-

**(S.S. Sarna)
Member**

Sd/-

**(D.S. Bains)
Chairman**

Chandigarh
Dated: 21.03.2017