

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

**Petition No. 51 of 2017**

**Date of Order:16.03.2018**

Present: Ms. Kusumjit Sidhu, Chairperson  
Sh. S.S. Sarna, Member  
Ms. Anjali Chandra, 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 Punjab State Electricity Regulatory Commission (RPO & its Compliance) Regulations, 2011 framed by the Commission for carrying forward of shortfall of Renewable Purchase Obligation (RPO) for FY 2016-17 specified in clause 3 (1) to FY 2017-18.

AND

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

...Petitioner

Versus

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

...Respondent

**ORDER**

Punjab State Power Corporation Limited (PSPCL) has filed the present petition for carry forward of the net shortfall in RPO targets for FY 2016-17 of 2354.33 MUs Non-Solar of the RPO compliance shortfall to FY 2017-18 and adjustment of surplus of 171.37 MUs of Solar against

Non-Solar shortfall. The petition was admitted vide order dated 03.10.2017. Punjab Energy Development Agency (PEDA) being a necessary party was ordered to be arrayed as respondent. The respondent was directed to file reply by 16.10.2017 and the petitioner was directed to file rejoinder, if any, by 06.11.2017. PEDA submitted written statement vide letter no.6384-86 dated 16.10.2017. Public Notice dated 14.12.2017 was published by PSPCL inviting suggestions and objections of various stakeholders on the said petition along with the intimation regarding the date of public hearing to be held on 24.01.2018 in the Commission. However, no suggestion / objection was received from any stakeholder. After hearing the parties on 24.01.2018, order was reserved vide order dated 01.02.2018.

1. The petitioner has submitted, in brief, as under:
  - a) The Commission notified the Punjab State Electricity Regulatory Commission (Renewable Purchase Obligation and its Compliance) Regulations, 2011 wherein the RPO requirements for the obligated entity for the years 2011-12 onwards were specified.
  - b) The said regulations provide for the procedure, target and manner of fulfillment of RPO and the relevant regulations for the instant petition are Regulation 2 (Definitions and Interpretation), Regulation 3 (Renewable Purchase Obligation) , Regulation 6 (Effect of Default), Regulation 7 (Inherent Powers of the Commission).
  - c) The RPO obligation as per the RPO Regulations, for the year 2016- 17 was 5.4 % out of which 1.3 % was Solar Power and 4.1 % was Non- Solar Power (total 5.4 %). PSPCL experienced difficulties to achieve the said target in order to ensure the compliance of the RPO targets, within the same year.

- d) The Commission with respect to the same has permitted 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 vide order dated 21.03.2017.
- e) PSPCL has taken the initiatives for meeting the targets which are as follows–
- i) A tender was called in December 2016 to procure renewable energy on short term basis from sources outside the State of Punjab. Response for the period Dec 2016 to March 2017 was not received and for the period of May 2017 to Sep 2017 was received to which PSPCL has issued Letter of Intent (LOI) to purchase the RE Power (Non Solar) 50 MW each from M/s NWNL & M/s APPCPL.
  - ii) PSPCL participated in a tender called by HPSEBL to sale RE Power (Non- Solar) and LOI was issued by HPSEBL to sale of RE Power from May 2017 to September 2017 .
  - iii) PSPCL has procured 926.31 MUs against the Target of 675.86 MUs in FY 2016-17.
  - iv) For Non Solar ,PSPCL had procured 1209.11 MUs from Pvt. Developers and from its own projects.
- f) PSPCL has been purchasing all the NRSE power which is offered to it by projects developed through PEDDA and a total of 10.7 MW of Non Solar Projects against 59.8 MW as projected by PEDDA are expected to be commissioned by 2016-17. However, there has been a shortfall in the actual delivery of RE to PSPCL resulting into constraints in meeting RPO targets.
- g) The reasons for non achievement of the Non Solar targets are as

under:

- i) that there is a delay in commissioning of the new NRSE Projects by developers resulting into slippage of capacity addition;
  - ii) some projects were due for commissioning, projects in operation were not generating RE power as per their full capacity;
  - iii) cancellation of NRSE projects by PEDDA considered for RPO targets;
  - iv) generation from existing NRSE Projects was less as compared to the expected generation being one of the reasons for the shortfall in the RPO for the FY 2016-17;
  - v) PSPCL was undergoing financial constraints and could not purchase Non Solar RECs for the shortfall for an amount of Rs. 242 crores. However, RECs equivalent to 66.67 MUs of Rs. 10 crores (app) was purchased from PXIL.
- h) The total RPO shortfall is of 855.77 MUs Non Solar & RPO surplus for 250.46 MUs Solar MUs (excluding the carry forward to FY 2015-16) and the net shortfall for the FY 2016-17 after considering the carry forward for the FY 2015-16 is 2354.33 MUs of Non Solar and net surplus of 171.37 MUs of Solar.
- i) That many of the expected renewable projects being developed by PSPCL are in process of being commissioned. However, date of commissioning of some of the projects has rolled over to the next year for the reasons beyond the control of PSPCL. These include as under:
- i) Commissioning of 18 (2x9) MW MHP stage-II, District

Hoshiarpur – All the material has been reached at site. However, due to some technical problem, the same has not been commissioned so far. The connection of head race of power house with main channel has been completed. Second unit of 2x9 MW of the project has been commissioned on 19.05.2017;

- ii) 4 Micro Hydrel Project – PPAs have been signed with Kotla Hydro Power Private Limited for 3 projects. As per PPAs the work of renovation has to be completed within 12 months. It is expected that all the three units shall put on bar by December, 2017. Negotiations for 4<sup>th</sup> project are also going on.
  - iii) Revival of the 10<sup>th</sup> MW Rice Straw based project at Jalkheri – PSPCL has assigned the work of renovation, operation and transfer (ROT) basis to SE/Civil Hydrel Design, PSPCL, Chandigarh. Request for proposal (RfP) for inviting tenders to lease out the project is prepared. As per the stipulation of RfP, the successful bidder is required to execute PPA with PSPCL for sale of power on re-commissioning of this project.
- j) PSPCL has acted bonafidely to procure renewable power and has complied with previous carry forward of RPO obligation and the shortfall created only was due to the factors beyond the control of PSPCL. A substantial capacity has been tied up through PPAs though the actual availability of electricity has turned out to be much less for the year 2015-16 resulting in the shortfall.
- k) The petitioner has prayed to:
- i) Carry forward the “Net Shortfall in RPO targets for FY 2016-17 of 2354.33 MUs Non Solar of the RPO compliance

shortfall to FY 2017-18”.

- ii) The surplus of 171.37 MUs of Solar may be adjusted against Non Solar Shortfall.

The petition was admitted vide Order dated 03.10.2017 wherein Punjab Energy Development Agency (PEDA) was impleaded as respondent being a necessary party. Accordingly, notice was issued to PEDA.

2. PEDA has submitted its reply, in brief, as under:

- a) That PEDA does allocate RE projects while seeking inputs from PSPCL being a member of Project Allotment Committee (PAC), and PEDA has communicated to PSPCL about the fact that before inviting the proposals for setting up the biomass projects, for promotion of RE and for fulfillment of non solar RPO to send amendments to the PPA, if any, as the PPA shall form part of the RFP. Accordingly, the successful developers were allocated the projects on the basis of the terms and conditions in RFP. Further, Implementation Agreements were signed by PEDA with the successful developer. The power for the projects is to be purchased by PSPCL hence they were required to enter into PPA with the successful developer. Non signing of PPA by PSPCL has had an adverse effect and has discouraged the project developers to invest in the RE sector despite great efforts by PEDA.
- b) That despite being well aware about PEDA being a Nodal Agency for monitoring the RPO compliance in the State of Punjab, it has failed to supply complete data with regard to its RPO compliance.
- c) That apart from Phase- I & II RFP, PEDA had also invited bids

under Phase- III for 100 MW capacity, which PEDDA was constrained to cancel as PSPCL had categorically stated in their communication that since there is huge surplus power with PSPCL therefore there was no need for costly RE Power (Non Solar) to be added in PSPCL system despite huge non solar RPO shortfall of 2354 MU which is very well known to PSPCL.

- d) That due to this irrational attitude of PSPCL of not even accepting power from the projects attempted to be brought to light by PEDDA in concurrence with PSPCL is totally unjustified which is discouraging the Biomass sector as a whole. Further, the reluctance of PSPCL to purchase Power from the project developers who had entered IAs with PEDDA after allocation in concurrence with PSPCL under Phase-II, some of the project developers have taken refund from PEDDA of their deposits as made under RFP/ allocation.
- e) That in case PEDDA suffers any loss/ litigation due to non signing of PPA's by PSPCL to purchase RE power from the developer of the allocated projects in concurrence with PSPCL , the Petitioner PSPCL itself shall be liable for the same which means that the petitioner's conduct is such that the contentions made by PSPCL for purchasing all NRSE power offered to it by the projects allocated by PEDDA is a complete fallacy in itself and mockery of RPO notification despite regular carry forward of shortfalls being allowed for the last 3-4 years by the commission .
- f) That the projections as to the capacity of 34.35 MW capacity projected in the small hydro includes 18 MW capacity on Mukerian Hydel Channel – II is under implementation agreement with PSPCL since last more than 12 years, out of which NIL capacity

was added during the FY 2016-17. However, out of the same, on 19.05.2017 one unit of 9 MW capacity stands commissioned and the second unit is yet to be commissioned by PSPCL. Further PSPCL is not rendering concurrence for the procurement of power generated through Waste to Energy projects and has declined two projects of 5 MW and 1.5 MW based on biogas power generation from paddy straw and cattle dung respectively, which is apparent from the fact that PSPCL vide its communication dated 27.9.2017 has categorically stated that it is not willing to purchase power at the generic tariff for biogas power projects which presently is Rs. 7.56/unit and rather can purchase power only at Rs. 3.47/unit, which is totally unwarranted and un-called for. This tariff is not even APPC which is Rs 3.82/unit and non solar REC is Rs.1.50 / unit. PSPCL has no power to deny the Generic Tariff for RE projects which is total violation of the RE Tariff Regulations & also sections 61, 66, 86(1) (e) and 181 of the Electricity Act, 2003.

- g) That on one hand PSPCL is banking upon to purchase power in physical form and on the other hand they had unilaterally terminated PPAs of 14 MW biomass projects allocated by PEDDA during the year 2007-08, which were on the verge of completion/ commissioning. As per the information provided by the developer huge investments to the tune of crores of rupees have already been made by the developer in the same and after unilateral termination of the PPA by PSPCL, the developer has been left with no alternative for sale of power leading to loss of investment in RE sector. These 14 MW projects would have contributed approx. 84 MUs of RE power per annum which would have also been counted toward the RPO of PSPCL. Further, it is submitted that on one side



PSPCL on its own without informing PEDDA that is the allocating agency, has terminated the PPAs of 14 MW biomass projects despite the fact that the IAs qua the same are alive, on the other hand has kept alive its own 18 MW project on Mukerian Hydrel Channel-II under development since 2004-2005. It is also brought out that PSPCL had allocated and signed IA cum PPA for 12 nos. of Rice Straw Thermal Power Projects (RSTPP) of 12 MW each in the year 2003-04 and only one of 12 MW capacity namely Punjab Biomass Power Pvt. Ltd. at village Bhaguara, Distt Patiala was commissioned. The remaining 11 projects of total capacity of 132 MW till date have not been completed and neither these projects are cancelled by PSPCL till date, on the other hand 14 MW biomass projects which are on the verge of commissioning / completion have been cancelled by PSPCL. These 132 MW projects if commissioned would have contributed 800 MUs approx of non solar RE power for RPO fulfillment for the FY 2016-17.

- h) That PSPCL is discouraging addition of new solar RE power such as Biomass, Biogas, Waste Energy etc while purporting that the PLF of existing plants is low as compared to the expected one. PSPCL has not been restrained to purchase new RE power in case of low PLF of the existing plants. Further, PSPCL only has to pay for the units supplied by the projects and in case of low PLF, PSPCL is not compelled to pay for the units not generated by the project developer. In fact the IPP whose business is primarily to earn through sale of power would never want to under utilize the capacity of the project and in case the capacity remains unutilized the same is causing loss to the project developer and not to the PSPCL. Further, the PPAs entered by PSPCL with the biomass

project developers nowhere stipulate / compel the project developers to generate specific number of units in a year/minimum PLF, rather PPA only provides the per unit tariff for sale of power supplied, as at the time of entering into PPA, PSPCL itself is well aware of the fact that the biomass is a difficult sector and the generation depends upon various factor which are variable in nature and the PLF of these projects keeps on varying and cannot be fixed due to collection and organizing of bio mass fuel from the un organized sector both on account of variability in GCV & price. The RSTP project allocated by PSPCL itself to Punjab Biomass is having a PLF of 30-35 % only.

- i) That PSPCL is bound to comply with the RPO and is not at all entitled for the carry forward of the same to FY 2017-18. In fact PSPCL for the past four years together has been filing similar petitions seeking carry forward of RPO to the next year. However, it has failed to meet with the RPO fixed for every year and the non compliance/ shortfall is increasing tremendously each year. In fact, PSPCL has made it a consistent practice of getting the shortfall of RPO carry forwarded to the next year so as to circumvent the penal provisions under the RPO Regulations.

### **Commission's Observations, Findings and Decision**

The Commission has carefully gone through the petition and reply of PEDDA. The observations, findings and decision of the Commission are as hereunder:

- i) PSPCL submitted that in terms of RPO Regulations, the RPO obligation for FY 2016-17 was 4.1% (Non-Solar) and 1.3% (Solar). The Commission vide Order dated 21.03.2017 in Petition No. 61 of 2016 allowed PSPCL to carry forward the shortfall in RPO

compliance of 1498.56 MUs (Non-Solar) and 79.09 MUs (Solar) for FY 2015-16 to FY 2016-17. PSPCL submitted that it purchased 1275.78 MUs Non-Solar renewable energy including Non-Solar RECs equivalent to 66.67 MUs and 926.31 MUs Solar energy in FY 2016-17. PSPCL further submitted that the cumulative shortfall in Non-Solar RPO compliance in FY 2016-17 is 2354.33 MUs after accounting for the shortfall of FY 2015-16 allowed to be carried forward by the Commission to FY 2016-17. PSPCL submitted that the Solar RPO compliance is surplus to the tune of 171.37 MUs in FY 2016-17. PSPCL submitted that it is purchasing all the NRSE power which is offered to it by projects developed through PEDDA. However, only 10.7 MW of Non Solar NRSE Projects developed through PEDDA were commissioned against 59.8 MW as projected by PEDDA in FY 2016-17. PSPCL further submitted that major reasons for shortfall in RPO targets for FY 2016-17 are delay in commissioning of the new NRSE Projects, cancellation of NRSE projects by PEDDA considered for RPO targets and less generation from existing NRSE Projects as compared to the expected generation. PSPCL further submitted that many of the renewable energy projects being developed by it are in the process of being commissioned and in case of few projects the date of commissioning has been rolled over to the next year for reasons beyond its control. These projects would have contributed 877 MUs if the same were commissioned by FY 2016-17. PSPCL submitted that after excluding the carry forward of FY 2015-16, there has been a shortfall of 855.77 MUs in Non-Solar RPO compliance and surplus of 250.46 MUs in Solar RPO compliance pertaining to FY 2016-17. The primary obligation and endeavor of PSPCL is to procure renewable energy in physical form although

the PSERC Regulations provide for RPO compliance by the alternative mechanism of purchase of RECs. PSPCL further submitted that it was facing financial constraints for the past couple of months of FY 2016-17 and could not purchase Non-Solar RECs for the shortfall for an amount of Rs.242.00 crore and RECs of only Rs.10.00 crore (equivalent to 66.67 MU Non-Solar RE power) could be purchased. PSPCL submitted that 2571 MUs Non-Solar power is expected to be available from all sources against the target of 2354 MUs in FY 2017-18. PSPCL further submitted that the Commission has the powers to revise the RPO targets under Regulation 3(2) of RPO Regulations or allow the carry forward of the shortfall under Regulation 6(2) of the RPO Regulation without relaxing the RPO targets. PSPCL has requested for carry forward of the net shortfall in RPO targets for FY 2016-17 of 2354.33 MUs (including the balance shortfall of FY 2015-16 which was not fully complied with in FY 2016-17) and adjustment of surplus of 171.37 MUs of Solar RPO against Non-Solar RPO shortfall.

PSPCL further submitted that it has taken necessary steps to procure renewable energy for RPO compliance and sought to procure renewable energy on short term basis from the sources outside the State of Punjab. PSPCL submitted that it has issued Letter of Intent (LOI) to purchase RE Power (Non-Solar) 50 MW each from NVVNL & APPCPL on short term basis from which it will get 370 MUs during FY 2017-18. HPSEBL issued LOI for sale of RE Power (Non- Solar) from May 2017 to September 2017 to PSPCL against which PSPCL is expected to receive 775 MUs.

- ii) PEDA submitted that it allocates RE projects while seeking inputs from PSPCL being a member of Project Allotment Committee (PAC). After following the due process, Implementation

Agreements were signed by PEDDA with the successful biomass power project developers but PSPCL is shying away to enter into PPAs with these developers. PEDDA has allocated 30 MW capacity under phase-I and 127.5 MW capacity under phase-II. PEDDA also invited bids under Phase-III for 100 MW capacity, which it was constrained to cancel as PSPCL despite having Non-Solar RPO shortfall informed that there is no need for costly RE Power (Non Solar) to be added in its system due to huge surplus power available with it. PEDDA submitted that PSPCL's contention that it purchases all NRSE power offered to it by PEDDA is not correct. As per the projections for FY 2016-17, 34.35 MW capacity projected in the small hydro category includes 18 MW capacity of Mukerian Hydel Project-II which is under implementation since last more than 12 years. One unit of 9 MW of this project was commissioned on 19.05.2017 and second unit is yet to be commissioned. PEDDA submitted that 12.40 MW Non-Solar capacity was added during FY 2016-17. PEDDA further submitted that PSPCL is not willing to procure power generated from Waste to Energy projects and has declined two projects of 5 MW and 1.5 MW based on biogas power generation from paddy straw and cattle dung respectively. PSPCL informed PEDDA that, it is not willing to purchase power at the generic tariff for biogas power projects which is Rs. 7.56 per unit and can purchase power only at Rs. 3.47 per unit. PEDDA submitted that this tariff is not even Average Power Purchase Cost (APPC) which is Rs 3.82 per unit and Non-Solar REC is Rs.1.50 per unit. PEDDA submitted that PSPCL has unilaterally terminated PPAs of 14 MW biomass projects allocated by PEDDA during the year 2007-08, which were on the verge of completion / commissioning. These 14 MW projects would have contributed

approx. 84 MUs of Non-Solar RE power per annum. PEDDA submitted that PSPCL had allocated and signed IA cum PPA for 12 nos. of Rice Straw Thermal Power Projects (RSTPP) of 12 MW each in the year 2003-04 and only one project of 12 MW capacity was commissioned. The remaining 11 projects of total capacity of 132 MW have neither been completed nor cancelled by PSPCL till date. These 132 MW projects, if commissioned, would have contributed 800 MUs approx. of Non-Solar RE power for RPO fulfillment for FY 2016-17. PSPCL is bound to comply with the RPO and is not entitled for the carry forward of the same to FY 2017-18.

PEDDA further submitted that as per the directives issued by Hon'ble APTEL in Judgment dated 20.04.2015 in O.P. No. 1, 2 and 4 of 2013, the carry forward / review of RPO should be allowed strictly as per provisions of the Regulations. The relevant extract of the Judgment is as under:-

“28.....

*iv) The State Commission shall give directions regarding, carry forward/ review in RPO and consequential order for default of the distribution licensees / other obligated entities as per the RPO Regulations. If the Regulations recognize REC mechanism as a valid instrument to fulfill the RPO, the carry forward / review should be allowed strictly as per the provisions of the Regulations keeping in view of availability of REC. In this regard the findings of this Tribunal in Appeal No. 258 of 2013 and 21 of 2014 may be referred to which have been given with regard to RE Regulations of Gujarat Commission but the principles would apply in rem. In case of default in fulfilling of RPO by obligated entity, the penal provision as provided for in the Regulations should be exercised.*

.....”

Keeping in view the aforesaid submissions of PEDA with respect to Hon’ble APTEL Judgment dated 20.04.2015 in O.P. No.1, 2 and 4 of 2013 and Hon’ble APTEL judgment dated 16.04.2015 in Appeal No. 258 of 2013 and Appeal no. 21 & IA no. 28 of 2014, the relevant provision of Regulation 9 of the 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 to Regulation 6(2) of the PSERC (Renewable Purchase Obligation and its compliance) 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 is clear from the above that in case of Gujarat Electricity Regulatory Commission (Procurement of Energy from Renewable Sources) Regulations, 2010, 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 State Electricity Regulatory Commission (Renewable Purchase Obligation and its compliance) Regulations, 2011, genuine difficulty in complying with the renewable purchase obligation covers non-availability of certificates or otherwise.

The Commission notes that it has been provided under para 6.4 of the revised tariff policy notified on 28.01.2016 that pursuant to provisions of section 86(1)(e) of the Electricity Act, 2003 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.

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

“ .....

*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).”***

PSPCL submitted that it could not purchase the RECs for RPO compliance due to funds constraint in the last couple of months of FY 2016-17. The Commission intends to agree with the submissions of PSPCL as its plea in this regard is corroborated by the following facts:

- a) The Commission in the tariff order dated 23.10.2017 of PSPCL for MYT control period from FY 2017-18 to 2019-20 determined the subsidy payable to PSPCL by Govt. of Punjab for FY 2016-17 as ₹ 6906.95 crore (inclusive of interest on delayed payment of subsidy) against which Govt. of Punjab had paid subsidy of ₹ 5600.70 crore. As such, there was shortfall of ₹ 1306.25 crore of subsidy during FY 2016-17.
- b) PSPCL in the ‘Balance Sheet as at 31<sup>st</sup> March 2017’ submitted in the ‘Annual Performance Review (APR) for FY 2017-18 and Revised Estimate for FY 2018-19’ has shown ₹ 2563.47 crore as ‘Trade Payables’ as at 31.03.2017 which includes liability for purchase of power as ₹ 2294.03 crore.

Thus, it appears that a genuine funds constraint was being faced by PSPCL during FY 2016-17 and the Commission intends to agree with the same.

The Commission vide Order dated 21.03.2017 in Petition No. 61 of 2016 allowed PSPCL to carry forward the shortfall in RPO compliance of 1577.65 MUs [1498.56 MUs (Non-Solar and 79.09 MUs (Solar)] for FY 2015-16 to FY 2016-17 which stands trued-up to 1545.24 MUs [1456.08 MUs (Non-Solar) and 89.16 MUs (Solar)] in

the 'True up for FY 2015-16' in the tariff order for PSPCL for MYT control period from FY 2017-18 to FY 2019-20, dated 23.10.2017. Accordingly, the RPO compliance for FY 2016-17 is as under:

Sr. No.	Description	FY 2016-17	
		%	MU
1.	Input Energy (MU)	49929.06 (for Non-Solar)	37271.71 (for Solar)
2.	RPO Specified		
	i. Non-Solar	4.10%	2047.09
	ii. Solar	1.30%	484.53
3.	RE Generation/ purchase (RPO compliance)		
	i. Non-Solar including RECs equivalent 66.66 MU	2.56%	1278.14
	ii. Solar	2.49%	926.32
4.	Previous year's RPO shortfall allowed to be carried forward to next year		
	i. Non-Solar		1456.08
	ii. Solar		89.16
5.	RPO compliance after accounting for carry forward of shortfall of previous year (3-4)		
	i. Non-Solar	(-)0.36%	(-)177.94
	ii. Solar	2.25%	837.16
6.	Net RE shortfall / (surplus) (2-5)		
	i. Non-Solar	4.46% (shortfall)	2225.03 (shortfall)
	ii. Solar	(0.95%) (surplus)	(352.63) (surplus)

The Commission observes that the major reasons for the shortfall in Non-Solar RPO compliance brought out in the petition are as under:

- a) Delay in commissioning of new NRSE projects by the developers resulting in slippage of capacity addition.
- b) Targets projected by PEDDA for capacity addition for FY 2016-17 were 59.8 MW for Non-Solar Projects. As against above projected capacity addition, only 10.7 MW capacity (12.4 MW as per submissions by PEDDA) has been added for Non-Solar projects.

- c) The projects in operation did not generate RE power as per their full capacity.**
- d) Cancellation of the NRSE projects by PEDDA during FY 2015-16 & FY 2016-17, which would have contributed 877 MUs towards fulfillment of RPO targets if the same were commissioned by FY 2016-17.**
- e) The following NRSE projects being developed by PSPCL are in the process of being commissioned and were expected to be commissioned in FY 2016-17 but their date of commissioning has rolled over to FY 2017-18:**
  - i) One unit of 9 MW capacity of 18 (2 x 9) MW MHP Stage-II, Distt. Hoshiarpur.**
  - ii) 4 nos. micro hydel projects with total capacity of 3.9 MW.**
  - iii) 10 MW rice straw based project at Jalkheri.**
- f) RECs could not be purchased due to financial constraints faced by PSPCL.**

**The Commission is of the view that as far as follow up with developers for timely execution / commissioning of the allotted projects is concerned, PEDDA needs to ensure that new projects in pipeline are commissioned in time. Further, it also needs to investigate reasons for less generation from existing NRSE Projects and take appropriate measures.**

**The Commission further observes as under:**

- a) PSPCL has fully complied with the RPO for Solar and Non-Solar up to FY 2014-15. The RPO shortfall sought to be carried forward to FY 2017-18 pertains to shortfall of Non-Solar RPO for FY 2015-16 of 177.94 MUs and shortfall of Non-Solar for**

**2047.09 MUs for FY 2016-17 which could not be complied with in FY 2016-17.**

**It has been observed that to fulfill this shortfall:**

- b) One unit out of 2x9 MW, MHP Stage-II project in district Hoshiarpur and micro-hydel projects of 3.9 MW at Rohti, Thuhi, Nidampur and Daudhar are likely to be operationalized in FY 2017-18 which would contribute around 50 MUs towards generation of Non-Solar RE power.**
- c) As per the information submitted by PEDA in various other matters in the Commission, the Non-Solar capacity projected to be added in FY 2017-18 is 56 MW. This capacity would contribute substantially towards Non-Solar RPO compliance by PSPCL.**

**The Commission notes that PSPCL has prayed that surplus Solar energy may be adjusted against shortfall in Non-Solar RPO compliance. If excess Solar energy procurement is not allowed to be adjusted against the fulfillment of shortfall of Non-Solar RPO, such shortfall will be required to be fulfilled through the purchase of Non-Solar RECs from the energy market and the same will be additional burden on PSPCL and consumers in the State. The Commission also notes that the State of Punjab is surplus in power and PSPCL has to pay the fixed charges even without scheduling the power in terms of long term PPAs signed with Independent Power Producers (IPPs) / other projects. Due to this, the consumers in the State of Punjab are already financially burdened. The Commission also takes note of PSPCL's submissions in its reply dated 27.03.2017 in petition no. 08 of 2017 (Suo-Motu) wherein PSPCL has submitted that the principle of Non-Solar RPO being**

adjusted by excess solar energy has been upheld by Hon'ble APTEL in its Judgment dated 25.04.2014 in Appeal No. 24 of 2013. The aforesaid Appeal was filed by Indian Wind Energy Association, against Gujarat Electricity Regulatory Commission, Gujarat Energy Development Agency & others. Further, the Commission notes that the cost of procurement of solar energy is higher than that of other Non-Solar sources of renewable energy.

Considering the above, the Commission is of the view that any excess procurement of Solar energy by PSPCL can, therefore, be considered towards fulfillment of total RPO requirement due to shortfall in Non-Solar RPO. The Commission, therefore, decides that the excess energy procured by PSPCL from Solar energy projects during the FY 2016-17 i.e. 352.63 MUs may be adjusted against the Non-Solar RPO requirement during the year.

The shortfall in Non-Solar RPO, which needs to be complied with by way of purchase / generation of electricity from RE Projects or in case of non-availability of such electricity despite best efforts, through purchase of Non-Solar RECs from Power Exchange(s), is therefore 1872.40 MUs [2225.03 MUs – 352.63 MUs (adjustment of excess Solar RPO)]. This shall be in addition to the RPO compliance for FY 2017-18 specified in the PSERC (Renewable Purchase Obligation and its compliance) Regulations, 2011, read with Amendment-1 notified by the Commission on 06.05.2015.

The Commission notes that as per provisions in the PSERC (Renewable Purchase Obligation and its compliance) Regulations, 2011, under the 1st and 2nd provisos of Regulation 6(2), 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.

As there have been some factors beyond the reasonable control of PSPCL such as delay in commissioning of the new RE projects by the developers, less generation from existing & newly commissioned RE projects and financial constraints besides other reasons brought out in the petition, the Commission allows PSPCL to carry forward the Non-Solar shortfall in RPO compliance for FY 2016-17 (including the balance of shortfall pertaining to FY 2015-16) to FY 2017-18. PSPCL is directed to ensure compliance of this carried forward shortfall alongwith RPO requirement of FY 2017-18 in the year 2017-18 failing which necessary action as per Regulations shall be initiated.

PSPCL and PEDDA are directed to submit the RPO compliance report (Non-Solar and Solar) every year in the last week of October for the first six months of the year (including backlog, if any) and also submit plan for compliance during the remaining period of the financial year.

The petition is disposed of in terms of above.

**Sd/-**

**(Anjuli Chandra)  
Member**

**Sd/-**

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

**Sd/-**

**(Kusumjit Sidhu)  
Chairperson**

**Chandigarh**

**Dated: 16.03.2018**