

**PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SCO NO.220-21, SECTOR-34 A, CHANDIGARH**

Petition No. 21 of 2015
Date of Order: 11.05.2015

Present: Smt. Romila Dubey, Chairperson
Shri Gurinder Jit Singh, Member

In the matter of: Petition under Section 86 (1) (b) and 86 (1) (e)
and other applicable provisions of the Electricity
Act, 2003 for purchase of electricity from solar
energy generators in the State of Punjab.

AND

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

----Petitioner

Versus

Punjab Energy Development Agency (PEDA),
Chandigarh

----Respondent

Order

Punjab State Power Corporation Limited (PSPCL) filed this petition seeking approval of the Commission to procure electricity including the tariff from solar PV power projects to be established in the State of Punjab by solar energy generators and also to the draft Power Purchase Agreement (PPA) to be executed with the solar energy generators.

2. PSPCL has submitted that Government of Punjab (GoP) issued the New and Renewable Sources of Energy (NRSE) Policy,

2012, which is aimed at the development of renewable energy sources, in particular solar energy generation in the State of Punjab. GoP has designated PEDDA as the nodal agency for development of renewable energy projects in the State under the said NRSE Policy.

3. In pursuance to above, PEDDA initiated competitive bidding process for inviting solar power developers for establishment of an aggregate 250 MW capacity solar projects in the State of Punjab. This capacity was divided between 3 categories; Category-I Projects: 1-4 MW (aggregate capacity 50 MW), Category-II Projects: 5-24 MW (aggregate capacity 100 MW) and Category-III Projects: 25-50 MW (aggregate capacity 100 MW).

4. The bids received from various developers were opened by PEDDA on 10.02.2015. Based on the bids received, PEDDA allocated a total capacity of 229 MW solar PV power projects to various developers in different categories viz. Category-I Projects: 1-4 MW (aggregate capacity 29 MW), Category-II Projects: 5-24 MW (aggregate capacity 100 MW) and Category-III Projects: 25-50 MW (aggregate capacity 100 MW). The tariff discovered in the competitive bidding varies from ₹7.29 per kWh to ₹7.72 per kWh for Category-I Projects, ₹6.88 per kWh to ₹7.45 per kWh for Category-II Projects and ₹6.88 per kWh to ₹7.56 per kWh for Category-III Projects. Detail of the allocations made and the discovered tariff is attached as Annexure-I of this Order.

5. PSPCL submitted that PEDDA has signed the Implementation Agreements (IAs) with the selected bidders as envisaged in the

bidding documents. Further, the electricity generated by the solar energy projects to be established by the developers is to be procured by PSPCL at the tariff discovered in the bidding process.

6. PSPCL submitted that solar energy generation is expected to be one of the primary sources of renewable energy generation in future which can be procured in large quantum. The solar energy generation has been promoted in various other States and also through policies issued by the Govt. of India. Govt. of Punjab has taken proactive steps to ensure development of solar energy generation capacity at tariff discovered through competitive bidding process. PSPCL submitted that the tariff discovered through the current competitive bidding process is less than that discovered in the last bidding process for 250 MW solar power projects, wherein, the procurement of electricity by PSPCL at the tariff discovered in the bidding was approved by the Commission in its Order dated 14.11.2013 in petition No. 52 of 2013 filed by PSPCL.

7. PSPCL further submitted that being the distribution licensee in the State of Punjab, it is required to fulfil its minimum Renewable Purchase Obligation (RPO) specified by the Commission. The quantum of electricity procured from these solar projects would ensure that Solar RPO is adequately met with. The present installed capacity for solar energy generation projects is about 303.27 MW. From FY 2015-16 onwards, the annual power purchase cost from these 229 MW solar power projects will be ₹246.91 crore (approx.) considering an average tariff of ₹7.19 per kWh. Taking into account the long term benefits of renewable energy, especially solar, PSPCL proposes to procure electricity

from these solar projects, which also fulfils the mandate in the Electricity Act, 2003 that the renewable sources are to be promoted.

8. PSPCL submitted that in terms of sections 86 (1) (b) and 86 (1) (e), the procurement of electricity including the tariff is required to be approved by the Commission. PSPCL also sought approval of the PPA signed with the solar power generators. It has been submitted by PSPCL that the PPAs were required to be signed with the solar project developers by 31.03.2015 and, in the circumstances, PSPCL is executing the PPAs by said date with the express stipulation that the PPAs would be effective and binding on the parties after approval by the Commission.

9. In the prayer, PSPCL has requested the Commission to approve the procurement of electricity by it from solar energy generators as per details in Annexure-B of the petition at the tariff discovered in the competitive bidding process conducted by PEDDA and allow the power purchase cost from these solar power projects as a pass through in the Annual Revenue Requirement (ARR).

10. The petition was admitted by the Commission and PEDDA was directed to file reply by 28.04.2015 with a copy to PSPCL vide Order dated 09.04.2015. Further, PSPCL was directed to file statement of deviations in PPA (Annexure-5) and IA (Annexure-4) of RfP (Annexure-A) enclosed with the petition and in the aforesaid PPA and PPA signed by PSPCL with various solar energy generators. PSPCL was also directed to clarify the ambiguity in the 3rd sub para of Article 10.1.0 and Article 10.1.1 of PPA (Annexure-

5 of the RfP) with regard to the number of months beyond which liquidated damages will be leviable. The next date of hearing was fixed as 05.05.2015.

11. PEDDA, in its reply filed on 05.05.2015 certified that the ibid competitive bidding process was carried out in a transparent manner through E-tendering mechanism and IAs were signed with the successful solar PV project developers. PEDDA submitted that as per stipulation in the RfP, PPAs were to be signed between PSPCL and the developers on or before 31.03.2015. PEDDA further brought out that the total solar generating capacity in the State of Punjab is 202.32MW. PEDDA also submitted that setting up of the said solar PV power projects will be in the interest of the State. Agreeing to the prayer made by PSPCL in the petition for approval of procurement of solar energy at the tariff discovered in the competitive bidding process conducted by it and approval of the cost of such power purchase in ARR of PSPCL, PEDDA requested the Commission to accept the same.

12. PSPCL, in its reply dated 30.04.2015 filed on 04.05.2015 and further amended vide submissions dated 04.05.2015, brought out the deviations as called for in Commission's Order dated 09.04.2015. It has been submitted that voltage levels of 132 kV and 220 kV and the word 'PSTCL' have been added in certain clauses of the PPA signed by PSPCL with the solar energy generators. This has been necessitated as the solar PV power projects, depending upon their capacity, would either be connected to the 132kV/220kV transmission system of PSTCL or 11kV/66kV distribution system of PSPCL already provided in the PPA

enclosed with the RfP. Further, in sub-clause 9.8.0 under clause 9.0.0 'Metering', the word 'Back Up meter' has been replaced with 'standby meter' and in sub-clause 9.10.0, the word 'sub standard meter' has been replaced with 'standard meter'. Also the words '14 months' mentioned wrongly in clause 10.1.1 of the PPA (Annexure-5 of the RfP) have been corrected to '12 months' in the PPA signed with the developers. Further, PSPCL also brought out certain clauses of PPA (Annexure-5) and IA (Annexure-4) of RfP depicting them as deviations.

13. On 05.05.2015, the Commission heard both PSPCL and PEDDA wherein PSPCL submitted that as per the PPA signed by it with the solar energy generators, IA signed by PEDDA with them is part of the PPA. The hearing was closed and Order reserved vide Commission's Order dated 07.05.2015.

14. The Commission notes that the 'Guidelines for Tariff Based Competitive Bidding Process for Grid Connected Power Projects Based on Renewable Energy Sources' issued by Ministry of New and Renewable Energy (MNRE), Government of India in December, 2012, for the process to be adopted in the event of any deviations, provide that approval of Appropriate Regulatory Commission shall be obtained unless the bid documents are as per the Standard Bid Documents (SBD) issued by the Central Government in accordance with the guidelines. The Commission observes that the additions/alterations in the PPA signed by PSPCL with the solar PV power project developers and the PPA (Annexure-5 of the RfP) as brought out in para 12 of this Order are need based and accordingly allowed. Further, with regard to the

purported deviations in PPA (Annexure-5) & IA (Annexure-4) of the RfP brought out by PSPCL, the Commission is of the view that these are, in fact, specific to the context of the respective documents. Also, since IA is a part of the PPA as submitted by PSPCL during the hearing on 05.05.2015, the Commission is of the view that various clauses of IA and PPA are to be read together and are complementary.

15. The Commission further notes that PEDDA, in its reply filed on 05.05.2015, certified that the competitive bidding process was carried out in a transparent manner through E-tendering mechanism and IAs were signed with the successful solar PV project developers. The RfP document specified in detail the qualification requirements viz. eligibility for participation, technical and financial criteria along with other terms & conditions and information required by the developers to submit their bids as also the criteria for short-listing and selection of the prospective developers. The selection of bidders was to be based on net availed tariffs after providing discount on generic tariff notified by the Commission for solar PV power projects for FY 2014-15. The Commission further notes that the tariff determined through the competitive bidding process varies from ₹7.29 per kWh to ₹7.72 per kWh for Category-I Projects (1-4 MW), ₹6.88 per kWh to ₹7.45 per kWh for Category-II Projects (5-24 MW) and ₹6.88 per kWh to ₹7.56 per kWh for Category-III Projects (25-50 MW). The project wise details including tariff determined through the competitive bidding process are enclosed as Annexure-1 of this Order.

PSPCL has submitted that solar energy generation is expected to be one of the primary sources of renewable energy

generation in future which can be procured in large quantum. The solar energy generation has been promoted in various other States and also through policies issued by the Govt. of India. Govt. of Punjab has taken proactive steps to ensure development of solar energy generation capacity at tariff determined through competitive bidding process. PSPCL has further submitted that the tariff determined through the current competitive bidding process is less than that determined in the last bidding process for 250 MW solar power projects, wherein, the procurement of electricity by PSPCL at the tariff determined in the bidding was approved by the Commission in its order dated 14.11.2013 in petition No. 52 of 2013 filed by PSPCL. PSPCL further submitted that being the distribution licensee in the State of Punjab, it is required to fulfil its minimum Renewable Purchase Obligation (RPO) specified by the Commission. The quantum of electricity procured from these solar projects would ensure that Solar RPO is adequately met with. Taking into account the long term benefits of renewable energy, especially solar, PSPCL proposes to procure electricity from these solar projects, which also fulfils the mandate in the Electricity Act, 2003 that the renewable energy sources are to be promoted.

The Commission, under section 86 (1) (e) of the Electricity Act, 2003 is mandated to promote generation of electricity from renewable sources of energy. Para 6.4 of the Tariff Policy notified by Ministry of Power, Govt. of India on 06.01.2006 provides for preferential tariff to be determined by the Commission for renewable energy projects while para 5.2.20 of the National Electricity Policy requires adoption of suitable promotional measures for encouraging higher generation from renewable energy sources. The Commission, in its Order dated 05.09.2014

in Petition No.42 of 2014 (Suo-Motu) in the matter of determination of generic levellised generation tariff for Renewable Energy Power Projects for FY 2014-15 had observed:

“12. Further, Para 6.4 (2) of the Tariff Policy notified by Ministry of Power, Govt. of India on 06.01.2006 provides that procurement of electricity from renewable sources of energy for future requirements shall be done, as far as possible, through competitive bidding under Section 63 of the Electricity Act, 2003. Accordingly, the Commission decides that if tariff based competitive bids are invited for purchase of electricity from RE Power Projects and the per unit tariff offered by the lowest bidder is less than the aforementioned tariff, a petition shall be filed by the procurer for consideration and adoption of tariff by the Commission under Section 63 of the Electricity Act, 2003. The Commission further decides that till such time tariff based competitive bidding is resorted to, bidding may be carried out on the basis of discount to be offered by the prospective bidders on the generic tariffs determined by the Commission in this Order, which would be the maximum / ceiling tariff for the purpose.”

Keeping in view the above, the Commission approves the procurement of electricity by PSPCL from the solar PV power projects at the tariff determined through the competitive bidding process conducted by PEDDA on the basis of discount offered by the bidders on the generic tariff for such projects determined by the Commission in its ibid Order as per details in the attached Annexure-1. The cost of power purchase from these projects would be considered as pass through in the ARR of PSPCL. The

tariff period for the said projects would be twenty five (25) years as provided in RfP which is as per Regulation 6(c) of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 adopted by the Commission in its Order dated 19.07.2012 in Petition No. 35 of 2012 (Suo-Motu) with State specific modifications. The tariffs approved above would be applicable upto 31.03.2016 provided the PPAs have been signed on or before 31.03.2015 and the entire capacity covered in each PPA is commissioned on or before 31.03.2016, in line with Regulation 8 of the said Regulations. It is further clarified that barring force majeure / change in law etc., the applicability of the said approved tariff beyond the aforementioned date i.e. 31.03.2016 will not be allowed by the Commission even if punitive clauses in the PPA are made applicable.

Sd/-

(Gurinder Jit Singh)
Member

Sd/-

(Romila Dubey)
Chairperson

Chandigarh

Dated: 11.05.2015

Annexure-I**Solar PV Power Projects [Category-I (1- 4MW)]**

Sr. No.	Name of the Company	Capacity (MW)	Tariff (₹/kWh)
1.	Magnificent Power Private Limited	1	7.29
2.	Nextgen Solux Power Private Limited	1	7.29
3.	Azure Power India Private Limited	4	7.33
4.	Aster Solar Power Private Limited	1	7.37
5.	Purshotam Industries Ltd.	3	7.39
6.	Vivaan Solar Private Ltd.	2	7.40
7.	M/s Continental Engineering and Power Pvt. Limited	1	7.48
8.	Allianz Ecopower Pvt. Ltd.	1	7.57
		1	7.57
9.	Durable Ceramics Pvt. Ltd.	3	7.58
10.	T R Energy & Agro Private Limited	1	7.59
11.	JSSK Energy Private Limited	1	7.63
12.	International Switchgears Pvt. Ltd.	1	7.65
13.	Abundant Energy Private Limited	1	7.68
14.	Welspun Solar Punjab Private Limited	4	7.71
15.	Oasis Contractors and Consultant Pvt. Ltd.	3	7.72
	Total	29	

contd.....

Solar PV Power Projects [Category-II (5-24MW)]

Sr. No.	Name of the Company	Capacity (MW)	Tariff (₹/kWh)
1.	Solairedirect Energy India Pvt. Ltd.	24	6.88
2.	Mihit Solar Power Private Limited	24	7.16
3.	Azure Power India Private Limited	24	7.19
4.	Allianz Group LLC	8	7.37
5.	Punj Lloyd Infrastructure Limited	20	7.45
	Total	100	

Solar PV Power Projects [Category-III (25-50MW)]

Sr. No.	Name of the Company	Capacity (MW)	Tariff (₹/kWh)
1.	Solairedirect Energy India Pvt. Ltd.	30	6.88
2.	Mihit Solar Power Private Limited	50	7.06
3.	Crocus Infra Realty Limited	20	7.56
	Total	100	

Notes:

As informed by PEDDA:

- i) The bidder at Sr. No. 3 in Category-III allotted 20 MW after obtaining his consent against 50 MW offered, due to capacity allotment limited to 100 MW under this category as per RfP.
- ii) The aforementioned tariff for all categories is applicable without availing benefit of Accelerated Depreciation.