

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A, MADHYA MARG, CHANDIGARH

Petition No. 13 of 2022
Date of Order: 01.06.2022

Petition under Section 86 (1) (b) and (e) of the Electricity Act, 2003 read with the Punjab State Electricity Regulatory Commission (Power Purchase and Procurement Process of Licensees) Regulations, 2012 and Regulation 46 of the Punjab State Electricity Regulatory Commission (Conduct of Business) Regulations, 2005 for the approval of the power procurement of Punjab State Power Corporation Limited (PSPCL) from the 4 No. Solar PV Power Projects of 4 MW each to be established by Punjab Energy Development Agency (PEDA) in the State of Punjab.

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

Petitioner

Versus

Punjab Energy Development Agency, Solar Passive
Complex, Plot No. 1&2, Sector-33D, Chandigarh-160020.

Respondent

Present: Sh. Viswajeet Khanna, Chairperson
Sh. Paramjeet Singh, Member

ORDER

1. Punjab State Power Corporation Ltd. (PSPCL) has filed the present petition seeking approval of the power procurement from 4 Nos. Solar PV Power Projects of 4 MW each to be established by Punjab Energy Development Agency (PEDA) in the State of Punjab. The submissions of PSPCL are summarized as under:

- (a) PSPCL has submitted that it is undertaking the generation and distribution of electricity in the State of Punjab and is a distribution licensee under the provisions of the Electricity Act, 2003. PSPCL has been procuring power from various sources (apart from generation of electricity by PSPCL itself at its generating stations), to meet the power supply requirements for maintaining the distribution and retail supply of electricity in the State of Punjab.
- (b) That the Commission has the jurisdiction to regulate the electricity purchase and procurement process of the distribution licensees in the State under the PPA/Agreements to be entered into by the distribution licensees. PSPCL has filed the present petition for approval of the power procurement from 4 Nos. Solar PV Power Projects of 4 MW each at the tariff terms and conditions contained in the Draft PPA to be entered into between PSPCL and PEDDA at a tariff of Rs. 2.748/kWh in terms of Section 86(1)(b) of the Act read with the other applicable provisions in this regard.
- (c) That in the case of co-generation and renewable sources of energy, the provisions of Section 86 (1)(b) of the Electricity Act, 2003 are required to be read with the provisions of Section 86 (1)(e) and also Section 61(h) of the Electricity Act 2003, the National Electricity Policy, the National Tariff Policy notified by the Central Government under Section 3 of the Electricity Act, 2003 and the preamble of the Act. Insofar as the RE sources are concerned, the object and directive under the Act is to promote the renewable sources of energy. The distribution licensee (PSPCL) in the State of Punjab is an obligated entity under Section 86 (1)(e) to procure power from the renewable energy sources.
- (d) That the Government of Punjab (GoP) has from time to time issued policies for development of non-conventional and RE sources in the

State of Punjab (NRSE Policies). The GoP has issued the NRSE Policy, 2012, which is aimed at the development of RE sources and in particular solar energy generation in the State of Punjab. GoP has designated PEDDA as the nodal agency for development of the renewable energy projects in the State under the NRSE Policy, 2012.

- (e) That the provisions of section 86 (1) (e) of the Electricity Act dealing with the Renewable Purchase Obligation (RPO) mandate to purchase a minimum percentage of renewable sources of energy. There is no prescription of maximum or ceiling percentage. The reason for the same is that the objective is to promote non-conventional power to the maximum extent i.e. maximization of the renewable powers. In line with the above Regulations, the Commission has prescribed a Solar RPO of 8% for the FY 2022-23. The Solar RPO is set to increase for the ensuing period.
- (f) That, keeping in view the targets specified by the Commission and based on the solar power received from already commissioned projects and the upcoming projects, the projected cumulative shortfall for FY 2022-23 is computed to be 531.48 MkWh.
- (g) That on 25.10.2018, a Meeting was held under the Chairmanship of the Minister for Power & New and Renewable Energy, Punjab, wherein it was decided that 4 Nos. Solar PV Projects with a capacity of 4MW each will be set up as pilot solar projects near the PSPCL 66KV grid sub stations so that the Agriculture power demand could be partially met from the solar power. These pilot power plants will be setup by PEDDA and the power generated was to be sold to PSPCL at a tariff of Rs. 3.62 per unit in terms of a long term PPA for 25 years. The pilot projects were proposed to be set up at 4 locations in Punjab namely Kothe Mulluana, Tarkhanwala, Sema and Bhagibandar of

District Bathinda. The Minutes of Meeting were intimated to PSPCL vide letter dated 24.04.2019 from PEDDA.

- (h) That while further processing was underway by PEDDA for implementation of the aforementioned projects like selection of land etc, Petition no. 8 of 2020 was filed before the Commission for the determination of levellised tariff for solar plants of capacity of 500 KW to 2MW to be set up near 66/11KV substations of Punjab under Component-A of PM KUSUM Scheme and on 09.10.2020, the Commission determined a levellised tariff of Rs. 2.748 per kWh for the same. In view of the above, PSPCL requested PEDDA to adopt the tariff of Rs. 2.748/kWh for the said Solar PV Power Projects.
- (i) On 13.05.2021 PEDDA accepted the tariff of Rs 2.748/kWh as proposed by PSPCL. On 18.06.2021, PSPCL sent the draft of the PPA to be entered into with PEDDA which was drafted along the lines of the PPA envisaged under the Component-A Kusum Scheme. Subsequently, PEDDA vide its letter dated 19.07.2021 requested PSPCL for certain modifications in the Draft PPA which were deliberated and considered by PSPCL and PSPCL sent the final draft of the PPA to PEDDA on 07.09.2021 and on 02.11.2021 PEDDA gave its concurrence to the draft PPA.
- (j) That the salient aspects of the Draft PPA are as under -
- (i) The PPA shall be valid for a period of 25 years at a tariff of Rs. 2.748/kWh at a CUF of 21%. Failure to meet the minimum level of generation would attract penal provisions in terms of Article 4.3.1 of the PPA.
 - (ii) The submission of Bank Guarantee has not been mandated in the draft PPA on the request of PEDDA being a Government agency. However, a clause regarding payment of Extension Charges @ Rs. 2000/MW/day for delay in commissioning beyond the

- Scheduled Commissioning Date has been provided, which shall be refunded to PEDDA without any interest (i) fully on the SPG achieving successful commissioning by the extended SCOD or (iii) On a pro-rata basis, based on the Project Capacity commissioned by extended SCOD. In case of any delay in commissioning of the project beyond the extended SCOD, PSPCL shall be entitled to forfeit the full amount.
- (iii) The SCOD of the Project shall be 12 months from the effective date. Any delay in commissioning would attract payment of extension charges as specified above.
 - (iv) The cost and risk of transmission of electricity till the substation of PSPCL shall be borne by PEDDA.
 - (v) PEDDA shall be entitled the Generation Compensation for the constraints in off taking power for reasons attributable to PSPCL.
 - (k) That PEDDA vide letter dated 23.12.2021 intimated that it had signed lease agreements with three of the Village Panchayats namely, Kothe-Mulluana, Tarkhanwala and Bhagi Bandar of District Bathinda and further intimated that the Panchayat of village Sema has refused to provide land on lease hold basis for setting of Solar PV Project. PEDDA expressed its willingness to sign the PPA for the aforementioned three projects.
 - (l) That PSPCL vide its letter dated 29.12.2021 requested PEDDA to give fresh consent for establishment of 4MWSolar PV Power Projects at the stated locations at a Tariff of Rs. 2.748/kWh. Subsequently, PEDDA vide its letter dated 03.01.2022 gave its consent for signing of PPA at tariff of Rs. 2.748 per unit for these Solar PV Projects. PEDDA also intimated that it has floated a tender for Design, Manufacture, supply, Erection, Testing and commissioning of the said Solar PV Power Projects. PEDDA further requested PSPCL to seek approval for signing

of PPAs for establishment of 4 MW solar projects stating that the land for 3 of the Projects has already been finalized and 4th location will be intimated later.

- (m) That the Scheduled Commercial Operation Dates of the Projects are 12 months from the date of execution of the PPA and are expected to be achieved in FY 2023-24 and would help PSPCL meet its RPO requirements.
- (n) That the tariff of Rs 2.748/kWh is competitive and would enable PSPCL to meet its RPO. This is particularly considering the fact that it has been clarified in the draft PPA that any impact of Basic Custom Duty shall not be applicable and shall not be considered as change in law. Further, the transmission/distribution losses are lesser for Solar Power Projects located closer to the agriculture loads in transmission/distribution network. Accordingly, the voltage drop is minimized along with improvement in power supply and power factor. There is also an additional benefit that availing power from within the State ensures extra Available Import Transmission Capacity (ATC) which is especially beneficial during the paddy season.
- (o) That the Ministry of Power, vide its notification dated 15.01.2021 and 21.06.2021 has now limited the ISTS exemptions only to transmission charges and not losses. The application of transmission losses would increase the landed cost of ISTS power by about 8-9 paise/kWh. Such impact will not be applicable on intra-state power including the power under consideration.

2. In the hearing held on 18.05.2022, the Ld. Counsel for PSPCL reiterated the submissions made in the petition and prayed to approve the said power procurement arrangement from the said Solar PV Power Projects to be established by PEDDA. The learned counsel for PEDDA submitted that PEDDA has got no objection and the petition may

be allowed. The petition was admitted and PEDDA was directed to file its reply to the petition in writing within a week with a copy to PSPCL. Subject to the above, after hearing the parties, Order was reserved.

3. PEDDA filed its written reply dated 31.05.2022 to the petition submitting that PEDDA has decided to set up 4 Nos. of Solar Photo Voltaic Power Projects of 4 MW capacity each at different locations in the State of Punjab and PSPCL has agreed with regard to various terms and conditions for the sale of power from the said power projects, more particularly contained in the draft PPA appended with the petition. Although the tariff offered for the sale of power from the said projects @ Rs. 2.478/KWh for a period of 25 years is primarily not viable but PEDDA has agreed at the said tariff as the projects are pilot demonstration project to encourage the sector and to benefit the farmers. The petition may be allowed and the terms of the power purchase from the project as specified in the PPA may be approved.

4. Analysis and Decision of the Commission

The Commission has examined the submissions made by the petitioner as well as the respondent. The petition is for approval of PSPCL's power purchase arrangement from 4 Nos. Solar PV Power Projects of 4 MW each to be set up by the State Nodal Agency PEDDA as pilot solar projects near the PSPCL 66KV grid sub stations so that the agriculture power demand in the State could be partially met from the distributed solar power generation. The analysis and decision of the Commission is as under:

- a. The Commission refers to the relevant Sections of the Electricity Act 2003 and the relevant PSERC Regulations for regulating the Power Purchase and Procurement process of the Licensee, which specifies as under:

The Electricity Act, 2003

“86. Functions of State Commission:

(1) *The State Commission shall discharge the following functions, namely: -*

.....

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

.....

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.”

.....

181. Powers of State Commissions to make regulations:

(1) *The State Commissions may, by notification, make regulations consistent with this Act and the rules generally to carry out the provisions of this Act.”*

The Punjab State Electricity Regulatory Commission (Power Purchase and Procurement Process of Licensee) Regulations 2012:

“10 Criterion for Power Purchases

(i).....

(ii) *While effecting power purchase, the Distribution Licensee(s) shall adhere to the principle of least cost plan (least financial cost to the Distribution Licensee), the ultimate objective being to make available secure and reliable power supply at economically viable tariffs to all consumers while satisfying power supply planning and security standards.*

13. Power Purchase Arrangements or Agreements

Any new long term power purchase arrangement or agreement and amendments to existing PPA entered into by Distribution Licensee(s), shall be subject to prior approval of the Commission under section 86 of the Act, in respect of:-

(i) *Necessity;*

(ii) *Reasonability of cost;*

.....

(viii) *Conformity with policy directives of the State Government and policies issued by the Government of India viz. National Electricity Policy, Tariff Policy, long term and short term power procurement guidelines.”*

Thus, for approval of any new long term power purchase arrangement entered into by Distribution Licensee, the Commission is mandated to examine the same on the criteria of its necessity, reasonability of cost and conformity with policy directives of the State Government and policies issued by the Government of India.

- b. PSPCL has submitted that based on the availability of solar power from already commissioned projects and the upcoming projects, the cumulative shortfall of solar RPO for FY 2022-23 is computed to be

531.48 MWh. The said Solar PV Projects, being set up by PEDA as pilot solar projects near the PSPCL grid sub stations would help it in meeting its RPO requirements. The Commission, in Petition no. 8 of 2020, has determined a levelled tariff of Rs. 2.748 per kWh for similar solar plants under Component-A of PM KUSUM Scheme. PEDA vide its latest letter dated 03.01.2022 has confirmed its consent for signing the PPA(s) at said tariff. It has been stated that, the tariff of Rs 2.748/kWh is competitive, particularly so considering the fact that it has been clarified in the draft PPA that any impact of Basic Custom Duty shall not be applicable and shall not be considered as change in law. Moreover, the transmission/distribution losses are lesser for Solar Power Projects located closer to the agriculture loads. In addition availing power from within the State ensures extra Available Import Transmission Capacity (ATC) which is especially beneficial during the paddy season. Further, impact of increase in the landed cost of ISTS power by about 8-9 paise/kWh as per MoP notification dated 15.01.2021 & 21.06.2021 limiting the ISTS exemptions only to transmission charges and not losses, will not be applicable on intra-state power including the power under consideration.

- c. The Commission also observes that PSPCL is finding it hard to meet the RPO targets prescribed by the Commission under Sections 86 (1)(e) of the Electricity Act 2003 and the Regulations framed under Section 181 of the Electricity Act, 2003. The mandated RPO is set to increase in the ensuing period, keeping in view the targets for solar power capacity addition envisaged by the Government of India. The Commission is of the view that the proposed power procurement arrangement from PEDA's said 4 MW pilot Solar PV Projects would contribute to some extent in fulfilment of its RPO targets and would also be instrumental in promoting other similar projects to aid the

solarisation of Agriculture Power Program. The stated levelled tariff of Rs. 2.748/kWh is as determined by the Commission for similar projects in Petition 08 of 20220. The Commission also notes that it has been clarified in the draft PPA that any impact of Basic Custom Duty shall not be applicable and shall not be considered as Change in Law. Further, the proposed Solar Power Projects being located closer to the agriculture loads will have lesser system losses and shall help in freeing the Available Import Transmission Capacity.

In view of the above, the Commission decides to allow the PSPCL's prayer for the said long term power purchase arrangement at the stated tariff of Rs. 2.748/kWh from the proposed 4 MW Solar PV Projects to be set up by PEDA as pilot solar projects.

The petition is disposed of in terms of the above.

Sd/-

(Paramjeet Singh)
Member

Sd/-

(Viswajeet Khanna)
Chairperson

Chandigarh

Dated: **01.06.2022**