### PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

SITE NO. 3, BLOCK B, SECTOR 18-A MADHYA MARG, CHANDIGARH

Petition No. 58 of 2024 Date of Hearing: 11.12.2024 Date of Order: 12.12.2024

Petition under Section 63, 86 (1) (b) and (e) of the Electricity Act, 2003, read with regulation 16 of the PSERC (Framework for Resource Adequacy) Regulations, 2024, for seeking adoption of capacity wise discovered tariff under competitive bidding process and for the approval of procurement of power from the Solar Project to be installed for the feeder-level Solarisation of 75,000 Grid Connected Agriculture Pump (Component-C of PM Kusum Scheme)

#### And

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

...Petitioner

#### Versus

- 1. Punjab Energy Development Agency, Plot No. 1-2, Sector 33 D, Chandigarh-160034.
- 2. The Secretary, Department of Power, Government of Punjab Civil Secretariat-2, Sector 9, Chandigarh.

...Respondents

Commission: Sh. Viswajeet Khanna, Chairperson

Sh. Paramjeet Singh, Member

PSPCL: Sh. Anand K Ganesan, Advocate (through VC)

Ms. Harmohan kaur, CE/ARR&TR

Sh. Harjeet Singh, ASE/TR-5

Sh. Sanjeev Jain,ASE Sh. Sajan Garg, AE

PEDA: Sh. Aditya Grover, Advocate (through VC)

GoP: Sh. Narender Mehta, OSD/Power Reforms (through

V.C.)

#### **ORDER**

1. The Petitioner (PSPCL) has filed the present petition seeking adoption of the tariff of Rs. 2.38/kWh (discovered by the State Nodal/Implementing Agency in the tariff based competitive bidding for the solar PV projects to be set-up for Feeder-Level Solariation of Grid-Connected Agriculture Pumps under Component-C of the PM Kusum Scheme) and approval of procurement of power therefrom. PSPCL, elaborating upon the process followed by PEDA for discovery of the said Feeder-Level Solariation (FLS) tariff, while recommending the adoption of same has submitted that:

## 1.1 Necessity of the proposed power arrangement:

PSPCL as a distribution licensee is mandated to procure power including from RE Sources to meet its commitment to supply power to all its consumers. That it is striving hard to meet its mandated RPO targets specified under the provisions of Section 86(1)(e) of the Act. The Distributed RE (DRE) target is to be met through power procurement from RE sources less than 10 MW. Thus, the proposed power procurement approval is vital for PSPCL in order to fulfil its RPO (including DRE) targets.

# 1.2 Reasonability of Cost:

That, the bid tariff is the landed cost and there is no additional cost to the proposed power procurement over or in addition to the bid discovered tariff of Rs. 2.38 per unit. There is no trader acting as an intermediary. Further, as the solar power plant is being setup within the State of Punjab, no ISTS transmission losses and charges would be applicable. Also, it would not block the present Available Transfer Capacity of PSPCL. In fact, the proposed

power procurement will aid in the reduction of the cost of the transmission infrastructure for the Discom and improve the voltage profile in rural areas. Therefore, the proposed power procurement is economical and conducive to the interest of the consumers in the State.

## 1.3 Accounting of FLS power in the GoP's AP Subsidy:

That, the PEDA *vide* its letter dated 19.10.2021 has communicated that the energy accounting is envisaged to be computed as under:

- "a) During the lean demand period, the exported power shall be adjusted with the overall AP Consumption.
- b) Excess solar energy injected if any shall be adjusted against AP consumption and AP subsidy shall be converted within the excess solar energy units.
- c) As the project capacity has been designed on the basis of power consumption parameters of the feeder. Any excess solar power injected into the grid bus bar will be adjusted on annual basis against the overall AP consumption. The AP subsidy will reduce by total solar energy exported to the grid x rate of solar power."

PSPCL submits that it's distribution cost (i.e., Distribution losses, wheeling charges, O&M expenses and employee cost etc.) for the use of the distribution network for supply of said power is also required to be added for consideration of AP subsidy to be paid by GoP after installation of solar plants under Component-C, as illustrated below:

#### "Illustration:

- a) The total energy generated from the solar plants per annum=**A** units.
- b) Tariff (Component-C feeder level solarisation) =Rs.a/unit
- c) Total Agricultural Pump (AP) energy consumption of the State per annum = **B units**.

- d) Tariff of Agriculture power in the State of Punjab=**Rs.b/unit**.
- e) Compensation charges(Distribution losses, wheeling charges, O&M expenses and employee cost etc.,)=**Rs.c/unit**
- f) Total cost of solar power generated=Rs.(A\*a)
- g) Total cost of AP subsidy being paid by GoP=Rs.(B\*b)
- h) Total AP subsidy to be paid by GoP after installation of solar plant=**Rs.** (**B-A**)\***b**+**A**\*(**a**+**c**)."

Therefore, the Compensation charges (elaborated at Sr. No. (e) above) ought to be determined/allowed by the Commission. Further any new tax/levy imposed by Gol/GoP in future for the transmission/distribution of power under the scheme shall also have to be reimbursed by the GoP to PSPCL.

## 1.4 Prayers:

- "i) Approve the procurement of 264 MW solar power from 66 nos. solar projects to be installed under RfS dated 08.08.2024 at a tariff of Rs. 2.38 per unit along with the other parameters being sought for by PSPCL.
- iii) Approve the Draft PPA as appended to the RfS.
- iv) Allow the compensation charges as per Para 46 (e).
- v) Pass such other further Order(s) as the Commission may deem just in the facts and circumstances of the present case."
- 2. Considering the averments made by the Petitioner, the petition was admitted on 28.11.2024 with directions to implead the Punjab Energy Development Agency (PEDA) and Govt. of Punjab (GoP) as Respondents being the necessary parties for the proper adjudication of the petition. Accordingly, a notice was issued to the PEDA and GOP to file their replies to the petition within one week with a copy to the Petitioner and the Petitioner has to file its rejoinder thereto, if any, before the date of hearing with a copy to the Respondents.
- **3.** PEDA, vide its affidavits dated 04.12.2024 and 10.12.2024,

submitted its reply to the petition. The same is summarised as under:

- 3.1 That the PEDA is a State Nodal Agency formed for the promotion and development of Renewable Energy Projects and Energy Conservation programme in the State of Punjab. Also, it has been designated as the State's Implementing Agency (SIA) by the MNRE for the purpose of implementation of Component-C under PM-KUSUM Scheme. Accordingly, PEDA prepared a Bid document for installation of 264 MW (66 Nos. X 4 MW) ground mounted solar power plants as per the MNRE's Guidelines dated 17.01.2024 for the implementation of Component C of PM-KUSUM Scheme and MOP's Standard Bidding Guidelines dated 28.07.2024. The Request for Selection (RfS) Document including the draft IA & PPA along deviations from the quidelines with finalized deliberations between PEDA, PSPCL & the Punjab Development Commission (PDC) was approved by the GOP on 06.08.2024. The salient features of the RfS documents are listed as under:
  - a) Mandatory use of DCR solar modules from ALMM only.
  - b) Commissioning of the allotted capacity to be achieved within 12 months of the issuance of LOA.
  - c) The bidder can bid for 4 MW capacity of a single substation or the cumulative notified capacity of multiple sub stations up to total cumulative capacity of 264 MW.
  - d) Normal CUF for the project is 19%, with the provision of a penalty for shortfall in generation below 15%.

- e) PSPCL shall purchase the excess generation over and above 21% CUF at 75% (seventy five percent) of the PPA tariff.
- f) Loss of generation due to constraints in the off-take of power will be compensated while calculating the availability of the projects.
- g) Adoption of mechanism of e-reverse auction to arrive at the competitive tariff as per standard bidding guidelines of MoP, Gol.
- 3.2 That, E-tender no. PEDA/KUSUM-C/2024-25/11 was put live on the GoP's e-proc portal on 08.08.2024 at 12:00 Noon, having its last date for submission of the bids as 23.09.2024. The Notice Inviting Tender (NIT) was also published in the following newspapers on 08.08.2024:
  - a) The Tribune, Chandigarh
  - b) Indian Express, Delhi
  - c) The Times of India, Ahmedabad
  - d) The Hindu, Calcutta & Hyderabad
  - e) Economics Times, Bengaluru
- 3.3 That, in terms of the bid documents, a pre-bid meeting was held on 04.09.2024 at 11:00 AM in the office of the PEDA at Chandigarh with an option for the participants to participate in physical mode and/or through online mode, wherein, 37 prospective bidders participated in the physical mode and another few attended through online mode. The PEDA uploaded the clarifications to the pre bid queries and the consequent amendments in the bid document on the e-proc portal of GoP on 01.10.2024 after approval of the Competent

- Authority. Accordingly, the tender was extended for participation till 10.10.2024 up to 3:00 PM.
- 3.4 A total of 34 bids having a cumulative capacity of 636 MW were received against the tendered capacity of 264 MW. As per the timelines given in the bid document, the technical bids were opened on the e-proc portal of GoP on 11.10.2024 at 3:00 PM by the Bid Evaluation Committee. That, pursuant to the technocommercial evaluation, 28 bids having a cumulative capacity of 600 MW were found to be techno-commercially qualified. The bids of 6 bidders were disqualified being non-compliant as per the bid document. Subsequently, the price bids of the 28 techno-commercially qualified bidders were opened on 24.10.2024 on the e-proc portal of GoP and the lowest tariff was discovered as Rs.2.47/kWh.
- 3.5 Thereafter, with the approval of the Competent Authority, it was decided to carry out an e-reverse auction as per the RfS conditions on 04.11.2024. Accordingly, all these 28 bidders were informed through email dated 30.10.2024. The, e-reverse auction was carried out on 04.11.2024 on the e-proc portal of GoP in which 6 Nos bidders participated actively and M/s. VP Solar Generation Pvt. Ltd. came to be the L1 bidder, with a tariff of Rs. 2.38/ KWh.
- 3.6 That the L-1 tariff of Rs 2.38/kwh so discovered was conveyed to PSPCL in accordance with the Bid Evaluation Committee's recommendation after approval from the competent authority. The requested information and documents as sought by PSPCL vide its email dated 06.11.2024 were conveyed to PSPCL through an email dated 18.11.2024.

- 3.7 That, as per conditions enunciated in the RfS, Clause no. H.1.1 provides for seeking the approval of this Commission by way of filing a petition, which would be filed by PSPCL. Accordingly, the Petitioner (PSPCL) has filed the captioned petition before this Commission.
- 3.8 PEDA submits that the implementation of the component C of the KUSUM Scheme of the MNRE, GOI would not only serve the interest of the State, but would also benefit the Petitioner-DISCOM and the Farmers in the State. This will help the Discom in achieving its RPO commitments for Distributed Generation. Thus, the implementation of the above said scheme is a win-win situation for all the stake holders and requires approval from this Commission.
- 3.9 That the Petitioner PSPCL has also drawn the proposed methodology for accounting of the injected power in AP subsidy and has also given an illustration for computing the same after commissioning of these 66 Solar projects of 264 MW aggregate capacity. PEDA submits that while deciding the methodology for accounting of GOP subsidy the distribution losses and wheeling charges pertaining to only voltage level of 11kV and below need to be considered considering that the Generation of solar plants is being fed to PSPCL grid at 11kV voltage.
- 3.10 That the PEDA also wishes to rely upon the minutes of the meetings dated 31.05.2024 and 14.06.2024 between the Answering Respondent-PEDA, Punjab Development Commission (PDC) and CMD, PSPCL and various other officials of PSPCL, demonstrating the detailed deliberations and discussions with regard to the formation and finalisation of RfS

- and PPA for the implementation of the impugned Scheme for feeder level solarisation of grid connected agriculture pumps.
- 3.11 That during the process of implementation of the aforementioned scheme, a committee stood duly constituted by the PEDA comprising of its officials for the evaluation of the technical and financial Bids submitted by the Bidders.
- 3.12 That, since time is of the essence for the implementation of the Component-C of the KUSUM Scheme for feeder level solarisation of 75000 grid connected agriculture pumps in the State and much time has already been exhausted, this Commission may kindly take an appropriate decision at the earliest possible.
- 4. The Petition was taken-up for hearing on 11.12.2024. While, the officer appearing for the GoP sought time to file its response, the Ld. Counsel appearing for PSPCL and PEDA requested for an early approval to PSPCL's impugned power procurement arrangement considering that the time is the essence for the implementation of the Scheme. After hearing the parties, the Commission ordered as under:
  - 4.1 The Commission decides to allow the prayer in the Petition in respect of adoption of the discovered tariff and approval of the proposed power procurement arrangement as per the following detailed observations:

# a) Adoption of the discovered Tariff:

The Commission observes that in term of Section 63 of the Electricity Act 2003, the Commission is mandated to ascertain whether the said tariff has been determined through a

transparent and competitive procurement process of bidding in accordance with the guidelines issued by the Central Government. In this regard, the Commission notes the State Nodal/Implementation Agency PEDA's submissions that:

- (i) PEDA had prepared the Bid documents per the MNRE's Guidelines dated 17.01.2024 and MOP's Standard Bidding Guidelines dated 28.07.2024, and that the RfS Document including draft IA & PPA along with deviations from the guidelines were got approved from the Government of Punjab (GOP) on 06.08.2024.
- (ii) The E-tender was put live on the GoP's E-proc portal on 08.08.2024 at 12:00 Noon with the last date for submission of the bids being 23.09.2024, indicating a period in excess of 30 (thirty) days, as mandated in the guidelines, between the issuance of RfS documents and the last date of bid submission.
- (iii) The Notice Inviting Tender (NIT) was got published on 08.08.2024 in the following newspapers:
  - (a) The Tribune, Chandigarh
  - (b) Indian Express, Delhi
  - (c) The Times of India, Ahmedabad
  - (d) The Hindu, Calcutta & Hyderabad
  - (e) Economics Times, Bengaluru
- (iv) A pre-bid meeting/conference with the prospective bidders was also held and a consolidated reply of the queries of the bidders was uploaded on the bidding portal.

(v) A Bid Evaluation Committee comprising of four members (including a Manager/Finance) evaluated the bids.

Further, considering the participation of 37 prospective bidders (in physical mode) in the pre-bid meeting, receipt of 34 bids offering a cumulative capacity of 636 MW against the tendered capacity of 264 MW, techno-commercially qualification of 28 bids with a cumulative capacity of 600 MW and active participation of 6 bidders in the e-reverse auction, the Commission is of the view that the process adopted by the State Nodal/Implementing Agency PEDA meets the test of transparency and competitiveness as required under Section 63 of the Electricity Act 2003.

# b) Approval of PSPCL's proposal for the proposed Capacity arrangement/tie-up:

The Commission notes that, in terms of Section 86(1)(b) of the Electricity Act read with Section 181(1) and Regulation 16 of the PSERC (Framework for Resource Adequacy) Regulations 2024, any new Capacity arrangement/tie-up by the distribution licensee needs to fulfil the primary criteria of its 'Necessity' and 'Reasonableness of cost of power purchase'.

The Commission observes that, in the prevailing scenario of progressively increasing RPO targets to achieve the ambitious RE capacity addition mandated by the Gol's RE addition trajectory, when PSPCL is striving hard to meet even its existing RPO targets, the proposed arrangement for procurement of RE Power from the Solar Projects to be installed for the feeder level solarisation of Grid-Connected Agriculture Pumps under Component-C of the PM-KUSUM Scheme of the Government of

India can be considered to fulfill the criteria of 'Necessity' as well as 'Conformity with the policies issued by the Government'.

Further, considering the last approved tariff of Rs. 2.75/kWh for solar power projects to be located anywhere in Punjab in Petition No. 42 of 2023, PSPCL's impugned proposal for procurement of power from the 4MW X 66 Solar projects to be set-up at the distributed level at the discovered tariff of Rs. 2.38/KWh also fulfills criteria of its reasonableness of cost to PSPCL.

In view of above, the Commission approves the adoption of the said discovered tariff of Rs. 2.38/kWh fixed for 25 years at the 11 kV side of PSPCL's nearest sub-transmission Sub-Stations from the 4MW X 66 Solar PV Projects of 264 MW aggregate capacity to be installed for Feeder Level Solarisation of Grid-Connected Agriculture Pumps under Component-C of the PM-KUSUM Scheme of the Government of India. The Commission, accordingly approves PSPCL's proposed power procurement arrangement in respect thereof. However, the Commission reiterates its earlier Orders that it does not approve the draft PPA's terms and conditions, which are to be decided mutually between the contracting parties.

4.2 However, on the issue of accounting of the impugned solar power towards the GoP Subsidy, the Commission observes that no justification has been provided by any of the parties appearing before the Commission to enable the Commission to consider the prayer to adjust the excess solar energy injected into PSPCL's grid, after meeting the requirement of the respective solarised AP Feeders as per indicated capacity,

towards reduction of GoP's subsidy as no investment or sharing in the payment of the discovered tariff by the GoP has been indicated for the units proposed to be adjusted against AP Subsidy.

Further, the Petitioner, based on the communication/ clarification received from the Implementing Agency PEDA, has submitted an illustration of methodology for computation of GoP's AP subsidy with the request that the recouping of its distribution cost (i.e., distribution losses, wheeling charges, O&M expenses and employee cost etc.) for the use of the distribution network also needs to be determined by the Commission. In its reply, the PEDA has suggested that, keeping in view the injection voltage of solar generation, the distribution losses and wheeling charges pertaining to only 11 kV voltage level and below need to be considered for such adjustment and recovery by PSPCL. The Govt. of Punjab is yet to file its reply/comments on the issue. The Commission also notes that PSPCL has not filed its detailed proposal on determination of the distribution costs it proposes to charge on the said solar power tariff for the impugned arrangement of Feeder level solarisation and has also not provided a justification for such adjustment in AP Subsidy.

Accordingly, all parties are directed to submit on affidavit the justification for the proposed accounting of excess solar injection also towards reduction of GoP's AP subsidy. PSPCL should also file a detailed proposal for determination of the voltage-wise distribution costs proposed to be charged on the solar power for the impugned arrangement of Feeder level solarisation. This may be done within two weeks with a copy to each other

(through hard & soft copy). The Petition shall be taken up for hearing on this issue on 12.02.2025 at 11.30 AM.

