

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

Petition No. 36 of 2023
Date of Order: 31.08.2023

Petition under Section 86(1)(b)&(e) and Section 61(h) of the Electricity Act, 2003 read with PSERC (Power Purchase and Procurement Process of Licensees) Regulations 2012 and Regulation 46 of PSERC (Conduct of Business) Regulations 2005 for approval of power procurement of 400 MW Solar power from NHPC under Tranche-III of Phase II of CPSU scheme of MNRE.

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

..... Petitioner

Versus

NHPC Limited, NHPC Office Complex, Sector-33,
Faridabad-121003, Haryana

...Respondent

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

Petitioner: Ms. Poorva Saigal, Advocate
Ms. Anumeha, Advocate

NHPC: Sh. Rajiv Shankar Dvivedi, Advocate

ORDER

1. The Petitioner, PSPCL has filed the instant petition for approval of the power procurement of 400 MW Solar Power from NHPC Ltd under Tranche-III of phase II of CPSU scheme notified by the MNRE at a ceiling tariff of Rs. 2.45/kWh exclusive of any other third-party charges such as wheeling and transmission charges and losses,

point of connection charges and losses, cross-subsidy surcharges, SLDC/RLDC charges etc. It has been submitted that:

1.1 PSPCL 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 and has been mandated to procure power from RE Sources as per the provisions of Section 86(1)(e) of the Electricity Act, 2003 and in terms of PSERC RPO Regulations.

1.2 On 05.03.2019, the MNRE, Government of India, approved the implementation of CPSU Scheme Phase-II for setting up 12000 MW grid-connected Solar Photovoltaic (**PV**) Power Projects by CPSUs/ State PSUs/ Government Organisations, with Viability Gap Funding (**VGF**) support for self-use or use by Government/ Government entities, either directly or through Distribution Companies. The CPSU Scheme was issued under the provisions of Section 63 of the Act for long term procurement of electricity by the 'Procurers', from grid-connected Solar PV Power Projects, through competitive bidding. The main objectives of the CPSU Scheme are as follows:-

- “(a) To facilitate national energy security and environmental sustainability through use of domestically manufactured solar PV cells and modules for Government purpose.*
- (b) Scaling up of sizes of projects thereby leading to economies of scale.*
- (c) To leverage the existing infrastructure of Government Producers, including land, transmission facilities, etc., and their engineering capabilities.*
- (d) Provide long term visibility and road map for solar power development enabling creation of India as manufacturing hub in the Solar PV.*

(e) To create good business models and systems for various Central and State Government entities to take forward.”

- 1.3 On 13.01.2021, NHPC offered solar power to PSPCL and indicated that it was planning to bid for developing the Solar PV projects under the CPSU Scheme on BOO basis where charges shall be below Rs. 2.20/kWh exclusive of any third party charges like wheeling and transmission charges & losses, cross-subsidy surcharges, SLDC/RLDC Charges etc.
- 1.4 On 29.01.2021, IREDA issued RfS No. 23016/1/2020-IREDA/RfS/5,000MW/012021 for selection of govt. power producers for setting up of 5 GW capacity of solar PV projects under Tranche-III of phase II of CPSU Scheme with the usage charges of not more than Rs. 2.20/kWh exclusive of any third party charges.
- 1.5 On 24.02.2021, PSPCL granted ‘in principal’ consent for procurement of 225 MW Solar Power to NHPC. However, on 10.05.2021, MNRE modified the ceiling of the usage charges to Rs 2.45/kWh. Accordingly, on 18.05.2021, NHPC requested PSPCL to give consent for the revised usage charges of Rs.2.45/kWh exclusive of any other third party charges. It was further submitted that waiver of ISTS charges for use of ISTS network, if any, shall be available to the Projects, as per relevant Orders/Guidelines issued by MoP. On 31.05.2021, PSPCL granted the ‘in principal’ consent for procurement of 225 MW Solar Power under the CPSU Scheme on revised usage charges of Rs. 2.45/kWh exclusive of any other third party charges.
- 1.6 Pursuant to the e-reverse auction conducted by IREDA, NHPC was selected as the successful bidder for an allocated capacity

of 1000 MW at a quoted VGF of Rs. 44,90,000/MW in Sept., 2021 and issued the LoA on 04.10.2021 in favour of NHPC for 1000 MW. On 09.06.2022, NHPC made an offer of an additional 175 MW solar power available under the same Scheme. On 27.07.2022, in addition to the previous consent for procurement of 225 MW Solar Power, PSPCL also granted in-principle consent for procurement of an additional 175 MW Solar Power under the said CPSU Scheme.

1.7 On 16.05.2023, PSPCL and NHPC executed Power Usage Agreements (**PUA**) for the contracted capacity of 300MW and 100MW, respectively, at the fixed Tariff of Rs. 2.45/unit (exclusive of any other third-party charges like wheeling and transmission charges and losses, point of connection charges and losses, cross-subsidy surcharges, SLDC/RLDC charges etc. as may be applicable) for a period of 25 at the following location:

- (a) For supply of 300MW (AC) Solar Power from NHPC Solar PV Station of 300MW at Village Karnisar- Bhatiyar, Tehsil Poogal, District- Bikaner, Rajasthan; and
- (b) For supply of 100 MW (AC) Solar Power from NHPC Solar PV Station of 600MW at Village Khavda, Taluka-Bhuj District Kutch, Gujarat.

1.8 The other salient features of the PUAs are listed below:

- (a) Scheduled Commercial Operation Date (SCOD) 30 months from the date of LoA, i.e., 04.04.2024.
- (b) Capacity Utilization Factor (CUF): The maximum Annual CUF against the contracted capacity (i.e.300 MW) is 28.48 % (748.96704 MU on Annual Basis) & the maximum Annual

CUF against the contracted capacity (i.e.100 MW) is 33.59 % (294.44994 MU on Annual Basis).

- (c) Interconnection Point/ Metering Point/Delivery Point: CTU at 400/220 kV Substation at Bikaner-II at 220 kV Voltage level for 300MW Solar Power & CTU at 765/400 kV Substation (GIS) in Khavda at 400kV Voltage level for 100MW solar Power.
- (d) ISTS Transmission Charges/Losses: ISTS charges beyond the Delivery Point through the ISTS up to Punjab periphery are exempted for all projects achieving CoD till 30.06.2025 for a period of 25 years from CoD.
- (e) Extension if any sought by NHPC shall be dealt as per clause 15 of RfS of IREDA tender published for CPSU scheme along with corrigendum & addendum if any.
- (f) As the Solar power developers have to make use of domestically manufactured solar PV cells and modules under this scheme so there will be no impact of BCD on the above said tariffs. Further, NHPC vide its letter NH/Comml/CPSU/Solar/2022/581 dated 30.05.2022 has accepted that there shall be no impact of increase in GST rates on the ceiling tariff of Rs.2.45/KWh w.r.t of Ministry of Finance, Government of India notification no.8/2021 dated 30.09.2021 under change in law.
- 1.9 By way of the Notification dated 12.12.2022, the Commission had notified the RPO Regulations, 2022, wherein, the RE Energy RPO of 30% is required to be met for the FY 2024-25. The RPO shall increase every year up to 43% for the FY 2029-30. The SCOD of the projects is 04.04.2024 and should be achieved in FY 2024-25. The proposed power procurement

would enable PSPCL to meet its RPO requirements. Also, the tariff of Rs. 2.45/kWh (exclusive of third party charges) for procurement of solar power is competitive and beneficial to the consumers of PSPCL.

1.10 In view of above and in accordance with Section 86(1)(b) and (e) of the Electricity Act 2003, it is respectfully prayed to:

- “a) To admit the instant Petition;*
- b) To adopt the tariff of Rs. 2.45/kWh (exclusive of any other third-party charges) on the terms and conditions contained in the Tender Documents andPUAs;*
- c) Approve the procurement of 400 MW of Solar Power by PSPCL from NHPC at the tariff of Rs. 2.45/kWh (exclusive of any other third-party charges)on the terms and conditions under the PUA dated 16.05.2023(300 MW) and 16.05.2023 (100 MW); and*
- d) Pass any other Order as the Hon’ble Commission may deem fit and appropriate under the circumstances of the case.”*

2. The petition was placed before the Commission for admission. After considering the averments, the petition was admitted vide Order dated 19.07.2023, with the direction that PSPCL shall submit the ‘Reasonability and competitiveness of rates’ as the applicable rate at the State periphery has been stated to be Rs. 2.45/kWh exclusive of third party charges like wheeling and transmission, losses, point of connection charges, cross-subsidy surcharges, SLDC/RLDC charges etc.

3. PSPCL filed an additional affidavit on 18.08.2023 submitting as under:

- 3.1 On 23.11.2021, MoP, Gol issued an Order for waiver of ISTS charges upto 30.06.2025 on transmission of electricity generated from solar and wind sources of energy. The SCOD of the Projects is 30 months from the date of Letter of Award, i.e., 04.04.2024, which is within the cut-off date of 30.06.2025. Accordingly, the ISTS charges applicable/leviable on the Projects, if any, are waived off in terms of the said Order.
- 3.2 However, there is no waiver of losses, which is only applicable to Projects for which bidding had been completed by 15.01.2021. Accordingly, there is no waiver of transmission losses and the implications of such transmission losses are estimated to be 8-10 paisa/kWh.
- 3.3 The projects under the CPSU Scheme are connected to the ISTS network i.e. the drawl point/delivery point of power is at the State's periphery. Thus, no wheeling charges up to the drawl/delivery point shall be applicable and accordingly, there will be no implications on the tariff with regard to the wheeling and transmission charges and the cross-subsidy surcharge.
- 3.4 There shall however be an implication on account of RLDC charges which are determined as per CERC (Fees and Charges of RLDC and other related matters) Regulations, 2019. In terms of the data provided by NHPC, the approx RLDC charges for 400 MW power from NHPC is Rs. 25 Lakh per annum.
- 3.5 Thus, even upon inclusion of the above-mentioned third party charges in the quoted tariff of Rs. 2.45/kWh, the overall tariff for the power from NHPC under Tranche -III of Phase II of the CPSU Scheme of MNRE is estimated to be in range of Rs. 2.54-2.56/kWh, which is competitive and beneficial to PSPCL as well

as the consumers of PSPCL. Further, in the Order dated 21.07.2023 passed by the Commission in Petition Nos. 41 & 42 of 2023 in the case of procurement of 1000MW solar power from projects to be set up anywhere in India and procurement of 200 MW solar power from projects to be set up in Punjab from the tenders floated by the PSPCL, the discovered rates were Rs. 2.53/kWh and Rs. 2.75/kWh respectively. Also, the procurement of solar power under Tranche -III of Phase-II of the CPSU Scheme of MNRE has been approved by other State Commissions as under:

Sr. No.	State/Utility	Capacity (MW)	Tariff (Rs./kWh)	Tender result date
1.	West Bengal State Electricity Distribution Company Limited	100	2.45	Nov., 2022
2.	Telangana State DISCOMS	1545	2.45	Sept., 2022

4. The petition was taken up for hearing on 23.08.2023. After hearing the parties, the Commission reserved the Order.

Analysis and Decision of the Commission:

5. The Commission has examined the submissions made by the Petitioner. The Petition is for adoption of tariff and approval of power procurement there of 400 MW Solar power from NHPC under Tranche-III of Phase II of CPSU scheme of MNRE. The analysis and decision of the Commission is as under:

5.1 Adoption of the Tariff:

The Commission observes that as per the provisions of Section 79(a) &(b) of the electricity Act, the Appropriate Commission in the case of generating companies owned or controlled by the Central Government as well as that having a composite scheme for generation and sale of electricity in more than one State is the

Central Commission. Accordingly, the parties may approach the Central Commission for the same.

5.2 Power procurement process of the distribution Licensee:

The Commission observes that the Electricity Act mandates the Commission to regulate electricity purchase and procurement process of the distribution licensees including the price at which electricity shall be procured for distribution and supply within the State. Further, as per PSERC (Power Purchase & Procurement Process of Licensee) Regulations' 2012, the Commission is mandated to examine the same primarily on the criteria of its 'Necessity', 'Conformity with the Govt. Policies' and 'Reasonability of cost' i.e. whether the same has reasonable cost and is economical in the prevalent circumstances. Accordingly, the Commission proceeds to analyse the PSPCL's proposal as hereunder:

a) 'Necessity' and 'Conformity with the Govt. Policies'

PSPCL has submitted that as a distribution licensee for distribution of electricity in the State it is mandated to procure power from RE Sources as per the provisions of Section 86(1)(e) of the Electricity Act, 2003 read with terms of PSERC RPO Regulations. It was submitted that vide Notification dated 12.12.2022, the Commission has specified the RPO targets of 30% for the FY 2024-25 rising to 43% for the FY 2029-30. With the SCOD of the projects being 04.04.2024, the projects commissioning should be achieved in FY 2024-25, which shall contribute in fulfillment of RPO requirements of PSPCL.

The Commission observes that, PSPCL is still not able to meet its mandated RPO Compliance. The gap may increase further in view of the continuous increase in consumption coupled with the

enhanced RPO targets for the subsequent years. As such, PSPCL's proposed arrangements for RE procurement can be considered to be fulfilling the criteria of "Necessity/Conformity with the Govt. Policies.

b) 'Reasonability of cost'

PSPCL has submitted that with the SCOD of the Projects being 04.04.2024, ISTS Charges on the Projects are waived off in terms of the Ministry of Power, GoI Order dated 23.11.2021, wherein the Inter State Transmission (ISTS) Charges are waived for the Solar Projects commissioned upto 30.06.2025. Also, since the projects under the CPSU Scheme are connected to the ISTS network there will be no implications on the tariff with regard to the wheeling and transmission charges and the cross-subsidy surcharge. Accordingly, PSPCL has estimated the third party charges on account of inter-State Losses and RLDC Charges to be around 9-11 paise/kWh. It has been submitted that even upon inclusion of the said third party charges in the quoted tariff of Rs. 2.45/kWh, the overall tariff for the power from NHPC under Tranche -III of Phase II of the CPSU Scheme of MNRE is estimated to be in range of Rs. 2.54-2.56/kWh, which is competitive and beneficial to PSPCL as well as the consumers of PSPCL. PSPCL further contended that the said tariff of Rs. Rs. 2.45/kWh under said CPSU Scheme of MNRE has already been adopted by the State of West Bengal and Telangna.

The Commission observes that a proposal by PSPCL for procurement of 1000 MW Solar power at the discovered tariffs of Rs. 2.53/kWh (Punjab periphery) already stands allowed by the Commission in Petition No. 41 of 2023. Accordingly, the

Commission agrees with PSPCL that the discovered tariffs are reasonable and economical in the prevalent circumstances.

In view of the above, the Commission allows PSPCL's proposal of a power purchase arrangement for procurement of 400 MW Solar Power from NHPC Ltd for a period of 25 years at the ceiling fixed tariff of Rs. 2.45/kWh (at the Interconnection Point) under Tranche-III of phase II of CPSU scheme notified by the MNRE, for the projects to be commissioned as per the SCOD agreed between the parties but not later than 30.06.2025 i.e the date upto which waiver of 'Inter State Transmission Charges' has been allowed by the Ministry of Power, GoI. In case, any tariff higher than the one approved above is adopted by the CERC, the Petitioner shall be required to approach the Commission for consideration of the same. The Commission also wishes to point out that it does not approve the detailed terms and conditions of the 'Power Purchase/Usage Agreements', which are to be decided by the contracting parties with mutual consent.

The petition is disposed of in terms of the observations and directions above.

Sd/-
(Paramjeet Singh)
Member

Sd/-
(Viswajeet Khanna)
Chairperson

Chandigarh

Dated: 31.08.2023