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

Petition No. 34 of 2024
Date of Order: 04.11.2024

Petition under Section 86(1)(b) and 86(1)(e) of the Electricity Act 2003, as read with Punjab State Electricity Regulatory Commission (Power Purchase and Procurement Process of Licensees) Regulations 2012 for the approval of the procurement of 900 MW wind Solar Hybrid power by Punjab State Power Corporation Limited (PSPCL) from the Solar Energy Corporation of India (SECI) under the ISTS Hybrid Tranche VII Scheme.

AND

In the matter of: Punjab State Power Corporation Ltd., The Mall, Patiala - 147001.

...Petitioner

Versus

1. Solar Energy Corporation of India Limited (SECI), 6th Floor, Plate-B, NBCC Office Block Tower-2, East Kidwai Nagar New Delhi-110023.
2. NTPC Renewable Energy Ltd, having its registered office at NTPC Bhawan, Scope, Complex-7, Institutional Area, Lodhi Road, South Delhi, India- 110003.
3. Juniper Green Beta Private Ltd, having its registered office at F-9, First Floor, Manish Plaza-1, Plot No. 7 MLU, Sector -10, Dwarka New Delhi110075.
4. Green Infra Renewable Projects Ltd, having its registered office at Building 7A, Level-5, DLF Cyber City, Gurugram-122002, Haryana, India.

....Respondents

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

Petitioner: Ms. Poorva Saigal, Advocate (through VC)
Ms. Harmohan Kaur, CE/ARR&TR, (through VC)

SECI: Ms. Mandakini Ghosh, Advocate (through VC)

NTPC: Sh. Rajiv Kumar, DGM

Juniper Green
Energy Pvt Ltd: Sh. Aditya K Singh, Advocate (through VC)

Green Infra Renewable
Projects Ltd: Sh. Akshat Jain, Advocate (through VC)

ORDER

1. The Petitioner (PSPCL) has filed the present petition for seeking approval of its Power Purchase Arrangement of 900 MW wind-solar hybrid power from SECI. The submissions made in the Petition are summarised as under:

1.1 PSPCL is a distribution licensee under the provisions of the Electricity Act 2003 and has been procuring electricity from various sources, including from renewable sources of energy, to meet the power supply requirements in order to maintain the distribution and retail supply of electricity in the State.

1.2 SECI, designated as the implementing agency for implementation of MNRE schemes for setting up of ISTS Connected/State Specific renewable projects, issued a Request for Selection (**RfS**) document on 23.10.2023 for selection of developers for setting up ISTS-connected Wind-Solar Hybrid Power Projects on Build Own Operate (BOO) basis for an aggregate capacity of 2000 MW under Tariff-Based Competitive Bidding (SECI-Tranche-VII). In terms of the same, the result of e-Reverse Auction conducted on 09.01.2024 as intimated by SECI is as under:

S.No.	Bidder	Bided Quantity (MW)	Tariff (INR / kWh)	Allotted Capacity (MW)
1.	NTPC Renewable Energy Ltd.	300	3.15	300
2.	Juniper Green Energy Pvt. Ltd.	150	3.21	150
3.	Green Infra Wind Energy Ltd.	450	3.21	450

1.3 On 18.01.2024, SECI issued a letter to PSPCL offering allocation of above said 900 MW wind-solar hybrid power. Upon acceptance of the offer by PSPCL, a Power Sale Agreement (**PSA**) was executed between PSPCL and SECI on 12.06.2024. Accordingly, the Power Purchase Agreements (**PPA**s) has been executed between the SECI and the developers. Therein, the Scheduled Commencement of Supply Date (**SCSD**) has been specified as 20.06.2026. The Project Configuration in the signed PPAs with HPDs is as under:

S. No.	Name of the Developer	Declared CUF (%)	Tariff* (Rs./kWh)	Capacity (MW)	Solar Component (MW)	Wind Component (MW)	Project Location
1	Green Infra Wind Energy Ltd.	33	3.21	450	410	152	Rajasthan
2	Juniper Green Energy Pvt. Ltd.	30	3.21	150	130	50	Rajasthan.
3	NTPC Renewable Energy Ltd.	30	3.15	300	200	100	Solar: Rajasthan. Wind: Gujarat
		Total		**900**			

** SECI's Trading Margin of Rs. 0.07/kWh is applicable over and above the discovered tariff.*

1.4 The other salient aspects of the RfS and PPAs/PSA are as under:

a) **Hybrid Power Projects:** The wind-solar hybrid power sought to be procured by PSPCL from SECI is from the power generated by the Hybrid Power Developers (**HPD**) from their respective hybrid power projects (**HPPs**). The RfS document which, inter-alia, states as under:

"ii. Under this RfS, a Hybrid Power Project shall mean a Project comprising two 'components' – one Solar and one Wind Power Project. The rated capacities of both the solar and wind components shall be at least 33% of the Contracted Capacity, to qualify the Project as a Hybrid Project under the Guidelines. It is further clarified that the criteria of a solar/wind component meeting minimum 33% of the Contracted Capacity of the Project will be examined based on the rated AC capacity declared by the Bidder for the corresponding component of the Project. The sum of the rated installed capacities of Solar and Wind power

components as committed by the Bidder/HPD shall be more than or equal to the Contracted Capacity.

For example, in case the Contracted Capacity of a Project is 100 MW, the rated capacities of both Wind and Solar components shall be minimum 33 MW each.

Note: *In the interest of utilizing the optimization potential offered by hybridization of the two components, the HPD is free to declare the rated Contracted Capacity of the Hybrid Power Project irrespective of the rated capacities of the Solar and Wind project components.*

For avoidance of any doubt, it is hereby reiterated that the Contracted Capacity of the Hybrid Project does not necessarily have to be the arithmetic sum of the rated installed capacity of the two components. However, the requirements as indicated above, regarding the minimum installed rated capacity of each of the components shall be strictly adhered to, failing which, the Project shall not be eligible for Commencement of supply of power under the RfS."

In terms of the same, the Solar Power will be available in the day time and most of the wind power will be available in evening/ night time and during the early morning, thereby ensuring a better rate of power supply as compared to from Solar or Wind power individually.

b) **Declared CUF:** Clause 8.1 of the RfS, specifies as under:

"8.1 Criteria for Energy Supply

The Bidders will declare the annual CUF of their Projects at the time of submission of response to RfS in the Covering Letter as per Format 7.1, and the HPDs will be allowed to revise the same once within first three years after SCSD. Thereafter, the CUF for the Project shall remain unchanged for the entire term of the PPA. The declared annual CUF shall in no case be less than 30% (thirty percent)."

c) **Validity/Term of PSA:** In terms of Recital III of the PSA, duration of the PSA would be '*co-extensive and co-terminus'* to the terms of the PPA which under Article 2.2.1 states the validity of the PPA to be from the effective date to the expiry date (i.e. 25 years from the SCSD).

d) **Penalty for shortfall in energy supply:** In terms of Clause 8.2 of the RfS and Article 4.4.1 of the PPA read with Article 2.11.3 of the PSA, the amount of penalty that is leviable on the HPDs on account of shortfall in supply of energy is corresponding to 1.5 times the applicable tariff for the shortfall in energy terms, Further, the said penalty is to be remitted by the HPDs directly to the Buying Entity (i.e., PSPCL).

e) **Grid Access:** In terms of Recital XV of the PSA, PSPCL is required to obtain the open access/grid access as per extant regulations for power evacuation from delivery points.

f) **ISTS Transmission Charges & Losses:** Applicability of ISTS Transmission Charges & losses waiver shall be in terms of the CERC Regulations 2023 as read with the Ministry of Power Notification. In terms of the CERC Regulations 2023, to avail the maximum possible waiver of 75% on ISTS charges for the present project, PSPCL signed the PSA with SECI on 12.06.2024. In terms of Clause 1.4 of the PSA, if the Scheduled Commencement of Power Supply Date (SCSD) is on or before above deadline for ISTS waiver and commencement of power supply from the project gets delayed beyond the applicable date of ISTS waiver due to reasons solely attributable to the developer, then the liability of transmission charges would be to the account of the developer.

1.5 That PSPCL has entered into a PSA dated 12.06.2024 with SECI subject to the approval by this Commission. Pursuant to entering into the PSA with PSPCL, PPAs dated 20.06.2024, 21.06.2024 and 27.06.2024 have been entered into by SECI with the HPDs, namely Juniper Green Beta Private Limited, NTPC Renewable Energy Limited and Green Infra Renewable Projects Limited respectively, for a period of 25 years. SECI has filed an appropriate petition bearing No. 315/2024 before the Central Commission seeking adoption of the said discovered tariffs.

1.6 In the circumstances, PSPCL has filed the present petition before this Commission seeking the approval of the power procurement of 900 MW ISTS Connected wind-solar hybrid power from SECI at tariff ranging from Rs. 3.21/kWh (i.e., Rs. 3.15/kWh plus SECI's trading margin of Rs. 0.07/kWh) to Rs. 3.28 (i.e., Rs. 3.21/kWh plus SECI's trading margin of Rs. 0.07/kWh) for a period of 25 years.

1.7 The abovementioned tariffs are economical and commensurate to the prevalent market rates prevalent, as evidenced from the following:

a) In its Order dated 21.07.2023 passed in Petition Nos. 41 and 42 of 2023, this Commission has adopted and approved the tariffs for supply of solar power at a tariff of Rs. 2.75/kWh for power plants within the State of Punjab and tariff of Rs. 2.53/kWh for power plants located outside the State of Punjab. The said approved tariffs are for the procurement of Solar Power which is available during day time only. By way of the present petition, PSPCL is seeking approval of procurement of hybrid power which will help PSPCL in meeting the night time and peak load requirements due to inclusion of wind power, which is generally available during night and peak hours.

b) In response to the RfS document floated by SECI on 30.11.2023 for selection of developers for Setting up of 1350 MW ISTS-connected Wind Power Projects anywhere in India under Tariff-Based Competitive Bidding (SECI-Tranche-XVI), the tariffs discovered were between Rs. 3.60/kWh and Rs. 3.70/kWh.

c) On 21.02.2024, NHPC Limited issued a letter to PSPCL offering the allocation of 960 MW wind-solar hybrid power from ISTS connected wind-solar hybrid power projects at the discovered tariff of Rs. 3.55/kWh and 3.56 /kWh (including trading margin of Rs. 0.07/kWh) as under:

Successful Bidder	Allotted Capacity (MW)	Hybrid Configuration	Location	CUF	Discovered Tariff including trading margin @ 07 paisa per unit (Rs./kWh)
M/s Juniper Green Energy Pvt Ltd	150	Solar- 130 MW	District Barmer-Rajasthan	Not less than 35 %	3.55
		Wind- 50 MW	District Barmer-Rajasthan		
M/s Energizent Power Pvt Ltd	300	Solar- 250 MW	District Jaisalmer, Rajasthan	Not less than 35 %	3.56
		Wind- 100 MW	Distrcit Kachchh, Gujarat		
M/s Avaada Energy Pvt Ltd	510	Solar-510MW	District Barmer-Rajasthan	Not less than 35 %	3.56
		Wind- 170 MW	Distrcit Osamanabad, Maharastra		

d) On 06.03.2024, SJVN Limited also issued a letter to PSPCL offering for the allocation of 1500 MW wind-solar hybrid power from ISTS connected wind-solar hybrid power projects at the discovered tariff of 3.56/kWh (including trading margin of Rs. 0.07/kWh).

e) The tariff rate for procuring from a Hybrid Solar Wind Power Project in other states is as follows:

S.No	Bidding Agency	Year	Capacity	Location	Tariff
1.	SECI	2023	490 MW	Rajasthan	Rs. 4.00/kWh
2.	Tata Power Co.	2024	225 MW	Maharashtra	Rs 3.27-3.28/kWh

f) Moreover, in terms of provisional Demand & Availability scenario, PSPCL is likely to be in deficit in energy terms during the peak/ paddy season in the upcoming years. The rate at which PSPCL seeks to procure the said power from SECI is substantially less that the Average Power Purchase Cost (APPC) of PSPCL as approved by this Hon’ble Commission for FY 2023-24 to 2025-26, which is as under:

Description	FY 2023-24	FY 2024-25	FY 2025-26
APPC (Gross)	4.75	4.64	4.51
APPC (Net)	4.83	4.72	4.60

1.8 Further, on 20.10.2023, the Ministry of Power (MoP) had issued a notification under the Energy Conservation Act specifying the renewable energy consumption targets for FY 2024-25 till FY 2029-30 along with a penalty to be imposed in case of non-compliance to the specified renewable energy consumption targets under Section 26(3) of the Energy Conservation Act, 2001. In continuation to the same, the MNRE had issued a letter dated 01.02.2024 to all the distribution licensees across India including PSPCL stating that, in case of non-compliance of the minimum renewable energy consumption specified under the MoP Notification dated 20.10.2023, a penalty of Rs. 3.72/kWh for every unit of shortfall in the consumption of renewable energy would be imposed in addition to the penalty under Section 26(3) of the Energy Conservation Act 2001. That in the event of there being shortfall in the RPO compliance by PSPCL, it would need to obtain Renewable Energy Certificates (RECs) from the Power Exchanges. In regard to the same, and as per data available on website of IEX, the cleared price of REC for month of June 2024 (as on 12.06.2024) was Rs. 150/Certificate. The break-up of the same is as under:

Price per REC (Non-Solar)	Rs. 150
IEX Transaction Fee	Rs. 20
GST 18% on IEX Fees	Rs. 3.60
GST 18% on IEX price	Rs. 27
Total Value per non solar REC	**Rs. 200.60**

Therefore, in case of shortfall in RPO, PSPCL will be constrained to purchase RECs at an approximate cost of Rs. 0.200/kWh. The present status of RPO compliance of PSPCL in respect of Wind and other RE RPO compliance in terms of both the Ministry of Power as well the Targets as notified by this Commission are also annexed to the Petition. However, in the event that PSPCL proceeds to procure 900 MW wind solar hybrid power from SECI, PSPCL would be in a position to minimize the shortfall in RPO compliance.

1.9 In the facts and circumstances mentioned above, it is prayed that this Commission may be pleased to:

"(a) Declare that the procurement of 900 MW wind solar hybrid power by PSPCL from SECI, stands approved in the facts and circumstances mentioned hereinabove on the tariff terms and conditions contained in the PSA dated 12.06.2024; and

(b) Pass such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case."

1.10 Along with the Petition, PSPCL also filed an IA No. 13 of 2024 seeking urgent listing of the Petition citing that in terms of the PSA dated 12.06.2024 signed with SECI, PSPCL has to obtain the approval of the Commission within 120 days from the date of signing of the PSA.

2. Considering the Petitioner's prayer, made in the IA No. 13 of 2024 filed on 15.07.2024 for seeking an urgent listing of the instant petition, the Petition was taken up for hearing on admission on 19.07.2024 thus disposing of the IA. However, considering the request made by Ld. Counsel appearing for SECI, that the Hybrid Power Developers (HPD) are also required to be impleaded for proper adjudication of the matter, the Commission decided to implead the HPDs as well. Further, PSPCL was directed to furnish the following information:

"a) Status of adoption of discovered tariffs by the CERC;

b) The landed cost of proposed power at State Periphery indicating the applicable cost components (i.e., Transmission charges/Losses, trader's margin etc.) separately in Paise/kWh;

c) Total financial liability (in Rs. Cr) on account of payment of Trading Margin over the period of the proposed power arrangements;

d) PSPCL's ability to utilise the proposed power capacity, considering that it has to draw banked power to the tune of about 3000MW during the peak/paddy season in addition to its already existing long-term power arrangements of more than 8000 MW on the Inter State Transmission System (ISTS);

e) Whether the proposed solar/wind hybrid arrangement is for supply of uniform power schedule on RTC basis? If not, the same is required to be compared with the similar projects (indicating the Year of discovery of tariff/SCoD) having same ratio of wind/solar power;

f) The tariff estimation considering the wind and solar power in the same ratio and the competitive tariffs discovered (on standalone basis) during the same period."

In reply thereto, PSPCL vide its affidavit dated 23.08.2024 submitted as under:

a) The Petition bearing No. 235/AT/2024 filed by SECI for adoption of the impugned discovered tariffs was listed before CERC on 22.07.2024. Whereon, PSPCL has filed its reply stating that it has no objection in adoption of the said tariffs, however, procurement by PSPCL in terms of the PSA dated 12.06.2024 shall be subject to the final approval by the Commission in the present petition.

b) The landed cost of proposed power at State Periphery may be around 300 MW @ 3.49 and 600 MW @ 3.55/kWh, inclusive of trading margin of Rs 0.07/kWh, Rs 0.12/kWh as transmission losses (@ 3.71%) and Rs 0.15/kWh as ISTS charges (@ 25% of Rs. 0.60/kWh).

c) The financial liability of PSPCL on account of payment of Trading Margin over the period of 25 years of the PSA, as provided by SECI, shall be Rs. 391.41 to 521.88 crore for 900 MW Hybrid Power.

d) The present Available Transfer Capacity (ATC) of the State is 9500MW which is expected to increase to 10400 MW in the near future after completion of the ongoing transmission system augmentation projects. Some additional transmission system augmentation projects are also under planning and are likely to be completed in the next two years. The short term arrangements (including banking of Power, purchase through exchanges/ traders) are being planned every season/year as per availability from other (long term) sources and gap anticipated during the season/day. Accordingly, upon receiving the power from SECI, these arrangements can be balanced out as per the requirement. In this regard, it is submitted that PSPCL is in need of long-term power purchase agreements to avoid procurement of costly power from exchanges during the peak season. Therefore, PSPCL will be able to utilise the proposed capacity of power.

e) SECI has clarified that power may be supplied on RTC basis; however, uniform power on RTC basis is not mandated under the bidding documents.

f) The tariff estimation/comparison considering the proportionate (individual) components of wind and solar power as provided by SECI is as under:

Particular	Hybrid (T7)	Solar	Wind	Hybrid (S+W)
Capacity (MW)	900	640	283	923
CUF (%)	31.50	29.00	34.58	30.71
Annual Energy (MUs)	2485	1627	858	2485
Wtd. Avg Tariff (Rs/kWh)	3.19	2.69	3.70	3.04

3. In the hearing held on 18.09.2024 the Ld. Counsel appearing for the developers requested for more time to file their replies which was allowed with the direction that the same may be filed within two weeks with a copy to the petitioner. In compliance thereto, all Respondents (except NTPC) submitted their respective replies. The same are summarised as under:

3.1 SECI, while reiterating the history of the case and supporting the PSPCL's prayer for grant of approval for the impugned power procurement arrangement, has submitted that:

a) Solar Power is only available during the daytime and this hybrid power will be useful in better round-the-clock utilization of State GNA quantum. Wind power is available during evening peak load hours and at night time. Therefore, it complements the Solar Power and avoids purchase of costly power from exchanges during peak hours.

b) Vanilla Solar and Vanilla Wind power, if procured individually, does not guarantee round the clock supply of power. Also, it is difficult to procure vanilla wind power which is evident from non-participation of developers in the latest tender floated by SECI & NHPC. Moreover, the latest tariff discovered is in the range of Rs. 3.81/kWh due to increased uncertainties across the wind industry such as unavailability of potential wind sites, delay in readiness of connectivity, various ROW issues, rise in turbine cost etc. In case of procurement of individual solar and wind power, if any of the project developer (solar or wind) backs out and does not establish the project then PSPCL will be left with stranded surplus solar or wind power and that would lead to underutilization of the transmission system and thereby leading to increased Transmission Charges. However, in case of SECI, the supply of wind-solar hybrid power is from a single project developer developing both the solar and wind projects therefore there is more assurance for supply of hybrid power in an optimized manner.

c) It is further submitted that SECI, by virtue of its operations, is exposed to various risks such as payment default, late payment, breach of contract, inflation etc. The Trading Margin, INR 0.07/kWh applicable in the present cases, is to mitigate the risk being borne by SECI. It is because of the payment security mechanism provided by SECI that the tariff discovered under SECI schemes are significantly lower than those under tenders done by distribution companies themselves. The 7 paisa/kWh trading margin charged by SECI from distribution licensees typically reflects the costs and services associated with facilitating and managing wind solar hybrid power transactions. Renewable power developers expect SECI to make payments for electricity generation and supply under the PPA, regardless of whether SECI has received payment from the buying entities. SECI must consistently work to recover these payments from the buying utilities for the power supplied under the Power Sale Agreement (PSA). Additionally, SECI should explore the option of selling power to third parties if the buying utility defaults. SECI is frequently involved in litigation with both renewable power developers and buying utilities.

d) That the trading margin to be paid to SECI shall be paid over 25 years for procurement of 900 MW Hybrid Power. In the past, PSPCL has not received adequate response from the bidders in its tenders and given the rating of PSPCL, the prices may not be as lucrative as in SECI's tender and therefore, the tariff, even after including Trading Margin of SECI, becomes competitive and economical for the state.

e) Further, the Trading Margin of Rs 0.07/kWh is consistent with the guidelines and the same is being charged by all the REIAs. PSPCL have agreed to Trading Margin of Rs.0.07/kWh in terms of Guidelines dated 21.08.2023 and signed the PSA with SECI. That, the price payable by PSPCL under the PSA dated 12.06.2024, inclusive of the trading margin of Rs.0.07 /kWh, is economical, competitive and in the interest of the consumers and such lower price has emerged in view of the involvement of SECI as the nodal agency of the MNRE, Government of India. Further, it is submitted that tariff under this scheme is the lowest tariff for Wind Solar Hybrid Power available in the market where the highest tariff available is in the range of Rs 3.46/kWh.

f) The Hon'ble Appellate Tribunal for Electricity, while considering the issue of trading margin in the context of a similar PSA executed between SECI and Distribution Licensees, in its decision dated 02.07.2021, passed in Appeal Nos. 52 of 2021 and 70 of 2021 filed by SECI in the matter of '*Solar Energy Corporation of India Limited vs Delhi Electricity Regulatory Commission & Ors*. and *Solar Energy Corporation of India Limited vs Punjab State Electricity Regulatory Commission & Anr',* has held as under:

> *"83. It is not correct on the part of respondents to argue that scrutiny by the State Commission into the price under Section 86(1)(b) would include the revisit of the trading margin determined under Section 79 by the Central Commission in case of inter-State transaction. That approach would render the jurisdiction of the Central Commission nugatory or subservient to that of the State Commission. Reliance on V.S Rice Mills vs State of A.P (supra) is misplaced.*

The general comments on power to "regulate" have to be understood in light of Electricity Act, a later enactment. The power and jurisdiction of the State Commission under Section 86(1)(b) concerns source, quantum and price (tariff) of procurement by the distribution licensee. In inter-State transaction it is bound to follow the regulatory regime or determination of trading margin by the Central Commission and cannot sit in judgment over its propriety. To hold otherwise would be permitting it to make inroad into the jurisdiction assigned to the Central Commission which will not be lawful.

84. From the above, it emerges that both orders disturbing the trading margin fixed by the regulatory framework put in position by the Central Commission have been passed by the State Commissions without authority in law. The impugned orders cannot be allowed to stand for this very reason alone. For comprehensive scrutiny, however, we proceed to examine other contentions as well.

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97. In view of above discussion, we are of the considered opinion that the nature of the transactions involved in these matters being inter-state operations, and not intra-state or within the State operations, the State Commission has no jurisdiction to deal with the trading margin of the interstate trading licensee (SECI) acting in terms of such trading License granted by the Central Commission under section 79 (1)(e) read with section 14 of the Electricity Act, 2003 and under the applicable Regulations notified by the Central Commission in exercise of powers under section 178 of the Act. .....

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102. As noted earlier, clause 2.1.1 c) ii of the Guidelines dated 03.08.2017 deals with trading margin and, inter alia, provided for the same to be "mutually decided between the Intermediary Procurer and the End Procurer" in the scenario wherein Intermediary Procurer enters into a PPA with the Solar Power Generator and PSA with the End Procurer, the PSA containing the relevant provisions of the PPA on a back-to-back basis. The Amendment dated 22.10.2019 to the Guidelines notified on 03.08.2017, clarified

Rs.0.07/kwh as the applicable trading margin payable to Intermediary Trading Licensee. ..".

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126. We, thus, hold and conclude that PSERC has fallen in grave error by disturbing the agreed terms settled by the contracting parties on the subject of trading margin. PSPCL has duly accepted the Trading Margin of Rs.0.07/kWh when it entered into the PSA dated 03.02.2020 and subsequent amendments. This has brought into existence a mutual agreement with regard to applicability of Trading Margin of Rs.0.07/kWh, it being binding since it is consistent with Clause 3.2 of the applicable Guidelines, Regulation 8 (1) (d) of the Trading License Regulations, 2020, the decision dated 21.05.2020 of the Central Commission in Petition No.307/AT/2020 whereby it was ruled that Regulation 8(1)(d) of the Trading License Regulations, 2020 provision "gives choice to the contracting parties to mutually agree on Trading Margin for long-term transaction", the RfS document defining that Trading Margin "means the trading margin as mutually agreed between Buying Entities and the SECI or as decided by CERC for long-term power purchase, whichever is less" and the proviso to Regulation 8(1)(d) and Regulation 8(1)(f) of the Trading License Regulations, 2020.

127. The impugned order of PSERC to the extent it reduces the trading margin is also liable to be set aside. We order accordingly"

g) The aforesaid position of law has been reiterated by Hon'ble APTEL in its recent Order dated 06.07.2023 in APL No. 199 of 2023 titled as "*Solar Energy Corporation of India Limited vs Uttar Pradesh Electricity Regulatory Commission & Anr.*", holding as under.

"31. It cannot be disputed that the Central Commission is the Appropriate Commission for determining the trading margin for inter-state trading licensees and SECI in the present case is an inter-state trading licensee, thus, governed by the relevant regulations notified by the Central

Commission, further, any dispute regarding the trading margin for SECI shall be resolved by the Central Commission.

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43. We, therefore, find no merit in the contentions made by the State Commission, the Trading margin of Rs. 0.07/kWh as mutually agreed by SECI and UPPCL through the PSA, shall be final, the decision of the State Commission in directing UPPCL to suitably adjusting the Trading margin cannot be agreed to, the Impugned Order is set aside to this limited extent."

h) In the above background, it is respectfully prayed that this Commission may be pleased to grant approval to PSPCL for procurement of 900 MW Wind Solar Hybrid Power at individual project wise tariff plus Trading Margin of INR 0.07/kWh as per terms and conditions of the signed PSA as agreed between SECI and PSPCL in terms of Guidelines dated 21.08.2023 for a period of 25 years and Section 86(1)(b) of the Electricity Act 2003.

3.2 M/s Juniper Green Beta Private Limited, while supporting the pleas of PSPCL, has submitted that it has already secured final grant of connectivity under land route and it is committed to initiate supply by June 2026, save for occurrence of any Force Majeure Events. It was also submitted that, SECI as an intermediary is beneficial as:

a) Direct agreement with SECI eliminates political risk.

b) Payment certainty, makes bidding through SECI a preferred option, in view of the following:

(i) CERC in its Order has held that SECI's obligations towards regular tariff payment is an independent obligation and it is not depended on payment by the distribution companies has strengthened trust of investors in SECI's bidding.

(ii) SECI is one of the beneficiaries of tripartite agreement amongst Ministry of Power, RBI and the state Government. This Agreement provides mechanism to ensure compliance of the payment obligations by the state distribution licensees.

3.3 M/s Green Infra Renewable Projects Limited in its reply has intimated that, due to the delay in CTU Substation Commissioning /connectivity, it will become impossible to evacuate the contracted quantum of power by the SCSD, which will resultantly have an impact on the levy of concessional transmission charges. Its submissions in brief are as under:

a) Although Clause 7.11 of the RfS mandates the Answering Respondent to apply for connectivity at the identified substation, within 30 days after the date of tariff adoption by the Appropriate Commission, it proactively applied for the connectivity on the basis of the LOA i.e., before the initiation of the tariff adoption proceedings by SECI before CERC, in anticipation of scarcity of connectivity at the targeted substations.

b) However, the substations at which connectivity has been granted to the Answering Respondent for the Project have Commissioning Timelines as follows:

Sr. No.	Capacity	ISTS Substation	Application Date	Application Status	CTU Substation Commissioning	Date of Connectivity granted
1.	Solar – 110 MW	Fatehgarh-IV	11th July, 2023	Granted on 08.11.2023	July 2026	28.02.2026 (interim)
2.	Solar – 300 MW	Nagaur Merta-II	14th May, 2024	Granted on 30.08.2024	December 2026 (transmission system COD 31.03.2027)	31.05.2027 (interim)
3.	Wind – 152 MW	Gadag-II	29th Dec., 2023	Granted on 01.03.2024	December 2025	01.06.2027

c) That the availability of connectivity is completely out of the control of the Answering Respondent. Article 4.5.2 of the PPA provides that, when there is a delay in operationalization of GNA by the CTU and/or there is a delay in readiness of the ISTS substation at the Delivery Point, including readiness of the power evacuation and transmission infrastructure of the ISTS network until SCSD of the Project, the same shall be treated as delays beyond the control of the HPD and SCSD for such Projects shall be revised as the date as on 60 days subsequent to the readiness of the Delivery Point and power evacuation infrastructure and/or grant/operationalization of GNA.

4. PSPCL vide its additional affidavit has further submitted that:

4.1 This hybrid power will be useful in better round-the-clock utilization of State. Solar Power is only available during daytime and Wind power is available during evening peak load hours and at night time complementing the Solar Power and avoiding purchase of costly power from exchange during peak hours. Moreover, the wind power available under the Hybrid Scheme is from coastal wind power projects which are sufficiently available even during Monsoon Season (i.e. from June to September). So, the wind power component from this bundled Wind-Solar Hybrid Power shall also be beneficial to PSPCL.

4.2 The impugned power arrangement between PSPCL and SECI was signed on 12.06.2024 to get benefit of 75% waiver of the ISTS transmission charges. Any new agreements for Solar/Wind Power shall fall in the bracket of 50% waiver of the ISTS transmission charges only.

4.3 The trading margin to be paid to SECI shall be paid over 25 years with Rs. 1.42 crore to be paid every month (total cumulative Trading Margin Rs. 428 crore) for 900 MW Hybrid Power. SECI being a central government utility can better coordinate with other central government utilities like RLDC, CTUIL/CEA etc. for connectivity and commissioning of the projects.

4.4 PSPCL floated a tender on 18.07.2023 for procurement of 1000MW of Solar power from ISTS connected projects anywhere in India with a ceiling tariff of Rs 2.55/kWh. Subsequently, due to lack of participation, the ceiling tariff was revised to Rs. 2.65/kWh. No bids were received against the tender even after one whole year of bidding and thereafter, the tender was dropped after one year i.e. on 10.07.2024. Currently, two intra-state tenders have been floated by PSPCL on 29.05.2023 for procurement of 1500 MW of Solar power. The ceiling tariff in these tenders was Rs. 2.75/kWh which was later revised to Rs. 2.85/kWh and again revised to Rs. 3.00/kWh. However, these tenders are still under bidding due to lack of participation in these tenders from potential generators.

5 After hearing the parties on 16.10.2024 the petition was admitted. During the hearing, the Ld. Counsel appearing for the parties reiterated their submissions and prayed to the Commission for approval of the proposed power procurement arrangement for 900 MW Wind-Solar Hybrid Power. After hearing all the learned counsel of the parties, the Order was reserved.

6 Observations and Decision of the Commission

The Commission has examined the submissions made by the parties. The Petition is for seeking approval of procurement of 900 MW Wind-Solar Hybrid power from SECI at a tariff ranging from Rs. 3.15/kWh to

Rs. 3.21/kWh plus trading margin of Rs. 0.07/kWh for a period of 25 years. In order to assess the PSPCL's proposal, the Commission refers to the Electricity Act, which reads as under:

"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;

....

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."

Further, relevant Sections of the PSERC (Framework for Resource Adequacy) Regulations 2024 framed/notified on March 15, 2024 by the Commission in exercise of the power conferred under the Electricity Act 2003 specifies as under:

"16. Approval of Power Purchase Agreement

16.1. Any new Capacity arrangement/tie-up shall be subject to the prior approval of the Commission in view of necessity, reasonableness of cost of power purchase and promotion of working in an efficient, economical and equitable manner.

16.2. …….

16.3. Any new power purchase agreement for Long/Medium-term or amendments to existing Long/ Medium-term Power Purchase Agreement (PPAs)/ Power Sale Agreement (PSA) entered into by the distribution licensee shall be subject to the prior approval of the Commission in respect of

i) Necessity;

(ii) Reasonability of cost;

(iii) Promoting efficiency, economy, equitability and competition;

……….."

Thus, any new Capacity arrangement/tie-up by the distribution licensee needs to pass the test of its 'Necessity', 'Reasonableness of cost of power purchase' and 'Promotion of working in an efficient, economical and equitable manner'. Accordingly, the Commission proceeds to examine the same as hereunder:

6.1 'Necessity' of the proposed procurement:

PSPCL has submitted that as a distribution licensee it is mandated to procure power from RE Sources to fulfil its RPO compliance targets as notified by the Commission from time to time. It was submitted that the proposed power procurement shall enable PSPCL in fulfilling the same.

The Commission observes that, in the prevailing scenario of progressively increasing RPO targets to achieve the ambitious RE capacity addition by the GoI, there cannot be any issue with regard to the criteria of 'Necessity' in case of any arrangement of power from the RE sources.

6.2 'Reasonableness of cost' of the proposed power purchase:

The Commission notes PSPCL's submission that, considering the trading margin of Rs 0.07/kWh, Rs 0.12/kWh as transmission losses (@ 3.71%) and Rs 0.15/kWh as ISTS charges (@ 25% of Rs. 0.60/kWh), the impugned tariff of Rs. 3.22 to Rs. 3.28 per kWh would result in the landed cost of about Rs. 3.49 to 3.55 per kWh at the State's Periphery. The Commission observes that:

a) PSPCL's comparison of the said solar-wind hybrid tariff with its APPC is not in order. An intermittent solar-wind power cannot be compared, as such without grossing up with an element of a storage cost, with RTC power supply. Neither, can it be compared with other hybrid projects having dis-similar wind/solar power ratios. Further, as per the Petitioner's own calculations, the proposed tariff of hybrid power is higher by 15 paise/kWh (Rs. 3.19 - Rs.3.04) in comparison to power when it is sourced separately from the solar and wind developers. In fact, this difference comes to be 26 paisa/kWh, considering the solar wind ratio projected in the petition and the solar power cost of Rs. 2.53/kWh submitted in Petition No. 35 of 2024, in place of Rs. 2.69/kWh considered by PSPCL. If allowed, the proposed arrangement would entail an additional financial liability of about Rs. 1590 crore, over the life of the projects, on the consumers of the State.

b) The Commission is not convinced by PSPCL’s submission that it is economical to go for long-term power supply to meet its peak season demand, which hardly lasts for 3-4 months. Moreover, PSPCL’s assertion that the proposed arrangement would help in avoiding purchase of costly power during peak hours is also misconceived, when there is no RTC assurance and no battery backup with proposed arrangement. Only 1/3rd of the proposed supply is wind power while the rest is solar. Even assuming that the projection of wind being available in the night hours is true, it remains unpredictable and is anticipated more in the monsoon months when the demand in Punjab actually reduces. Also, buying RECs at the prevalent price of about 20 paise/kWh (as per PSPCL’s own admission) is much cheaper than the price difference of more than Rs. 1/kWh between the wind and solar prices.

c) Further, the Respondent M/s Green Infra Renewable Projects Limited, selected to supply 450 MW (i.e. half of the impugned supply) has, in its reply to the Petition, intimated that due to the delay in the CTU Substation Commissioning/connectivity it will become impossible to evacuate the contracted quantum of power by the SCSD, which will resultantly have an impact on the levy of applicable transmission charges.

d) Also, PSPCL's submission that its present Available Transfer Capacity (ATC) of 9500 MW is expected to increase in the near future to 10400 MW and that it shall be balancing its arrangements of banking of Power and purchase through exchanges/ traders upon receiving the power from SECI is not convincing. In fact, the surplus power available with the State is banked in winter months and drawn during the summer/paddy period and there is no logic in balancing of the same with the power from costly sources. Further, considering the existing long term Inter-State generation capacity tie-ups of about 6450 MW, in-line (already approved) Inter-State Solar Capacity of 1950 MW and 3000 MW of banking arrangement, PSPCL's ATC requirement works out to be about 11400 MW. Therefore, PSPCL would also have to incur increased expenditure to obtain the additional ATC so as to utilise the proposed power capacity.

6.3 'Promotion of working in an efficient and economical manner':

As already observed in the preceding para the proposed arrangement of hybrid power would entail an additional financial liability of about Rs. 1590 crore over the life of the projects in comparison to power sourced separately from the solar and wind developers. Further, it shall also entails a liability of Rs. 428 crore payable as the commission/trading margin to the intermediary agent/trader for just floating a tender and acting as an arranger without any further risk or liability. This is unjustified specially when PSPCL itself is fully capable of doing the same exercise inhouse and invite bids directly as has been done in the past (in FY 2022-23 over 1600 MW of RE power was tied up directly by PSPCL). Thus, a saving of about Rs 2018 (1590+428) crore can be effected if the said power is arranged by PSPCL utilising its in-house experience of previous similar bids and their ability to seek a direct bid from developers.

In fact, utilizing this amount, PSPCL itself can inhouse set up its own solar plant of over 500 MW and own it and get even cheaper power without any extra cost. PSPCL itself has its own vacant lands and can lease Panchayat land, which will also help in reducing the agriculture power load and save ground water and stubble fires, benefitting the consumers and the ecology both. In case land availability is an issue, the State has thousands of km of canals which form an ideal location for setting up Solar generating stations. Some such projects have already been set up in Punjab and there is huge scope to further expand the capacity. PSPCL needs to coordinate with the State Govt. to explore and promote its own in house capacity which would also ensure Resource Adequacy. Such an arrangement of establishing the solar projects at the distributed level, utilizing its in-house technical expertise and other available sources with PSPCL, in addition to promoting PSPCL's in-house capacity and generating income to the Village Panchayats, jobs for the rural folk as well as preserving the water table and ecology, shall help in substantial savings through:

I. Economising the cost of power through saving of the ISTS charges, ISTS losses as well as commission payable to the traders;
II. Saving in cost for ATC augmentation;
III. Reduce intra-state transmission losses at the distributed level;

IV. Increase in PSPCL's income on account of availability of cheaper in-house power generation for sale to its consumers;

V. Saving in cost for meeting of RPO targets through the in-house availability of cheaper RE Power.

Thus, the instant proposal cannot be said to be passing the test of ‘Reasonableness of cost of power purchase’ and ‘Promotion of working in an efficient and economical manner’ as mandated under the PSERC Regulations. The Commission is of view that it would not be prudent to allow PSPCL’s proposal for power procurement in the present form.

The petition is dismissed in terms of the above observations.

Sd/-	Sd/-
(Paramjeet Singh) Member	(Viswajeet Khanna) Chairperson

Chandigarh
Dated: 04.11.2024