

# THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

### **Petition No. 2136 of 2024**

### **QUORUM**

Hon'ble Shri Arvind Kumar, Chairman Hon'ble Shri Sanjay Kumar Singh, Member

### IN THE MATTER OF

Petition under Section 63 read with Section 86(1)(b) of the Electricity Act, 2003 for approval for procurement of 1175 MW Wind Power in terms of the Power Sale Agreement (PSA) dated 30.05.2024 on long-term basis procured through Tariff Based Competitive Bidding (TBCB) process held under the Inter-State Transmission System Tranche-XVI Scheme.

### AND

# IN THE MATTER OF

# U.P. Power Corporation Ltd. (UPPCL),

Shakti Bhawan, 14-Ashok Marg, Lucknow-226001

..... Petitioner

#### Versus

# Solar Energy Corporation of India Ltd. (SECI),

6th Floor, Plate -B, NBCC Office Bolock Tower-2, East Kidwai Nagar, New Delhi-110023

...... Respondent

# **FOLLOWING WERE PRESENT**

- 1. Sh. Deepak Raizada, CE-PPA, UPPCL
- 2. Sh. Divyanshu Bhatt, Advocate, UPPCL
- 3. Sh. Savyasachi Saumitra, Advocate, UPPCL
- 4. Sh. Tarun Mukhija, Manager, SECI

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### **ORDER**

(DATE OF HEARING: 24.12.2024)

 The Petitioner, UPPCL has filed this Petition seeking approval for procurement of 1175 MW Wind power along with approval of PSA dated 30.05.2024 executed between UPPCL and SECI on long-term basis through TBCB process.

### **Prayers:**

- 2. The prayers of the Petitioner are as follows:
  - a) Approve the procurement of 1175 MW of Wind Power on long-term basis procured
     by UPPCL from SECI through tariff based competitive bidding process held under the Inter State Transmission System Tranche-XVI Scheme.
  - b) Approve the Power Sale Agreement executed on 30.05.2024 between Solar Energy Corporation of India Limited and UPPCL; and/or
  - c) Pass any further Order(s) as this Commission may deem fit in the facts and circumstances of the case.

### **Brief facts of the case:**

- 3. The Petitioner has mainly submitted the following:
  - a) SECI had floated a Request for Selection (RFS) document dated 30.11.2023 for the selection of Wind Power Developers (WPD) on Build Own Operate (BOO) basis for setting up of 1350MW ISTS-connected Wind Power Projects in India under TBCB Guidelines dated 26.07.2023 of the Ministry of Power, Govt. of India. SECI constituted a Bid Opening and Evaluation Committee for the said RFS. After the Techno-Commercial Evaluation process Bid Evaluation Committee, in its report dated 29.01.2024, recommended 5 bidders as qualified and eligible for opening of financial bids.
  - b) The total bid capacity of all the techno commercially qualified bidders was 500MW, 350MW, and 160MW in Gujarat, Karnataka, and Rajasthan respectively. While the Letter of Awards (LoA) to the Successful Bidders for the States of Gujarat and Karnataka were issued on 09.02.2024. LoA to the Successful Bidder in Rajasthan,

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i.e., M/s Datta Power Infra Pvt. Ltd. (DPIL), was not issued by SECI as the tariff quoted by DPIL was higher than the tariff discovered in the SECI's Wind Tranche-XV tender, which was cancelled by SECI in accordance with the direction issued by MNRE vide its letter dated 16.02.2024. DPIL filed a Writ Petition No. 2789 of 2024 before the Hon'ble High Court of Delhi seeking issuance of LoA. Hon'ble Delhi High Court, vide its Order dated 03.07.2024, dismissed the said Writ Petition as bereft of any merit.

c) SECI issued LoA dated 09.02.2024 to JSW Neo Energy Limited, Torrent Power Limited, and Powerica Limited. On 15.03.2024, LoA were issued to JSW Neo Energy Limited under the Greenshoe option in the State of Gujarat and Karnataka. Subsequently, on 08.05.2024, addendum to the LoA dated 15.03.2024 was issued to JSW Neo Energy Limited awarding an additional capacity of 25MW under the Greenshoe Option in the State of Karnataka. Subsequently, SECI entered PPAs of 1175MW capacity, the details of which are exhibited below:

S	WPD Name	Capacity		Energy (MUs	)	Date of PPA	Applicable
No.		(MW)	Declared	Min. (-20%)	Max (+20%)		Tariff
			1	supply of	supply of		(Rs/kWh)
			y -	power till 25	power till 25		
				yrs. of PPA.	yrs. of PPA.		
			Proje	ct Location Gu	jarat		
1.	JSW Neo	350	1043.15	834.52	1251.78	26.06.2024	3.61
	Energy Ltd.		€				
2.	Powerica Ltd.	50	166.55	133.24	199.86	13.06.2024	3.70
3.	JSW Neo	350	1043.15	834.52	1251.78	26.06.2024	3.61
	Energy Ltd.						
			Project	Location Karr	nataka		
4.	Torrent	100	340.47	272.38	408.57	04.07.2024	3.60
	Power Ltd.						
5.	JSW Neo	175	521.58	417.26	625.89	26.06.2024	3.60
	Energy Ltd.						
6.	JSW Neo	150	447.07	357.65	536.48	26.06.2024	3.68
	Energy Ltd.						
	Total	1175	3561.98	2849.58	4274.37		

d) Power Sale Agreement (PSA) dated 30.05.2024 was executed between UPPCL and SECI. In terms of Article 1.1 of the said PSA, SECI shall be entitled to receive the tariff as indicated in the aforementioned table along with a trading margin of Rs 0.07/kWh fixed for the entire term of PSA.









- e) SECI has filed Petition no. 224/AT/2024 under Section 63 of the Act before the CERC for Adoption of Tariff of 1175MW Wind Power Projects (Tranche-XVI). CERC, vide its Order dated 03.10.2024 in Petition No. 224/AT/2024, had adopted the individual tariff for the Wind Power Projects of 1175MW capacity.
- f) The procurement of Wind Power in the instant case is also an endeavour of UPPCL to fulfil its obligation of Renewable Purchase Obligation (RPO) for promoting green energy and optimising the cost of power purchase to benefit of the consumers of Uttar Pradesh.
- g) The Ministry of Power (MoP) had issued a notification dated 20.10.2023 vide which the MOP had mandated the power distribution companies (i.e., Discoms) to prepare a RPO roadmap and it was further stated that the RPO targets on Discoms for FY 2024-25 shall be 29.91%. Further, MoP, vide said notification dated 20.10.2023, has given the new RPO trajectory from FY 2024-25 to FY 2029-30 as tabulated below:

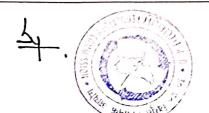
Year	Wind	Hydro	Other	Distributed	Total
	RPO	RPO	RE	RE	
2024-25	0.67%	0.38%	27.35%	1.50%	29.91%
2025-26	1.45%	1.22%	28.24%	2.10%	33.01%
2026-27	1.97%	1.34%	29.94%	2.70%	35.95%
2027-28	2.45%	1.42%	31.64%	3.30%	38.81%
2028-29	2.95%	1.42%	33.10%	3.90%	41.36%
2029-30	3.48%	1.33%	34.02%	4.50%	43.33%

h) MoP through the aforesaid notification has provided the criteria to meet the RPO against each category, however, 100% fungibility has been provided between Wind, Hydro, and Other Renewable sources under the notification. The criteria has been outlined below:

Wind: shall be met from the Wind Power Projects commissioned after 31.03.2024.

**Hydro:** shall be met only from Hydro Power Projects (including Pump Storage and Small Hydro Projects) commissioned after 31.03.2024.

**Other RPO:** can be met by energy produced from any RE projects other than specified under Wind, Hydro, and Distributed Energy and shall comprise energy from







all WPPs and Hydro Power Projects (including Pump Storage and Small Hydro Projects), including free power, commissioned before the 01.04.2024.

**Distributed RE:** shall be met only from energy generated from RE projects that are less than 10MW in size.

- i) Guideline No. 6 of the aforesaid MoP Notification dated 20.10.2023 provide that any shortfall in meeting RPO targets will be treated as non-compliance and penalty will be imposed for each unit of shortfall in meeting the energy consumption norms as per the amended Energy Conservation Act, 2001. As per Section 12(3) of the Conservation Act, the non-compliance of the directions as mentioned in clause (n) and (x), a penalty shall be levied from the Discoms which shall not exceed Rs. 10 Lakh for each failure. The MNRE, vide its letter dated 01.02.2024, had further notified that additional penalty shall also be levied to the tune Rs. 3.72 per unit for each unit of shortfall in meeting RE consumption norms.
- j) The capacity in MW required to be contracted by UPPCL to meet the RPO targets has been showcased below:

Ca	apacity (M	IW) to be	contract	ed in res	ective Y	ear to m	eet RPO (	With Fun	gibility)	
Category/ FY	2023 -24	2024 -25	2025 -26	2026 -27	2027 -28	2028 -29	2029 -30	2030 -31	2031 -32	Total (MW)
Solar	3,000	2,000	2,000	1,000	500	_	1-1		-	8,500
Wind	_	2,000	2,000	1,500	1000	-	-	-	<b>-</b>	6,500
Hydro	_	4,000	1,000	1,000	500	-	-	-	j-	6,500
Cumulative	3,000	8,000	5,000	3,500	2,000	=		-	a-	21,500*

\*Out of 21,500 MW as proposed, UPPCL has already contracted 3000 MW RE power in FY2023-24 and remaining 18500MW is to be contracted in upcoming years.

k) As per the observation of this Commission, in Petition no. 1629/2020 which was jointly filed by UPPCL as well as SECI for approval of procurement of power, it was held that unless the tariff gets adopted by the appropriate Commission, the approval of PPA as well PSA would not be justified.

# **Records of Proceedings:**

4. On hearing dated 19.11.2024, Sh. Shashwat Singh, Advocate of UPPCL submitted that instant Petition was for approval of 1175MW Wind Power under PSA dated 30.05.2024 and CERC has already adopted the tariff of the same. He further stated that a trading margin of 7 paise/unit was over and above the discovered tariff. On specific query of

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the Commission regarding type of power (i.e., whether peak/off-peak/RTC power), representative of UPPCL responded that it is a flexible power to maintain the CUF. The Commission directed UPPCL to furnish reasons for the higher discovered tariff as compared to the past Wind power Tranches and difference in major terms & conditions of this PPA/PSA from the earlier similar Wind based PPA/PSA, if any, along with its rationale.

5. During the hearing dated 24.12.2024, Sh. Divyanshu Bhatt, Counsel for UPPCL submitted that additional affidavit on 20.12.2024 in compliance to the Commission's Order dated 21.11.2024 has been filed. Regarding higher discovered tariff, Sh. Bhatt responded that major reasons were concentration of Wind power sites, increased Raw material price, RoW issues etc. Representative of SECI stated that recent Wind power tenders went undersubscribed as observed in SJVNL's tender and in SECI's 500MW Wind Tranche XVII tender, only 120 MW bid received, and the discovered tariff was Rs. 3.81 per unit for the same; further in NHPC's tender no bidders participated. Sh. Deepak Raizada submitted that in view of RPO fungibility, they prefer Wind power over Solar based power because the former supports the UPPCL in meeting peak power in summer seasons. On specific query of the Commission regarding profile of the power requirement, Sh. Raizada responded that general profile of this wind power supply was for morning and evening hours of the day.

### **Additional Submissions**

- 6. On 20.12.2024, UPPCL filed its submissions wherein main submissions were following:
  - a) SECI, through its letter dated 13.12.2024, has submitted the following reasons for the discovery of higher tariff in the tenders for selection of Wind power projects:
    - i. <u>Concentration of Wind Power sites in few windy States:</u> Availability of highpotential sites was crucial to achieving higher CUF and improved Internal Rates of Return (IRR) and hence, developers were planning projects in States where CUF was good to realize better tariff.
    - ii. <u>Limited Wind Turbine Generator (WTG) Supply & Increased costs due to raw materials price increase</u>: Domestic WTG manufactures are affected by financial troubles and international manufacturers have either reduced supply or have increased price. Additionally, due to ongoing geopolitical

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energy crisis, labour cost and prices of raw materials such as steel, aluminum, copper, etc., have significantly increased.

- iii. <u>Increased ROW issues:</u> Local aggregators influence farmers and landowners to restrict bilateral transactions which is a key factor driving up overall project costs, contributing to higher tariffs in current bids. Additionally, increasing ROW issues delay the project execution which leads to higher IDC charges and further increase the project cost.
- iv. <u>Wind Sites Acquired by Other Technology Developers:</u> Many high-potential Wind sites have been secured by developers working on RTC, Green Hydrogen, and Captive Power projects. As a result, these developers were securing connectivity and locations near high-potential wind sites, which was increasing the demand of other ancillaries like crane, labours and EPC contractors.
- b) In areas where multiple Wind farms were concentrated, the wake effect led to lower generation efficiency for downstream turbines. This reduces overall energy output and increases the cost per unit.
- c) Advanced Wind turbines with larger rotor diameters and taller towers were more complex and require specialized maintenance.
- d) Harsh environmental conditions such as high humidity, corrosion, and extreme winds in coastal areas adds to maintenance costs.
- e) Most high-wind potential sites have already been utilized. Thus, new Wind farms were often located in remote areas far from demand centers. Transmission network congestion and delays in green energy corridor projects lead to higher evacuation costs, increasing overall tariffs.
- f) Changing wind patterns due to climate change result in deviations from expected wind speeds. This reduces PLFs and adds uncertainty to generation forecasts, requiring developers to price this risk into their tariffs.
- g) Summary of previously signed PSAs for procurement of Wind power are:

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S. No.	Particular	PSA dated 28.06.2022	PSA dated 14.03.2023	PSA dated 19.10.2023	PSA dated 30.05.2024			
1	Capacity (MW)	450	516.37	690	1175			
2	Weighted Avg. CUF%	35.95	36.67	36.06	34.61			
3	Weighted Avg. Tariff (incl. SECI Trading margin @7 paisa) Rs./kWh	2.69	2.93	3.22	3.62			
4	Expected SCOD/Revised SCOD	26.07.2025	23.01.2026	16.11.2025	30.05.2026			
5.	Major Changes in Supply Terms and Conditions	All terms and conditions of supply of Wind power from under these PSA are similar. No major changes in Supply terms are observed.						

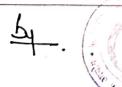
h) Wind Power generation aligns well with Uttar Pradesh's demand profile, making it beneficial for UPPCL to meet peak demand, which would otherwise be procured at significantly higher market rates. This procurement will also help DISCOMs in fulfilling its RPO trajectory.

# **Analysis & Decision**

- 7. UPPCL has filed this Petition seeking approval for procurement of 1175MW Wind Power under Tariff-based Competitive Bidding on long-term basis of 25 years along with approval of PSA dated 30.05.2024 executed with SECI. UPPCL has submitted that this Wind power procurement shall facilitate meeting its power demand profile as well as in compliance of RPO targets.
- 8. The CERC vide its Order dated 03.10.2024 in Petition No. 224/AT/2024 has adopted the individual tariff of the 5 WPDs with total capacity of 1175MW from which power would be supplied to UPPCL. The relevant extract of the quantum of power executed under the PSA by UPPCL as observed in the aforementioned Order dated 03.10.2024 are as follows:

"33. In view of the aforesaid discussions, it emerges that the selection of the successful bidders has been made, and the tariff of the Wind Power Projects has been discovered by the Petitioner, SECI, through a transparent process of competitive bidding in accordance with the Guidelines issued by the Ministry of Power, Government of India. Therefore, in terms of Section 63 of the Act, the Commission adopts the individual tariff for the Wind Power Projects of 1175 MW, as agreed to by the successful bidder(s), as under:

Sr. No.	Successful Bidder	Project Company formed by Successful Bidder for execution of PPA.	PPA Date	Quantum (MW)	Tariff Rs./kWh
1.	Powerica Limited		13.6.2024	50	3.70
2.	JSW Neo Energy Limited	JSW Renew Energy Four Ltd.	26.6.2024	175	3.60
3.	JSW Neo Energy Limited	JSW Renew Energy Four Ltd.	26.6.2024	150	3.68
4.	JSW Neo Energy Limited	JSW Renew Energy Eight Ltd.		700	3.61







5.	Torrent So	olar Power	Pvt.	4.7.2024	100	3.60
	TOTAL				1175^	

^includes the capacity of 525 MW awarded under Greenshoe option."

- 9. In view of above, the Commission approves the Wind power procurement of 1175 MW at the individual tariff as per table at para 8 above in terms of CERC Order dated 03.10.2024 in Petition No. 224/AT/2024, along with trading margin of Rs.0.07/kWh. However, in case of failure by SECI to provide an Escrow arrangement or irrevocable, unconditional revolving letter of credit to the Wind Power Developers, trading margin shall be limited to Rs.0.02/kWh in terms of Regulation 8 of the CERC Trading license Regulations, 2020. The Commission also approves the PSA dated 30.05.2024 executed between UPPCL & SECI. Further, in the consumer interest, UPPCL should comply with the Commission's direction vide Order dated 03.10.2024 in Petition No. 2091/2024 regarding negotiating trading margin below 7 paise per unit for future long-term power procurement with the intermediary procurer/Trading Licensee.
- 10. The Commission observes that the Wind power tariff has increased over 34% over the last two years that too at lower CUF. Therefore, UPPCL shall take a conscious decision of power procurement from renewable energy sources to optimise its overall power purchase cost while simultaneously fulfilling its RPO targets.

The Petition stands disposed of in terms of above.

(Sanjay Kumar Singh)

Member

Place: Lucknow Dated: 09.01.2025

(Arvind Kumar)
Chairman