#### Before the

### MAHARASHTRA ELECTRICITY REGULATORY COMMISSION World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005

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#### Case No. 123 of 2024

MSEDCL's Petition seeking adoption of Tariff for long term procurement of 780 MW Wind - Solar Hybrid Power from NTPC.

Maharashtra State Electricity Distribution Company Ltd. (MSEDCL)... Petitioner

NTPC Ltd. (NTPC)... Respondent

#### Coram

Sanjay Kumar, Chairperson Anand M. Limaye, Member Surendra J. Biyani, Member

#### **Appearance:**

For the Petitioner : Ms. Deepa Chawan (Adv.)

For the Respondent: None

#### **ORDER**

Date: 10 September 2025

1. Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) filed the present Petition on 24 July 2024 seeking adoption of tariff for long term power procurement from 480 MW ISTS grid connected Wind-Solar hybrid power projects discovered through competitive bidding process. In meantime, MSEDCL filed its additional submission on 22 November 2024 wherein it sought approval to contract additional 300 MW at discovered tariff of Rs.3.43/kWh. To supplement the proposed procurement, MSEDCL referred to Section 63 of the Electricity Act, 2003 and Regulation 7.6 MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 (RPO Regulations-2019) & its successive Amendment.

#### 2. MSEDCL's major prayers are as follows:

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- a) To admit the Petition as per the provisions under Section 63 of the Electricity Act (EA), 2003.
- b) To accord approval for adoption of tariff for 480 MW Wind-Solar Hybrid from NTPC under Development mode at discovered tariff Rs. 3.42-3.43 per kWh (including Trading Margin) as discovered in the e-reverse auction conducted by NTPC.
- c) To accord approval for Power Sale Agreement (PSA) and Draft PPA.
- d) To consider procurement of Wind-Solar Hybrid from NTPC under Development mode for meeting Wind RPO and Other RPO (which includes Solar Source) requirement of MSEDCL.

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## MSEDCL in its additional submission dated 22 November 2024 revised Prayer clause (b) as follows:

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b) To accord approval for adoption of tariff for 780 MW Wind-Solar Hybrid from NTPC under Development mode at discovered tariff Rs. 3.42-3.43 per kWh (including Trading Margin) as discovered in the e-reverse auction conducted by NTPC.

#### 3. MSEDCL in its Case has stated as follows:

3.1 The chronology of the event:

Date	Event
07.02.2024	NTPC sought consent from MSEDCL with quantum (MW) for Wind-Solar
&	Hybrid Power under development mode.
02.05.2024	
10.05.2024	MSEDCL issued in-principal consent for procurement of 2580 MW Wind-Solar
	Hybrid Power at discovered tariff rate.
29.06.2024	Power Sale Agreement is executed between parties for quantum of 480 MW.

# 3.2 Details of developer and discovered tariff in respect of 480 MW Wind-Solar Hybrid Power procurement are as under:

Selected Developer	Quantum (MW)	Tariff (Rs/kWh)	Trading Margin (Rs/kWh)	Final Tariff including Trading Margin (Rs/kWh)	
Sprng Vayu Vidyut Private Limited	250	3.35	0.07	3.42	
Juniper Green Beta Pvt. Ltd.	230	3.36	0.07	3.43	

Total	480 MW		

- 3.1. As on 30 June 2024, MSEDCL contracted 24740 MW renewable energy capacity for meeting RPO requirements, out of which 10196 MW has been commissioned.
- 3.2. MSEDCL's Solar RPO compliance is as below:

Sr. No.	Financial Year	Solar	Non-solar
1	Shortfall till FY 2019-20	6115	4320
2	2020-21	60	3883
3	2021-22	1176	3838
4	2022-23 (Provisional)	1174	4216
5	2023-24 (Provisional)	5124	7248
	Cumulative Shortfall	13649	23505
	Total RPO Shortfall till l	FY 2023-24 is 37154 MU'	s

Considering the future Wind and Other RPO targets (which include Solar power), MSEDCL needs to procure considerable quantum of Wind and Solar power for fulfillment of RPO targets.

3.3. The recent discovered tariff in various tenders is as under:

Bidding Company	Discovered Rate Rs/kWh.
NHPC 500 MW, February-2024	3.48-3.49
NTPC, 1000 MW, December-2023	3.41-3.47
SJVN, 1500 MW, February-2024	3.43-3.49

The above tariff is excluding trading margin.

- 3.4. The APPC of MSEDCL for FY 2024-25 is Rs.4.88/kWh. The tariff offered by NTPC is lower than APPC.
- 3.5. The landed tariff to MSEDCL will be around Rs. 3.35 & 3.36/kWh + 0.09/kWh (transmission losses) + 0.07/kWh (Trading Margin) = Rs.3.51/kWh & 3.52/kWh with no transmission charges at present.
- 3.6. As per MSEDCL, project of 480 MW Wind-Solar Hybrid Project will likely to be commissioned in FY 2026-27. Hence, the energy generated from these projects will be utilized for mitigating the RPO target of Wind RPO (Wind Component) and Other RPO (Solar Component).
- 3.7. The Commission notified the RPO Regulations 2019 on 27 December 2019 for the control period from FY 2020-21 to FY 2024-25. Subsequently, vide notification dated 23 February 2024, the Commission issued Amendments to the RPO Regulations, 2019.

3.8. As per Regulation 7.5(A) of the Amendment RPO Regulations, 2024, the RPO targets are as below:

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

- 3.9. MSEDCL requested the Commission to approve the 480 MW Wind-Solar Hybrid from NTPC under Development Mode at discovered tariff Rs. 3.35-3.36 per kWh (excluding Trading Margin) and NTPC's trading margin of Rs. 0.07 per kWh. The agreement will be for a period of 25 years from the Scheduled Commencement Supply Date (SCSD) or Commercial Operation Date for solar power projects.
- 3.10. Further, MSEDCL requested to consider the 480 MW Wind-solar Hybrid power procured through NTPC towards meeting the RPO requirement of MSEDCL.
- 4. MSEDCL in its Additional Submission dated 22 November 2024 stated as below:
- 4.1. MSEDCL had signed Two (2) PSAs for 480 MW Wind-Solar Hybrid Power. Thereafter, MSEDCL has executed PSA of additional 300 MW Wind-Solar Hybrid Power. Accordingly, the finalized PSA quantum is as below:

Selected Developer	Quantum (MW)	Tariff (Rs/kWh)	Trading Margin (Rs/kWh)	Final Tariff including Trading Margin (Rs/kWh)
Sprng Vayu Vidyut Private Limited	250	3.35	0.07	3.42
Juniper Green Beta Pvt. Ltd.	230	3.36	0.07	3.43
ACME Renewtech Private Limited, (a SPV of ACME Cleantech Solutions Pvt. Ltd.)	300	3.36	0.07	3.43
TOTAL	780 MW			

- 4.2. Resource Adequacy Plan:
- 4.2.1. MSEDCL has submitted Resource Adequacy plan to the Commission for its approval on 15 October 2024. The capacity mix with current capacity addition plan is as under:

Year	Thermal +Gas	Nucle ar	Large Hydro	PSP- BSES Storage	Wind	Solar	Hybrid	FDRE	Bagasse +Biomass	Small Hydro	DRE	Total
FY 2025-26	22551	1191	2819	250	2855	16012	300	0	2911	317	2675	51881
FY 2026-27	22551	1191	2928	1000	2855	28377	1080	1468	3256	317	3234	68257
FY 2027-28	22551	1191	3241	1000	2855	29377	4344	1468	3601	317	4016	73961
FY 2028-29	22551	1191	3345	2750	2855	32377	4344	1468	3601	317	5111	79910
FY 2029-30	24379	1191	3345	4824	2855	32377	4344	1468	3601	317	6644	85345

- 4.3. The CERC vide its Order dated 24 July 2024 in Petition No. 71/AT/2024 has accorded approval Adoption of Tariff for procurement of 1080 MW power from ISTS-connected Wind Solar Hybrid Power Projects.
- 4.4. Further, the Commission vide its Order dated 11 October 2024 in Case No.148 & 149 of 2024 has adopted the tariff of Rs. 3.60 per kWh discovered in MSEDCL's Solar-Wind Hybrid Phase-III & IV tenders.
- 5. E-Hearing in this matter was held on 9 July 2025. The Advocate of MSEDCL narrated the sequence of events in proposed procurement process. The tariff has been discovered through the transparent competitive bidding process. Landed tariff for MSEDCL will be in the range of Rs. 3.42/kWh & Rs. 3.43/kWh, which is market reflective.

#### Commission's Analysis and Rulings

- 6. The Commission notes that in present Petition, MSEDCL is seeking approval to procurement of 780 MW Wind-Solar Hybrid power from NTPC at discovered rate of Rs. 3.42/kWh- Rs. 3.43/kWh (including 7 Paise/Unit Trading Margin).
- 7. Before delving into merits of the matter, it would be appropriate to highlight following timeline in the proposed procurement:

Date	Event
19.07.2023	NTPC issued a RfS for the selection of hybrid power generators for setting
	up of the 1500 MW ISTS-connected Wind-Solar Hybrid power projects.
27.12.2023	The reverse auction has been conducted and tariff discovered is Rs.3.35-
	3.36/ kWh (excluding trading margin of Rs.0.07/kWh).
07.02.2024	NTPC vide its letters sought consent from MSEDCL with quantum (MW)
&	from MSEDCL for Wind-Solar Hybrid Power under development.
02.05.2024	
10.05.2024	MSEDCL issued in-principle consent for procurement of 2580 MW (which
	also includes quantum from tenders floated prior to 19.07.2023)Wind-Solar

Date	Event											
	Hybrid Power under development mode from ISTS connected power projects.											
24.07.2024	Tariff has been adopted by CERC vide its Order in Petition No.71/AT/2024											

- 8. With above background and submissions made during proceedings, the Commission frames following issues for its consideration:
  - a. Quantum of power procurement to be allowed to MSEDCL;
  - b. Competitiveness of the rate proposed for approval;
  - c. Trading Margin (7 Paise per Unit) in present transaction;
  - d. Availability of Inter-State Transmission Corridor for procurement of power.

The Commission's ruling on above issues is provided in the subsequent paragraphs.

- 9. Issue A: Quantum of Power Procurement to be allowed to MSEDCL
- 9.1. The Commission notes that MSEDCL has filed the present Petition to meet future demand by accommodating RE sources in power basket and compliance of RPO targets.
- 9.2. To validate the proposed power procurement, MSEDCL has referred to its Resource Adequacy (RA) Plan.
- 9.3. It is pertinent to note that the Commission in its MYT Tariff Order dated 28 March 2025 in Case No.217 of 2024 has dealt with RA plan and noted certain observations for further compliance. Hence, at this stage it is not appropriate to rely on MSEDCL's RA Plan.
- 9.4. But parallelly, CEA has conducted its independent RA study, which is relied upon by the Commission in past for power procurement scrutiny.
- 9.5. With regards to CEA's Resource Adequacy Study, the Commission in its Order dated 26 September 2024 in Case No. 155 of 2024 has noted following:
  - 5.7 CEA has conducted the Resource Adequacy study for MSEDCL and the capacity projected by CEA considering 'Loss of Load Probability' and 'Expected Energy Not Served' is as under:

	Year	Coal	Gas	Nuclear	Bagasse + Biomass	Hydro	Wind	Solar	Hybrid (wind + Solar)	STOA/ OA	Storage (4 Hours) + PSP	Total
CEA	2033-34	27562	1076	1186	3439	3949	15905	30285	0	1457	2668	87528

*The present contracted and consented capacity of MSEDCL is as below:* 

	Coal	Gas	Nuclear	Bagasse + Biomass	Hydro	Wind	Solar	Hybrid (wind + Solar)	FDRE	Storage (4 Hours) + PSP	Total
MSEDCL	22733	1077	1191	3439	4273	3905	24785	2880	1468	574	66325

Thus, capacity addition required by MSEDCL by FY2033-34 is as under:

	Coal	Gas	Nuclear	Bagasse + Biomass	Hydro	Wind	Solar	Hybrid (wind + Solar)	DRE	Storage (4 Hours) + PSP	Total
MSEDCL	4829	0	0	0	0	12000	5500	0	12693	2094	37116

- 9.6. From submission on record, it is evident that MSEDCL has consented for the proposed procurement on 10 May 2024 and MSEDCL's proposed procurement of 780 MW has been factored into CEA's Resource Adequacy Study. Hence it is justified.
- 9.7. Apart from above, the Commission notes that MERC RPO (Amendment) Regulations, 2024 stipulates RPO trajectory till FY 2029-30. The notified trajectory is as below:

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

- 9.8. The quantum proposed to be procured by MSEDCL will supplement its effort to meet RPO targets and fulfil past RPO shortfall. Apart from above, MSEDCL will be able to replace its costly power in crucial peak period. Considering these factors, the proposed quantum of 780 MW of hybrid power procurement seems to be justified.
- 10. Issue B: Competitiveness of the rate proposed for approval.
- 10.1. The Commission notes that proposed 780 MW Solar power procurement is based on competitive bidding process initiated by NTPC.
- 10.2. As the proposed Wind-Solar project is inter-state project, any contractual issues including adoption of tariff is within the jurisdiction of the Central Commission. The scope of present proceedings is governed by Rule 8 of the Electricity Rules, 2005 which is reproduced below:
  - 8. Tariffs of generating companies under section 79.- The tariff determined by the

CERC for generating companies under clause (a) or (b) of subsection (1) of section 79 of the Act shall not be subject to re-determination by the State Commission in exercise of functions under clauses (a) or (b) of sub-section (1) of section 86 of the Act and subject to the above the State Commission may determine whether a Distribution Licensee in the State should enter into Power Purchase Agreement or procurement process with such generating companies based on the tariff determined by the CERC." (Emphasis added)

- 10.3. In the present case, the tariff of Rs. 3.42-3.43/kWh has been discovered through transparent process of competitive bidding and such tariff has been adopted by CERC vide its Order dated 24 July 2024 in Petition No.71/AT/2024. Therefore, scope of present proceedings is to determine whether MSEDCL be allowed to execute PSA at the tariff adopted by CERC.
- 10.4. The Commission notes that after adding trading margin and ISTS losses, landed cost of such power at Maharashtra periphery will be around Rs. 3.52/kWh which will be lower than tariff of Rs. 3.60/kWh adopted by this Commission vide Order dated 11 October 2024 in Case No 148 & 149 of 2024 for MSEDCL's Solar-Wind Hybrid Phase III & IV tenders. Hence, the Commission is inclined to allow such power procurement by MSEDCL.

### 11. Issue C: Trading Margin (7 Paise per Unit) in present transaction:

- 11.1. MSEDCL submitted that in the proposed power transaction, NTPC is acting as a trader/facilitator for a trading margin of Rs.0.07/kWh. The said Trading Margin in accordance with the Competitive Bidding Guidelines, 2023 as well as Regulation 8 (1) (d) of the CERC Trading License Regulations, 2020.
- 11.2. The Commission notes that with regards to Trading Margin, Competitive Bidding Guidelines, 2023 stipulates following:

h) 'Intermediary Procure' & 'End Procurer'

. . .

- (ii) The Intermediary Procurer shall enter into a Power Purchase Agreement (PPA) with the RE Power developer and also enter into a Power Sale Agreement (PSA) with the End Procurer. The PSA shall contain the relevant provisions of the PPA on a back-to-back basis. Trading margin, of Rs.0.07/kWh shall be payable by the End Procurer to the Intermediary Procurer."
- 11.3. As Trading margin of Rs.0.07/kWh is stipulated in the Competitive Bidding Guidelines, 2023, the Commission allows trading margin of Rs.0.07/kWh to be payable by MSEDCL

to NTPC.

#### 12. Issue D: Availability of Transmission Corridor:

12.1. The Commission notes that PSA executed between MSEDCL and NTPC contain following clauses:

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- XVI. The <u>MSEDCL shall coordinate with the respective STU and facilitate grant of necessary NOC for drawl of power</u>, as required by the HPG.
- XVII The MSEDCL shall be responsible for obtaining Grid Access as per the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022, and for obtaining any Grid Access/ NOC/clearance from the respective State Transmission Utility (STU)/ SLDC, at its own risk and cost. MSEDCL is required to file the GNA application and NOC application within 30 days of signing of PSA (if required). ISTS charges on transmission of power, including waiver for RE power, shall be applicable as per extant regulations. Government of India, from time to time, issues order for waiver of inter-state transmission system (ISTS) charges on transmission of RE power till a certain date.

NTPC shall bear no liability arising out of any reasons whatsoever, on account of transmission charges.

As per the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) (First Amendment) Regulations, 2023 dated 07.02.2023, and subsequent amendments and clarifications thereto the liability of transmission charges would be to End procurer(s)". The extant regulations provide graded waiver on ISTS charges for the projects commissioned (CoD) up to 30.06.2028. Further, MOP order dt 29.05.2023 provides that if a Renewable Energy Project, which is eligible for ISTS waiver in terms of extant orders, is granted extension in Date of Commercial Operation (COD) by the competent authority, the project would not be deprived from applicable waiver of ISTS charges based on the original COD."

MSEDCL (being Buying Entity) is responsible for obtaining Grid Access/GNA as per the CERC (Connectivity and General Network Access to the interstate Transmission System) Regulations, 2022 and its amendments. Considering the above-mentioned contractual settings, MSEDCL needs to be vigilant on transmission corridor availability to avoid any consequences as per provisions of the PSA.

12.2. Therefore, the Commission directs MSEDCL to coordinate with STU for timely implementation of strengthening and augmentation of planned inter-state transmission

transfer capacities schemes on urgent and priority basis. If required, a suitable intervention from various Government Departments may be sought to resolve issues in clearances and Right of Way for timely implementation of such planned schemes.

13. In view of above, the Commission allows MSEDCL to procure 780 MW Wind-Solar Hybrid Power from NTPC for 25 years. As per following details:

Developer	Quantum (MW)	Tariff (Rs/kWh)	NTPC's Trading Margin (Rs/kWh)	Final Tariff including Trading Margin (Rs/kWh)
Sprng Vayu Vidyut Pvt. Ltd.	250	3.35	0.07	3.42
Juniper Green Beta Pvt. Ltd.	230	3.36	0.07	3.43
ACME Renewtech Pvt. Ltd, (a SPV of ACME Cleantech Solutions Pvt. Ltd.)	300	3.36	0.07	3.43
TOTAL	780 MW			

#### 14. Hence, the following Order:

#### **ORDER**

- 1. Petition in Case No.123 of 2024 is allowed.
- 2. The Commission accords its approval to the MSEDCL's proposal for procurement of 780 MW Wind-Solar Hybrid Power from NTPC at tariff of Rs. 3.42-3.43/kWh including trading margin of 7 Paise/unit for 25 years.
- 3. The power procured from projects considered in this Petition shall be considered for meeting the Renewable Purchase Obligation requirement of MSEDCL.
- 4. MSEDCL shall furnish copies of Power Supply Agreements, executed between the parties for records of the Commission.

Sd/- Sd/-

(Surendra J. Biyani) (Anand M. Limaye) (Sanjay Kumar)
Member Member Chairperson

(Dr. Rajendra G. Ambekar) Secretary