TAMIL NADU ELECTRICITY REGULATORY COMMISSION

Order of the Commission dated this the 19th Day of February 2026

PRESENT:

Thiru. R.Manivannan …. Chairman

Thiru K.Venkatesan …. Member

and

Thiru B.Mohan …. Member (Legal)

M.P. No. 78 of 2025

Tamil Nadu Power Distribution Corporation Ltd.,
Represented by its Chief Engineer / Private Power Projects,
144, Anna Salai,
Chennai – 600 002. ….. Petitioner

(Thiru.N.Kumanan &
Thiru.A.P. Venkatachalapathy
Standing Counsel for TNPDCL)

This Miscellaneous Petition stands preferred by the petitioner Tamil Nadu Power Distribution Corporation Limited with prayer to accord approval for procurement of 270 MW for 25 years with the fixed tariff for entire term of agreement and in addition to the tariff for payment of 7 paise /KWhr as trader margin to SECI.

This petition having come up for final hearing on 09-12-2025 in the presence of Thiru.Kumanan and Thiru.A.P.Venkatachalapahy, Standing Counsel for the petitioner and on consideration of the submission made by the Counsel for the Petitioner and on perusal of material records the Commission passes the following order :-

ORDER

1. **Submission of the petitioner :-**

1.1. The Tamil Nadu Power Distribution Corporation Limited (TNPDCL) is filing this Miscellaneous Petition as we are bifurcated from TANGEDCO as per G.O (Ms). No. 6 Energy (B2) Department dated 24.01.2024 & G.O.(Ms) No.7 dated 24.01.2024 of the Energy Department, Govt. of Tamil Nadu.

1.2. The SECI had invited proposals for setting up of ISTS-connected RE Projects for supply of 1200 MW Power on "Round-the-Clock" (RTC) basis from ISTS-connected RE Power Projects in India SECI/C&P/IPP/13/0019/ 24-25 dated 30.10.2024 under the Build-Own-Operate (BOO) model. SECI shall enter into a Power Purchase Agreement (PPA) with the successful Bidders selected based on this RfS for purchase of power for a period of 25 years based on the terms, conditions and provisions of the RfS and PPA.

1.3. M/s SECI in their Email letter dt 17.10.2025 have offered RE RTC power under ISTS connected RTC Tranche-IV scheme available with them for procurement to TNPDCL:

Sl.No	Available capacity for allocation	Price/Kwh	Expected date of commissioning
1.	120	5.06	24 months from signing of PPA
2.	150	5.07	

1.4. The proposed allocation of 270 MW Firm and Dispatchable Renewable Energy (FDRE) capacity to TNPDCL is duly justified considering the State's projected peak demand growth, renewable energy integration requirements, and the need to ensure reliable, round-the-clock power supply. The said quantum has been assessed keeping in view the resource adequacy obligations, Renewable Purchase Obligation (RPO) targets, and the requirement of firm renewable capacity to supplement the existing renewable portfolio of the State. The 270 MW FDRE capacity is expected to provide a balanced mix of generation that will enhance grid reliability, reduce dependence on conventional thermal power, and support the State's transition towards a sustainable and dispatchable renewable energy mix.

1.5. The implementation of the FDRE project aligns with the national objectives of achieving 500 GW of non-fossil capacity by 2030 and supports Tamil Nadu's commitment to promoting sustainable, reliable, and low-carbon energy systems. The addition of this 270 MW FDRE capacity will therefore play a significant role in maintaining the State's leadership position in renewable energy deployment.

1.6. With the increasing penetration of Renewable Energy (RE) in the State's energy mix, there is a growing need to address the challenges of intermittency and grid stability. FDRE projects will play a vital role in supporting Grid stability particularly during the peak demand hours and in reducing the dependence on conventional thermal generation. The dispatchable nature of the FDRE power will assist TNPDCL in meeting its Resource Adequacy obligations as prescribed under the Electricity (Amendment) Rules, 2022, by

ensuring availability of power to meet both energy and capacity requirement on a long-term basis.

1.7. As per Rule 16 of the Electricity (Amendment) Rules 2022, the Ministry of Power has notified Resource Adequacy guidelines. As per the Resource Adequacy guidelines, the Central Electricity Authority (CEA) is entrusted to Long Term National Resource Adequacy Plan. The Distribution Licensee has to carry out Long Term Distribution Licensee Resource Adequacy Plan (LT-DRAP) to meet utility peak and energy requirement. As per the Resource Adequacy guidelines, each Distribution Licensee has to undertake a Resource Adequacy Plan for a 10 year horizon to meet the peak and energy requirement and the plan should be vetted / validated by the Central Electricity Authority.

1.8. Accordingly Resource Adequacy (RA) studies have been carried out for the State of Tamil Nadu by CEA based on data furnished by TNPDCL and communicated by CEA on 20.1.2025. As per the Central Electricity Authority's Resource Adequacy plan for the State of Tamil Nadu, the peak demand and energy projections of TNPDCL are as below:

a) Peak demand

Financial year (FY)	Peak demand projections	YoY growth	Financial year (FY)	Peak demand projections	YoY growth
2023-24	19409		2029-30	27541	5.7%
2024-25	20701	6.7%	2030-31	29027	5.4%
2025-26	21959	6.1%	2031-32	30567	5.3%
2026-27	23314	6.2%	2032-33	32159	5.2%
2027-28	24680	5.9%	2033-34	33805	5.1%
2028-29	26046	5.5%	2034-35	35507	5.0%

b) Energy Projections

Financial Year (FY)	Energy projections (MU)	YoY growth in %
2023-24	130223	
2024-25	142441	9.4
2025-26	152678	7.2
2026-27	162726	6.6
2027-28	172679	6.1
2028-29	182401	5.6
2029-30	193232	5.9
2030-31	203598	5.4
2031-32	214582	5.4
2032-33	225898	5.3
2033-34	237559	5.2
2034-35	249580	5.1

1.9. The peak demand projections as per the 20th EPS (Electric Power Survey) are as follows:

Financial year (FY)	Peak demand projections (MW)	Financial year (FY)	Peak demand projections (MW)
2023-24	18336	2028-29	24276
2024-25	19413	2029-30	25764
2025-26	20545	2030-31	27033
2026-27	21736	2031-32	28291
2027-28	22976		

1.10. The year wise capacity projections as per the CEA's RA plan is as follows:

FY	Coal	Gas	Nuclear	Bio mass	Hydro	Wind	Solar	Solar DRE	Hydro DRE	Storage	STOA
2024/25	15291	739	1906	891	1864	10015	12496	1614	58	400	3274
2025/26	15141	739	1906	966	1884	11015	14796	2457	58	900	3996
2026/27	16461	739	3006	966	1884	12015	16796	3391	58	2441	2580
2027/28	16923	739	3006	966	1884	13015	18996	4419	58	4344	2674
2028/29	17588	739	1828	966	1884	14015	21496	5533	58	5581	3310
2029/30	18380	739	2828	966	1884	16515	24296	6778	58	7581	2408
2030/31	19380	739	2828	966	1884	18015	25796	7947	58	8581	2780
2031/32	20380	408	2828	966	1884	19515	27296	9224	58	9581	2855
2032/33	21380	408	2828	966	1884	21015	28796	10603	58	10581	2184
2033/34	22130	408	2828	966	1884	22515	30296	12089	58	12581	2084
2034/35	22497	408	2828	966	1884	24015	31796	13687	58	13581	2799

1.11. The demand of the State is met by the conventional sources of power and Renewable Energy sources. The TNERC in the Resource Adequacy regulations has prescribed guidelines for the procurement of various mix of sources. Regulation 14 of the TNERC's Resource Adequacy regulations state that,

> *" The distribution license in its power procurement strategy shall identify an optimal procurement generation resource mix that shall enable smooth RE integration in its portfolio of power procurement resource options while meeting reliability standards.*
>
> *The power capacity procurement from renewable energy sources for fulfilling the RPO targets shall be carried out as per Tamil Nadu Electricity Regulatory*

Commission (Renewable Energy Purchase Obligation) Regulations, 2023 and amendments thereof. 14.5. The power procurement from Wind, Solar PV, Wind Solar Hybrid, Round the Clock (RTC) generations shall be carried out as per the guidelines for tariff based competitive bidding process notified by the Ministry of Power.

"

1.12. The TNERC in the Renewable Purchase obligations has notified the minimum percentage of RPO to be complied by Distribution Licensee as follows:

Sl. No.	Year	Wind Renewable Energy	Hydro Renewable Energy	Distributed Renewable Energy	Other Renewable Energy	Total Renewable Energy
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2	2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
3	2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
4	2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
5	2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
6	2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

1.13. In accordance with the above notification, every obligated entity is mandated to procure energy from renewable energy sources under the RPO and the requirement of energy in million units (MU) is delineated below:

Year	Energy Projections (MU)	RPO Notified in % Other as per regulations dated 26-08-2025	To be procured to meet RPO (MU)	Energy available to meet RPO MU	Balance to be complied in DRE (MU)
2025-26	152678	28.24%	43116	35000	8116
2026-27	162726	29.94%	48720	38328	10392

2027-28	172679	31.64%	54366	41656	12980
2028-29	182401	33.10%	60375	44984	13591
2029-30	193232	34.02%	65738	48312	17426
2030-31	203598				
2031-32	214582				
2032-33	225898				
2033-34	237559				
2034-35	249580				

*For 2025-26, installed capacities considered are-9900 MW for wind, 9900 MW for solar, 2000 MW for hydro. From 2026-27, data shown is from projected capacities with YoY addition of 2000 MW solar

1.14. As per the above notification, the details of RPO compiled & to be complied for different sources are shown below:

Wind:

Year	Energy projection	RPO notified in % Wind as per regulation dated 26-08-25	Energy to be produced to meet RPO (MU)	Ex/proposed Capacity addition(MW)	Total Install capacity (MW)	Energy Produced to meet RPO*(MW)	Excess/ Shortfall (MW)
2025-26	**152678**	**1.45%**	**2214**	**300**	**620**	**1583**	**-631**
2026-27	**162726**	**1.97%**	**3206**	**300**	**920**	**2349**	**-856**
2027-28	**172679**	**2.45%**	**4231**	**300**	**1220**	**3115**	**-1115**
2028-29	**182401**	**2.95%**	**5381**	**300**	**1520**	**3881**	**-1499**
2029-30	**193232**	**3.48%**	**6724**	**300**	**1820**	**4647**	**-2077**

1.16. The tie up of capacities through Battery Energy Storage System (BESS) up to 2590 MWh is under process.

1.17. As per CEA, 37GWh BESS capacity is required by 2027 and the requirement will increase to 236 GWh by 2031-32. BESS capacity of 13.2 GWh has been approved under the ongoing VGF scheme for development of BESS.

1.18. With the large-scale integration of RE energy in the Tamil Nadu grid, ramping up and ramping down thermal energy causes stress to the grid. To address these integration challenges, Firm Dispatchable Renewable Energy (FDRE) play a vital role in successfully integrating RE into the grid and assisting grid operators in managing fluctuations in demand and RE supply.

1.19. The long-term solution for RE integration shall be the adoption of the FDRE, Energy Storage Systems. The Central and State Governments have been actively promoting the development of Firm Dispatchable Renewable Energy, Pumped Storage Plants and Battery Energy Storage Systems (BESS). While Pumped Storage Systems take a longer time for execution, FDRE is an ideal option for near-term integration of renewable energy.

1.20. The salient features of the tender floated by Solar Energy Corporation of India under ISTS connected RTC Tranche IV Scheme are as below:

a. **Mode of Selection:** Tariff-Based Competitive Bidding under “BOO” model. Bidders will quote availability-based fixed charge (Rs per KWH).

b. **Bid Processing Fee:** Rs. 20,000/MW + GST for the quoted Contracted Capacity, subject to a maximum amount of Rs. 20,00,000 + GST

c. **Earnest Money Deposit (EMD):** EMD amount = Rs. [9,42,000 * S + 12,98,000 * W + 3,41,000 * E],

where,

S= Rated cumulative Installed Capacity of Solar component (in MW);

W= Rated cumulative Installed Capacity of Wind component and other RE generating sources (in MW);

E= Rated cumulative Installed Capacity of the ESS component (in MWh)

Bid Details: Selection of RE Power Developers for Supply of 1200 MW

of Round-the-Clock (RTC) Power from ISTS connected Renewable Energy (RE) Power Projects in India, under Tariff-based Competitive Bidding (SECI-RTC-IV)

A) Eligibility Criteria: The Bidder must fall under either of the following categories:

- A Company under the Companies Act, 2013.
- A Foreign Company under the respective nation's laws.
- Alternative Investment Funds (AIF) as registered under SEBI.
- Consortium: Consortium of up to three members, from the above categories, is permitted. However, the eligibility criteria shall be met proportionately to the equity contribution of the entity whose credentials are being used to meet the requirement.

B) Financial Eligibility Criteria:

- Minimum Net-Worth requirement = [(Rs. 94,20,000 x Rated cumulative Installed Capacity of Solar PV component (MW)) + (Rs. 1,29,80,000 x Rated cumulative Installed Capacity of Wind Power component and other RE sources (MW)) + (Rs. 34,10,000 x Rated cumulative Installed Capacity of ESS component (MWh))].

C) Changes in Shareholding:

a. In case the project being implemented by the bidder itself:

i. it shall ensure that its promoters shall not cede control (Control shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors) of the Bidding Company/Consortium until 1 year after the SCSD, except with the prior approval of SECI.

b. In case the project being implemented through SPV:

i. The Successful Bidder, if being a single company, shall ensure that its shareholding in the SPV/ Project Company executing the PPA shall not fall below 51% at any time prior to 1 year after SCSD, except with the prior approval of SECI. In the event the Successful Bidder is a consortium, then the combined shareholding of the consortium members in the SPV/ Project Company executing the PPA, shall not fall below 51% at any time prior to 1 year after SCSD, except with the prior approval of SECI. Further, the successful bidder shall ensure that its promoters shall not cede control of the bidding company till 1 (one) year from the SCSD, except with the prior approval of SECI.

c. In the case of companies having multiple promoters (but none of the shareholders having more than 50% voting rights and paid-up share capital), it shall be considered as a company under joint control and the shareholding pattern in the company as submitted at the time of bidding, shall be maintained up to the COD.

d. Any change in the shareholding after COD can be undertaken only with the approval of the Authority.

e. Selection Process: e-Bidding shall be conducted under an open tender two-part system, followed by an e-reverse auction for qualified bidders.

f. Financial Closure: The Projects shall achieve Financial Closure by the date as on 6 months prior to the SCSD/ extended SCSD. (For e.g. if SCSD of the Project is 07.12.2026, then scheduled Financial Closure date shall be 07.06.2026).

g. Payment Security Mechanism: As part of the Payment Security Mechanism as brought out in the PPA, to be eligible for coverage from the PSM, the RPD will undertake to pay PSM Charges @Rs. 0.02/kWh to SECI, by offering a commensurate discount in the monthly tariff payment being made by SECI.

2. Regulatory Framework

2.1 Regulation 14 of the TNERC (Resource Adequacy) Regulations obligates the distribution licensee to identify and secure an optimal mix of generation resources that ensures reliability of supply while facilitating seamless integration of renewable energy.

2.2 The TNERC (Renewable Energy Purchase Obligation) Regulations, 2023, prescribe progressively increasing RPO targets, mandating long-term planning and firming of renewable capacity.

2.3 The Electricity (Amendment) Rules, 2022 and the Resource Adequacy Guidelines issued by the Ministry of Power cast a statutory duty upon distribution licensees to contract adequate capacity on a long-term basis, subject to validation by the Central Electricity Authority.

3. Analysis and Findings

3.1 The Commission has independently examined the proposal in the light of the statutory framework governing power procurement. It is evident that the procurement emanates from a transparent tariff-based competitive bidding process conducted by SECI in accordance with the guidelines issued by the Ministry of Power.

3.2 The discovered tariffs of Rs.5.06/kWh and Rs.5.07/kWh for RTC power cannot be said to be excessive or arbitrary and appear to be market-aligned, particularly having regard to the firmness and dispatchability embedded in FDRE resources.

3.3 The quantum of 270 MW sought to be procured is proportionate to the projected demand growth and is demonstrably aligned with the State's Long-Term Distribution Resource Adequacy Plan vetted by CEA.

3.4 The Commission is of the considered view that FDRE power addresses the twin challenges of intermittency and grid stability, and materially assists the distribution licensee in meeting its peak demand and capacity obligations.

3.5 The trader margin of 7 paise/kWh payable to SECI is traceable to the standard bidding documents and does not warrant regulatory disapproval.

4. Factual Matrix

The Ministry of Power, Govt. of India has set 2030 targets, interalia, as under :

(a) to achieve 50% of its cumulative installed power generation capacity from non-fossil fuel sources; and

(b) reduce the emission intensity of its GDP from 2005 levels by 45%. The strategy is to add solar and wind energy at large scale.

(c) The National Electricity Plan projects India's RE capacity (including hydro) to be 596 GW, including 365 GW solar and 122 GW wind by 2032, making RE 65% of the total installed capacity.

Tamil Nadu plans to increase the share of RE from the current 30% to 50% of electricity supply by 2030.

Also, the TNERC in the Renewable Purchase obligations has notified the minimum percentage of RPO to be complied by Distribution Licensee within a range of 33.01% to 43.33% between 2025-26 and 2029-30.

5. Challenges in the penetration of Renewables

However, with increasing penetration of RE in state's network, large scale variable renewable energy (RE) could make grid unstable and create mismatches in supply and demand.

6. Conclusion

6.1 However, on a holistic consideration of the material placed on record and the Factual Matrix stated supra, the Commission is satisfied that the proposed procurement subserves the larger public interest, advances statutory renewable energy objectives, and conforms to the governing regulatory framework such as RPO Targets etc. outweigh the Challenges in the penetration of Renewables.

7. Order

7.1 Accordingly, the Commission approves the procurement of 270 MW of Firm and Dispatchable Renewable Energy (FDRE) power by Tamil Nadu Power Distribution Corporation Limited from SECI under the ISTS-connected RTC Tranche–IV Scheme for a period of 25 years, at the discovered tariff, along with payment of trader margin of 7 paise/kWh to SECI.

7.2 The Commission has accorded approval for procurement of solar power from SECI in its various Orders. The Commission hereby directs the petitioner to file a detailed Status Report on the above procurement within four weeks from the date of this Order.

This Miscellaneous Petition is ordered accordingly.

(Sd….)	(Sd….)	(Sd….)
Member (Legal)	Member	Chairman

/True Copy /

Secretary (i/c)
Tamil Nadu Electricity
Regulatory Commission