

TAMIL NADU ELECTRICITY REGULATORY COMMISSION

Order of the Commission dated this the 28th Day of August 2025

PRESENT:

Thiru.R.Manivannan		 Chairman
Thiru.K.Venkatesan		 Member
	and	
Thiru.B.Mohan		 Member (Legal)

M.P. No. 36 of 2025

Tamil Nadu Transmission Corporation Ltd.,
Represented by the Director / Operation/ TANTRANSCO
1st Floor, TANTRANSCO Building,
144, Anna Salai, Chennai – 600 002.

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

The Miscellaneous Petition stands preferred by the petitioner Tamil Nadu Transmission Corporation Limited with a prayer to accord approval for permitting “Right of Use” of TANTRANSCO land and leasing the substation lands @ Re.1/- per project per year to the Battery Energy Storage System (BESS) developers for establishment of BESS at TANTRANSCO substations for Implementation of 1000 MWhr BESS under State VGF funding through Tamil Nadu Green Energy Corporation Limited (TNGECL) for a total period of 15 years.

The petition having come up for final hearing on 17-06-2025 in the presence of Tvl.N. Kumanan and A.P. Venkatachalapathy, Standing Counsel for the petitioner and on consideration of the submission made by the Counsels for the Petitioner, the Commission passes the following order :-

ORDER

1. Submissions of the Petitioner:

1.1. The Petitioner is filing the present Miscellaneous Petition seeking approval for permitting “Right of Use” of TANTRANSCO land and leasing the substation lands @ Re.1/- per project per year for establishment of Battery Energy Storage System (BESS) at TANTRANSCO substations for Implementation of 1000 MWhr BESS under State VGF funding through Tamil Nadu Green Energy Corporation Limited (TNGECL) for a total period of 15 years.

1.2. The Government of India has been expanding its installed RE capacity with the aim of reaching 500 GW by 2030 from sources like solar and wind which is variable and not available round the clock like thermal power to meet the demand. In tandem, Government of Tamil Nadu has been a forerunner in promoting Renewable Energy and the capacity of Renewable Sources as on date is around 23,940 MW which includes solar, wind, cogen and biomass/biogas plants.

1.3. With large scale integration of RE energy in the Tamil Nadu grid, ramping up and ramping down the thermal energy causes stress to the grid. In order to address these integration challenges, Energy Storage System (ESS) plays a vital role in successfully integrating RE into the grid and assisting grid operators in managing these fluctuation in demand and RE supply.

1.4. The long term solution for RE integration shall be adapting Energy Storage Systems only. The Central as well as State Government has been actively promoting the development of ESS such as Pump Storage Plants (PSP) and Battery Energy Storage Systems (BESS). Government of Tamil Nadu has issued recently “Tamil Nadu Pumped Storage policy for promoting Pumped Storage Systems and action have been initiated for establishment of around 15 Nos of Pumped storage Systems which would help to resolve the integration challenges. However as these Pumped Storage Systems takes longer time for execution and implementation ,Battery Energy Storage Systems, would be an ideal option for near-term integration of renewable energy, especially while waiting for the completion of planned PSP capacity.

1.5. While Energy Storage Systems plays a vital role in successfully integrating RE into the grid, the States are responsible for ensuring adequate resources to minimize the stress on the Intra-state Transmission system while the Centre is required to manage the remaining stress on the Inter-State Transmission System (ISTS).

1.6. The Government of India has taken several initiatives for promoting ESS, the Central Government has sanctioned the “**Central Sector Scheme Viability Gap funding**” for development of Battery Energy Storage Systems to develop 4000 MWhr of BESS capacity. Further, Ministry of Power has issued operational Guidelines for Scheme for Viability Gap funding for development of BESS on 15/3/2024.

1.7. As more than 70% of Variable Renewable Energy capacity is connected at Intra-state System, and as there is a need to support State Utilities in the development of BESS in States with high solar penetration, Ministry of Power has issued draft operational guidelines for implementation of State Component of BESS.

1.8. The following are the main highlights of the **State Component under the scheme of VGF for BESS:**

- The State Component of the Scheme aims to facilitate RE rich states in integration of large scale RE within state.
- VGF of upto 30% of capital cost for BESS or Rs 27 lakh per MWh whichever is lower, shall be provided by the Central Government under State Component.
- VGF shall be a non-recurring expenditure and shall be fully funded from Central grant.
- The period of commissioning shall be as defined in the TBCB guideline issued for BESS projects

- BESS capacity allocation has been done to RE rich states ie., Tamil Nadu, Gujarat, Karnataka, Rajasthan, Telangana and Maharashtra. Tamil Nadu has been allocated 1000 MWh under this scheme
- State Dist Licensees, State Transmission Utilities and State Generating Companies or the agencies authorized by them of the above States are eligible for this scheme.

1.9. As Battery Energy Storage System is a viable solution for the integration challenges faced in Tamilnadu's grid due to large scale penetration of RE energy and as VGF funding would help to reduce the DISCOM's burden, the willingness to participate under State Component of VGF funding for 1000 MWhr of BESS allocated to Tamilnadu has been informed to Ministry of Power on 25.9.2024.

1.10. It has been proposed to execute the 1000 MWhr of Battery Energy Storage System (BESS) under State Component of VGF scheme in the following Sub-stations:

Sl. No	Name of the Sub-station	Proposed capacity	Voltage level
1.	Thennampatty 400/230/110 kV SS	100 MW/200 MWh	230 kV
2.	Anuppankulam 230/110 kV SS	100 MW/200 MWh	230 kV
3.	Ottapidaram 400/230/110 kV SS	100 MW/200 MWh	230 kV
4.	Vellalaviduthi 400/230/110 kV SS	100 MW/200 MWh	230 kV
5.	Kayathar 400/230/110KV SS	50 MW/100 MWh	110 kV
6.	Karaikudi 230/110 kV SS	50 MW/100 MWh	110 kV
	Total	500 MW/1000 MWh	

1.11. It is proposed to implement this scheme under “Build Own Operate” model wherein the project is to be established in the TANTRANSCO Substations under lease basis for a period of about 15 years. Further, it is proposed to levy a lease rent of Re.1/- per project per year upto the lease period. Further, the charging power for the BESS is to be provided by TNPDC. As VGF is to be extended by the Central Government, the bidders would be requested to quote the capacity charges on MW basis per month taking into account all the above factors.

1.12. The assets of TANTRANSCO that would be utilized for development of BESS Projects is only the surplus land which is not otherwise required for undertaking licensed transmission activities and accordingly the activities of the transmission will not be affected. At the same time the establishment of the BESS near the sub-station of TANTRANSCO will be in accordance with the policy decision of the Central Government and further will be in greater public interest of charging of the BESS and drawing of electricity from BESS Projects at the time of need.

1.13. The arrangement proposed is more in the nature of the land being given on use within the scope of Section 17(3) and 41 of the Electricity Act, 2003. These provisions read as under:

“Section 17. (Licensee not to do certain things): ---

(1) No licensee shall, without prior approval of the Appropriate Commission, -

(3) No licensee shall at any time assign his license or transfer his utility, or any part thereof, by sale, lease, exchange or otherwise without the prior approval of the Appropriate Commission.

“Section 41. (Other business of transmission licensee):

A transmission licensee may, with prior intimation to the Appropriate Commission, engage in any business for optimum utilisation of its assets:

Provided that a proportion of the revenues derived from such business shall, as may be specified by the Appropriate Commission, be utilised for reducing its charges for transmission and wheeling:

Provided further that the transmission licensee shall maintain separate accounts for each such business undertaking to ensure that transmission business neither subsidises in any way such business undertaking nor encumbers its transmission assets in any way to support such business:

Provided also that no transmission licensee shall enter into any contract or otherwise engage in the business of trading in electricity:”

1.14. There will be no revenues out of the business conducted by utilization of the land for BESS Projects as the entire benefit of the activities is eventually accruing to the consumers and other users of the transmission system and the distribution system. The BESS Projects will help in adding values including the availability of power from RE Projects which are intermittent by arranging for the power availability on a consistent basis. When using BESS for grid storage with advanced modeling to accurately monitor and control the storage system a more robust operation of the storage system will be in place and thereby benefitting the interest of all concerned, including public interest.

1.15. In the facts and circumstances of the case and as there is no optimum utilization of functional assets involved in the licensed transmission activities and there is only utilization of currently unused land/space in existing sub-station for greater public interest, namely, the

charging or the BESS from drawing the power from the grid and injection of the electricity from the BESS to the grid, there is only a token charge of Re.1/- per project per year to be paid by the BESS Developer to TANTRANSCO. However the guidelines provides for signing of 'Right to Use' agreement.

1.16. The sub-station land to be utilized for development of BESS Projects shall not be sold, transferred, or otherwise used for any other purpose. These lands can only be used in a restrictive manner on right to use basis and that too under the supervision and control of TANTRANSCO.

1.17. The establishment of BESS Projects requires incurring of substantially high degree of capital expenditure on assets which have nothing to do with the transmission activities and which cannot be avoided by using any part of the transmission business assets. In other words, except for the land, the other infrastructure required by the BESS Projects has to be established in any event separately, including the electricity supply for such BESS Projects. In case of proposed BESS Projects, the land cost is estimated to be smaller than of overall Capital expenditure of BESS Projects. Further there is no impact envisaged from the utilisation of land for BESS Projects on the electricity transmission activities of TANTRANSCO. TANTRANSCO further undertakes to ensure that the proposed utilisation of land shall not in any manner adversely affect its performance or obligation in the power transmission business.

1.18. Except for the land, the other infrastructure required by the BESS projects has to be established in any event separately. Further the land to be utilized by BESS shall not be sold, transferred, or otherwise use for any other purpose.

1.19. The right to use for such BESS is being considered for a period of 15 years.

2. Findings of the Commission:

2.1. The present petition has been filed seeking the Commission's approval for permitting "Right of Use" of TANTRANSCO land and leasing the sub-station lands @ Re.1/- per project per year to the Battery Energy Storage System (BESS) developers for establishment of CESS at TANTRANSCO sub-stations for implementation of 1000 MHhr BESS under the State VGF through Tamil Nadu Green Energy Corporation Limited for a total period of 15 years and the details are as below:

Sl. No	Name of the Sub-station	Proposed capacity	Voltage level
1.	Thennampatty 400/230/110 kV SS	100 MW/200 MWh	230 kV
2.	Anuppankulam 230/110 kV SS	100 MW/200 MWh	230 kV
3.	Ottapidaram 400/230/110 kV SS	100 MW/200 MWh	230 kV
4.	Vellalaviduthi 400/230/110 kV SS	100 MW/200 MWh	230 kV
5.	Kayathar 400/230/110KV SS	50 MW/100 MWh	110 kV
6.	Karaikudi 230/110 kV SS	50 MW/100 MWh	110 kV
	Total	501 MW/1000 MWh	

2.2. Earlier, the TNGECL in its M.P.No. 14 of 2025 has sought approval of the Commission to issue a tender for setting up of 500 MW/1000 MHhr standalone BESS under Build-Own-Operate (BOO) model, with capacity charges determined on a per MW per

month basis to be established by the BESS developers in the above sub-stations of the TANTRANSCO under State Component of VGF scheme of MoP along with the specification and PPA. The Commission, in-turn in its daily order dated 27-02-2025 directed the TNGECL to proceed with processing of tender and file the requisite adoption petition on discovery of the rate through tender prior to the execution of the BSEPSA by adhering the relevant provisions of the Electricity Act, 2003, MoP guidelines, etc.

2.3. In continuation to the above, the TNGECL has filed adoption petition before the Commission vide M.P.No. 37 of 2025, which is under consideration with the Commission.

2.4. The 5th Board meeting of the TNGECL held on 06-12-2024 approved the proposal for allotment of 1000 MHhr to Tamil Nadu under State Component of VGF funding scheme. Further, in the Board meeting of the Tamil Nadu Infrastructure Development Board, Finance Department, GoTN held on 09-01-2025, the Principal Secretary, Finance Department informed that the project is approved in-principle and tenders may be published at the earliest upon vetting and approval of the tender documents by the TNIDB.

2.5. The Ministry of Power has allocated 1000 MWh of BESS capacity to the Tamil Nadu under the Viability Gap Funding component and this has been granted in principle approval by the Commission to proceed with processing of tender in its daily order dated 27-02-2025. The Commission is of the view that this project aims to support the integration of the Renewable Energy produced in the State along with the grid balancing.

2.6. In this context, the TANTRANSCO has sought the Commission's approval to use its sub-station's land (six various locations) for establishment of BESS by the private developers with the land lease of Re.1/- per project per year.

2.7. After careful examination of the proposals along with the MOP's guidelines, the Commission hereby authorises the TANTRANSCO to lease its sub-station land at six various locations as listed in para 2.1 with a rent of Re.1/- per project per year for the implementation of BESS projects in the State of Tamil Nadu under VGF scheme. Accordingly, the TANTRANSCO shall take all necessary steps as per the MOP Guidelines and amendments issued from time to time. This order is subject to the following conditions:

1. Study of the Grid connectivity and technical feasibility by the TANTRANSCO in line with the Commission's Regulations and procedure issued.
2. Execution of land lease agreement by the TANTRANSCO with the developers for a total period of 15 years duly incorporating the terms and conditions for handing over the land back to the TANTRANSCO as it was handed over to the service provider for establishing the BESS.
3. The BESS projects shall comply with all relevant State and Central Government Policies and as well as Regulations/Procedures/Orders issued by the Commission from time to time.

4. The BESS projects shall comply with all standard environmental and safety considerations as stipulated in the statute from time to time.
5. The BESS Projects shall no way hinder the transmission business or the augmentation of the transmission/sub-station capacity, etc. of the TANTRANSCO.
6. It shall be ensured that necessary State Government approval shall be obtained before entering upon agreement with the BESS service provider.

Petition ordered accordingly.

(Sd....)
Member (Legal)

(Sd....)
Member

(Sd....)
Chairman

/True Copy /

Secretary (i/c)
Tamil Nadu Electricity
Regulatory Commission