

**TAMIL NADU POWER DISTRIBUTION CORPORATION LIMITED**  
**ABSTRACT**

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Electricity – Thiruvannamalai Region – Dharmapuri EDC – Enhancement of power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33/11 kV SS - Administrative approval - Accorded.

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**TECHNICAL BRANCH**

(Per.) MD TNPDC Proceedings No:34

Dated.13.05.2026.  
Chitirai 30,  
Sri Parabhava Varudam ,  
Thiruvalluvar Aandu 2057.

**READ:** Chairman cum Managing Director's approval dated 22.04.2026.

**PROCEEDINGS:**

1. The Tamil Nadu Power Distribution Corporation Ltd hereby approves the proposal for enhancement of power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33/11 kV SS in Dharmapuri EDC of Thiruvannamalai Region at an estimated cost of Rs.173.25 lakhs Gross and Nett. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TNPDC – Funds – Capital expenditure – Dharmapuri EDC – A/C. code No.1020400.
3. By virtue of the provisions contained in sub-section (2) (a) of section 185 of the Electricity Act, 2003, the TNPDC being the Licensee and successor entity of Tamil Nadu Electricity Board will exercise the powers of the Telegraph Authority under the provisions of section 164 of the Electricity Act, 2003, which have already been conferred upon the Board under section 51 of the Indian Electricity Act, 1910.
4. The works will be taken up only after ensuring the Budget provision.

// BY ORDER OF THE CMD //

J.PUSHPALATHA  
CHIEF ENGINEER / PLANNING & RC

Encl: Report and detailed estimate.

To  
The Chief Engineer / Distribution / Thiruvannamalai Region/ Thiruvannamalai

(Per.) MD TNPDCCL Proceedings No: 34, dt.13.05.2026.

Copy to:

The Director / Distribution / TNPDCCL / Chennai - 2

The Director/Finance/ TNPDCCL / Chennai – 2

The Chief Engineer/Material Management /Chennai

The Superintending Engineer/ Dharmapuri EDC/ Dharmapuri

The Superintending Engineer / RE & I(D) / Chennai - 2

The Company Secretary / TNPDCCL /Chennai -2

The Resident Audit Officer (AGO'S Unit) / Chennai –2

B.P.Section (Administrative Branch)

Stock file

// FORWARDED BY ORDER //

  
EXECUTIVE ENGINEER/MASTER PLAN II

**REPORT TO ACCOMPANY THE ESTIMATE**

This proposal envisages enhancement of power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33/11 kV SS in Dharmapuri EDC of Thiruvannamalai Region at an estimated cost of Rs.173.25 lakhs Gross and Nett.

**Need:**

At Hanumanthapuram 33/11 kV SS 1x8 MVA power transformer is in service. The sustained peak reached at the above power transformer is 7.29 MVA and is loaded to 91.12 % of its capacity. The load growth in the area is 3.0 % per annum.

Load transfer to nearby Kanavanahalli 33 kV SS and Bysuhally 33/11 kV SS are not possible as they are located at a distance of 15 km and 22.5 km respectively and will lead to low voltage problems.

Hence, to meet the load growth in the area, to avoid overloading of the existing power transformer, to provide uninterrupted supply and to maintain 30% spare capacity as per Board's norms so as to meet out the contingencies in the nearby substations, it becomes necessary to enhance the existing 33/11 kV power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33/11 KV SS.

The voltage regulation of all the 11 KV feeders fed from Hanumanthapuram 33/11 KV SS except 11 kV Gettur feeder are well within the permissible limits of 8%. In this regard, the Chief Engineer / Distribution/ Thiruvannamalai Region has stated that strengthening of conductor for a distance of 1.0 km in the 11 kV Gettur is proposed and on completion of the same, the voltage regulation of the 11 Gettur feeder will be within the permissible limit.

Adequate land is available at existing Hanumanthapuram 33 kV SS for erection of additional 8 MVA power transformer.

Further, it is to be stated that enhancement of power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33 kV SS is included in the 14<sup>th</sup> & 15<sup>th</sup> Master plan and proposed to be effected during the year 2028-29. As the peak at Hanumanthapuram 33 kV SS has reached 7.29 MVA and is loaded to 91.12 % of its capacity now and as summer demand is also to be met, it becomes necessary for enhancement of power transformer capacity from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33 kV SS.

**Adequacy of Transmission system:****Details of the source SS:**

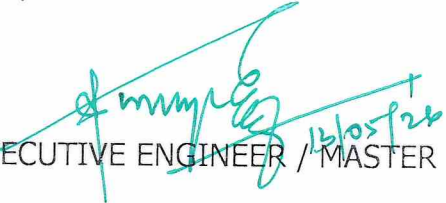
a	Name of the substation	Karimangalam 110/33-11 KV SS
b	110/33 kV pr. tr. capacity	2x16 MVA
c	Peak reached in MVA	24.1 MVA
d	Proposed addition in MVA	Now proposed 8
e	Anticipated peak in MVA	32.1 MVA
f	Whether power tr. capacity is adequate:	Adequate

**Details of Source Feeder:**

a	Name of the feeder	33 KV Karimangalam – Hanumanthapuram#
b	Size/Loading capacity of the conductor	ACSR Dog Conductor – 17.78 MVA
c	Present loading in MVA	7.29 MVA
d	Proposed addition in MVA	8 (now proposed)
e	Anticipated load in MVA	15.29 MVA
f	Whether the conductor is adequate	Adequate

**Details of work:**

1. Erection of additional 1 no. 8 MVA power transformer and its allied equipments at Hanumanthapuram 33/11 kV SS.

  
EXECUTIVE ENGINEER / MASTER PLAN II

**Detailed estimate for enhancement of power transformer from 1x8 MVA to 2x8 MVA at Hanumanthapuram 33/11 kV SS in Dharmapuri EDC**

**Part I : New Asset Chargeable to Capital**

Rs.in Lakhs

Sl No	Description	Qty	Rate	Per	Total
1	33 kV AB switch	1 No	0.466	E	0.466
2	33 kV LAS	3 Nos	0.038	E	0.114
3	11 kV VCB (1LV )	1 No	1.626	E	1.626
4	11 kV CTs	3 Nos	0.250	E	0.750
5	11 kV LAS(Station type)	3 Nos	0.018	E	0.054
6	11 kV AB switch	1 No	0.236	E	0.236
7	Plinth for breaker	1 No	2.500	E	2.500
8	Control and relay panel				10.000
9	Control cable				2.000
10	Earthing, yard lighting & painting				5.000
11	Cost of materials				22.746
12	Contigencies @1%				0.227
13	Sub total				22.973
14	Labour and Transport charges @ 15%				3.446
17	GST on labour & transport				0.620
18	8 MVA,33/11 kV Pr.Tr	1 No.	88.374	E	88.374
19	Plinth, Labour and transport inclusive of GST, EPF & ESI	1 No.	13.000	E	13.000
20	Earthing	1 No	0.500	E	0.500
21	Establishment and supervision charges 15%				19.337
22	33 kV and 11 kV structure and bus modification				10.000
23	Civil works including fire protection wall				15.000
24	<b>Total Gross &amp; Nett.</b>				<b>173.251</b>

  
 Executive Engineer / Master Plan II

