

**TAMIL NADU POWER DISTRIBUTION CORPORATION LIMITED
ABSTRACT**

Electricity – Vellore Region – Tirupattur EDC – Enhancement of 33/11 kV power transformer capacity from 1x8 MVA to 2x8 MVA at Kunichi 33/11 KV SS - Administrative approval - Accorded.

TECHNICAL BRANCH

(Per) MD TNPDC Proceedings No:89

Dated: 12.08.2025
Visuvaavasu Varudum,
Aadi 27,
Thiruvalluvar Aandu 2056.

READ: Chairman cum Managing Director's approval dated 07.08.2025.

PROCEEDINGS:

1. The Tamil Nadu Power Distribution Corporation Ltd hereby approves the proposal for enhancement of 33/11 kV power transformer capacity from 1x8 MVA to 2x8 MVA at Kunichi 33/11 kV SS in Tirupattur EDC of Vellore Region at an estimated cost of Rs.155.04 Lakhs Gross & Nett. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TNPDC – Funds – Capital expenditure – Tirupattur EDC – ERP 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 / Vellore Region / Vellore

(Per.) MD TNPDC Proceedings No: 89, dt.12.08.25.

The Director/Distribution/TNPDC/Chennai – 2.
The Director/Finance/TNPDC/Chennai – 2.
The Chief Engineer/IT & R-APDRP/Chennai -2.
The Chief Engineer/Material Management/Chennai – 2.
The Superintending Engineer/ Tirupattur EDC/ Tirupattur.
The Superintending Engineer/Schemes/Chennai-2.
The Superintending Engineer/RE & I(D)/Chennai – 2.
The Company Secretary/TNPDC /Chennai -2.
The Resident Audit Officer (AGO'S Unit) / Chennai –2.
B.P.Section (Administrative Branch)
Stock file

FORWARDED BY ORDER


13.08.2025

EXECUTIVE ENGINEER/MASTER PLAN I

REPORT TO ACCOMPANY THE ESTIMATE

This proposal envisages enhancement of 33/11 kV power transformer capacity from 1x8 MVA to 2x8 MVA at Kunichi 33/11 kV SS in Tirupattur EDC of Vellore Region at an estimated cost of Rs.155.04 Lakhs Gross & Nett.

Need:

Kunichi 33/11 KV SS is having 1x8 MVA power transformer and the peak reached is 7.0 MVA. The power transformer is loaded to 87.5% of its capacity. The load growth in this area is about 3 %

There is no possibility to transfer the loads from Kunichi 33 /11 kV SS to nearby Koratty 33/11 kV SS, Tirupattur 110/33-11kV SS and Kandili 33/11 kV SS as they are located at a distance of 15 km, 15 km and 14 km respectively away and load transfer will lead to low voltage issues.

Hence, to meet the load growth in the area, to avoid overloading of the existing power transformer, to maintain n-1 conditions and 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 Kunichi 33/11 KV SS.

The voltage regulation of all the 11 kV feeders are well within the permissible limit. It has been stated that adequate space is available at existing Kunichi 33/11 kV SS for erection of additional 8 MVA power transformer.

Adequacy of Transmission system:

Details of the source SS:


a.	Name of the substation	Koratty 110/33/11 kV SS
b.	110/33kV Power transformer capacity	2x16 MVA
c.	Peak reached in MVA	22.1 MVA
d.	Proposed addition in MVA	8: now proposed
e.	Anticipated load in MVA	30.21 MVA
f.	Whether the Power tr. capacity is adequate:	Adequate.

Details of source feeder:

a.	Name of the feeder	33 kV Koratty - Kunichi feeder
b.	Size/Loading capacity of the conductor	Dog – 17.78 MVA
c.	Present peak in MVA	7 MVA
d.	Proposed addition in MVA	8: now proposed
e.	Anticipated load in MVA	15 MVA
f.	Whether the conductor is adequate:	Adequate.

Details of work:

Erection of 1 no. 8 MVA, 33/11 kV power transformer at Kunichi 33/11 kV SS with associated equipments .


13.08.2025
EXECUTIVE ENGINEER / MASTER PLAN I

**DETAILED ESTIMATE FOR ENHANCEMENT OF EXISTING 33/11 KV POWER
TRANSFORMER CAPACITY FROM 1x8 MVA TO 2x8 MVA AT KUNICHI 33/11KV SS IN
TIRUPATTUR EDC**

RS. in Lakhs

S.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT
1	33 kV AB switch	1 No	0.445	E	0.445
2	33 KV LAS	3 Nos	0.037	E	0.111
3	11 kV VCB (LV Breaker)	1 No	1.637	E	1.637
4	11 KV AB switch	2 Nos	0.199	E	0.398
5	11 kV CT	3 Nos	0.250	E	0.750
6	11 kV LAS (Station type)	3 Nos	0.018	E	0.054
7	Plinth for breaker	1 No	2.000	E	2.000
8	Control and Relay panel				10.000
9	Control cable				3.000
10	Fire fighting equipment				0.500
11	Earthing,Painting and Yard lighting			LS	1.000
12	Sub total				19.895
13	Contingencies 1%				0.199
14	Cost of Material				20.094
15	Labour and Transport charges @ 15%				3.014
16	GST on labour & transport @ 18%				0.543
17	Total for material and labour				23.651
18	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	78.488		78.488
19	Plinth, labour & Transport inclusive of GST.	1 No	13		13.000
20	Earthing	1 No	0.55		0.550
21	Estt and Supervision charges 15%				17.353
22	Sub total				133.042
23	33 kV and 11 kV structure modifications				12.000
24	Civil works such as Fire protection wall,sand filling , cable duct etc.,				10.000
25	Total Gross & Nett				155.04


 13.08.2025.
 EXECUTIVE ENGINEER/MPI

