

TAMILNADU POWER DISTRIBUTION CORPORATION LIMITED
ABSTRACT

Electricity – Thanjavur Region – Thiruvarur EDC – Replacement of failed 8 MVA power transformer with a healthy unit of same capacity at Edamelaiyur 33/11 kV SS - Administrative approval - Accorded.

TECHNICAL BRANCH

(Per). MD TNPDC Proceedings No.75

Dated: 02.09.2026.
Sri Parabhava Varudum,
Aavani: 16,
Thiruvalluvar Aandu 2057.

READ: Chairman cum Managing Director's approval dated 29.08.2026.

PROCEEDINGS:

1. The Tamilnadu Power Distribution Corporation Limited hereby approves the proposal for replacement of failed 8 MVA power transformer with a healthy unit of same capacity at Edamelaiyur 33/11 kV SS in Thiruvarur EDC in Thanjavur Region at an estimated cost of Rs.50.78 lakhs Gross and Rs.25.76 Lakhs Nett. and ratification for having replaced the failed power transformer with healthy power transformer in anticipation of the approval. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TNPDC - Funds - Capital Expenditure – Thiruvarur 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 TamilNadu 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 has to be taken up in order to normalize the supply condition.

// BY ORDER OF THE CMD//

J.PUSHPALATHA
CHIEF ENGINEER/PLANNING & RC

Encl: Report and detailed estimate.

To

The Chief Engineer/Distribution/Thanjavur Region.

(Per).MD.TNPDCL Proceedings No.75, dated:02.09.2026.

Copy to:

The Director/Distribution/ TNPDCL.

The Director/Finance/ TNPDCL.

The Chief Engineer/ Material Management.

The Superintending Engineer/ Thiruvarur EDC.

The Superintending Engineer/ RE&ID/Chennai.

The Company Secretary/TNPDCL / Chennai.

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

B.P.Section (Administrative Branch)

Stock file.

//FORWARDED BY ORDER//


02.09.2026

EXECUTIVE ENGINEER/MASTER PLAN I

REPORT TO ACCOMPANY THE ESTIMATE

This proposal envisages replacement of failed 8 MVA power transformer with a healthy unit of same capacity at Edamelaiyur 33/11 kV SS in Thiruvavarur EDC in Thanjavur Region at an estimated cost of Rs.50.78 lakhs Gross and Rs.25.76 lakhs Nett. and ratification for having replaced the failed power transformer with healthy power transformer in anticipation of the approval.

Need:

Edamelaiyur 33/11 kV SS was in service with 2x8 MVA power transformers. The 8 MVA Indo Tech make power transformer bearing Sl.No.IT-33434 was in service at Edamelaiyur 33/11 kV SS from 19.05.2023.

On 02.12.2025 at 08.50 Hrs, 33 kV Edamelaiyur feeder got fault tripped with E/L indication. On charging 33 kV Edamelaiyur feeder at Vaduvor 110/33-11 kV SS at 9.10 hrs., the above 8 MVA power transformer at Edamelaiyur 33 kV SS got tripped with actuation of Master Relay and Buchholz relay along with the tripping of GC breaker and LV-I breakers. Hence, the Power Transformer was isolated from service. The loads were managed with the existing other available 8 MVA power transformer. The year of manufacture of the above power transformer is 2000 and has served 25 years.

The MRT test results revealed that HV & LV core balance test values were abnormal. The DGA test results on oil samples revealed development of fault gas values when compared with the results of previous test conducted on 05.11.2025. Discharge of high energy thermal/arcing inside the power transformer was suspected and internal examination of the power transformer was suggested to be carried out.

Hence, internal examination was carried out by TRB wing on 06.12.2023 and carbon deposit was noticed on the top side of the core and coils, arcing was found in "R" phase HV coil bottom side tapping end and there was visible burning inside the coil. As the same could not be attended at site, the power transformer was declared as failed.

In order to normalise supply, the failed unit was replaced by a healthy 8 MVA of Accurate make bearing T-1690/Accurate/24 and the same was commissioned on 02.02.2026. Hence, this estimate has been evolved to regularize the replacement made already.

The failed power transformer is available at Edamelaiyur 33/11 kV SS and is yet to be allotted for carrying out repairing works.

Details of works:

- Erection of 1 No. healthy 8 MVA power transformer at the existing Edamelaiyur 33/11 kV SS.
- Dismantling of failed 1 No. 8 MVA power transformer at the existing Edamelaiyur 33/11 kV SS.


02.09.2026

EXECUTIVE ENGINEER/MASTER PLAN-I

**Replacement of failed 8 MVA power transformer by healthy unit of same capacity at
Edamelaiyur 33/11 kV SS in Thiruvavur EDC of Thanjavur Region**

Part I : New Asset Chargeable to Capital

Rs.in Lakhs

SL NO	DESCRIPTION	QTY	RATE in Lakhs	PER	AMOUNT in Lakhs
1	8 MVA, 33/11 KV Power Transformer (rate as per P.O.TR.2339/2012)	1 No.	41.239	E	41.24
2	Cost of materials				41.24
3	Labour & transport charges	actuals			2.383
4	Sub total				43.62
5	Estt & supervision charges @ 15%				6.54
6	Sub total				50.17
7	Dismantling charges	actuals			0.61
8	Gross				50.78
9	Less credit				25.02
10	Nett				25.76

Part I (a) : Dismantling Charges

0.61

PART II Accumulated depreciation charges

SL. No.	DESCRIPTION	Original cost	Full Life	Useful Life Period	Accumulated depreciation
1	8 MVA, 33/11 KV Power Transformer	25.02	25	25	22.52
					22.52

Part III : Devolution of old equipment to store

Part III:Part IV - Part II = 25.02 - 22.52 = **2.50**

Part IV : Removal of old assets Charges

SL. NO	Name of the item	Original Cost	Original Erection Charges 10%	Original Centages 15%	Original Cost of Asset
1	8 MVA, 33/11 KV Power Transformer (rate as per cost data 2000-2001)	19.776	1.98	3.26	25.02
	Total				25.02

ABSTRACT

Part I : New Asset Chargeable to Capital

Rs.in Lakhs

50.78 Gross

25.76 Nett

Part I (a) : Dismantling Charges

0.61

Part II : Accumulated Depreciation Charges

22.52

Part III:Devolution of old equipment to store

2.50

Part IV : Removal of old assets Charges

25.02


 02.09.2026
 Executive Engineer/MasterPlan I

