

TAMILNADU POWER DISTRIBUTION CORPORATION LIMITED
ABSTRACT

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

TECHNICAL BRANCH

(Per). MD TNPDC Proceedings No. 64

Dated: 06.08.2026.

Sri Parabhava Varudum,

Aadi : 21

Thiruvalluvar Aandu 2057.

READ: Chairman cum Managing Director's approval dated 03.08.2026.

PROCEEDINGS:

1. The TamilnaduPower Distribution Corporation Limited hereby approves the proposal for replacement of failed 8 MVA Power Transformer with a healthy unit of same capacity at Sriperumbudur Indoor 33/11 kV SS in Kanchipuram EDC of Kanchipuram Region at an estimated cost of Rs.64.81 lakhs Gross and Rs.10.16 Lakhs Nett. and ratifies the action of Chief Engineer/Distribution/Kanchipuram Region for having replaced the failed power transformer in anticipation of approval. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TNPDC - Funds - Capital Expenditure – Chennai EDC/Central - 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.

// BY ORDER OF THE CMD//

N.SIVAGAMI
CHIEF ENGINEER/PLANNING & RC (i/c)

Encl: Report and detailed estimate.

To

The Chief Engineer/Distribution/Kanchipuram Region.

(Per).MD.TNPDCL Proceedings No.64 dated: 06.08.2026.

Copy to:

The Director/Distribution/TNPDCL.

The Director /Finance/ TNPDCL.

The Chief Engineer/ Material Management.

The Superintending Engineer/ Kanchipuram EDC.

The Superintending Engineer/RE&ID/Chennai.

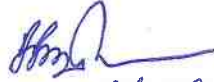
The Company Secretary/TNPDCL, Chennai.

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

B.P.Section (Administrative Branch)

Stock file.

//FORWARDED BY ORDER//



06.08.2026

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 Sriperumbudur Indoor 33/11 kV SS in Kanchipuram EDC of Kanchipuram Region and ratifies the action of Chief Engineer/ Distribution/ Kanchipuram Region for having replaced the failed power transformer in anticipation of approval at an estimated cost of Rs.64.81 lakhs Gross and Rs.10.16 Lakhs Nett.

Need:

Sriperumbudur 33/11 kV SS was in service with 2x8 MVA power transformers. The 8 MVA Atlanta make power transformer bearing Sl.No.1348/600 has been commissioned at Sriperumbudur Indoor 33/11 kV SS on 06.03.2020.

On 19.04.2026 at 23.30 hrs, the above 8 MVA Atlanta make power transformer got tripped due to actuation of Bucholz trip relay. Hence, the Power Transformer was isolated from service. Back feeding was partially made from the nearby Sriperumbudur 110 kV SS and the balance loads were managed with the existing other available 8 MVA power transformer. The year of manufacture of the above power transformer is 2013 and has served 13 years.

The MRT test results revealed that magnetic balance test values and LV DC resistance test values were abnormal. Hence, winding fault was suspected. The DGA test results on oil samples revealed that significant increase in fault gas values. Discharge of high energy inside the power transformer was suspected and internal examination of the power transformer was suggested to be carried out.

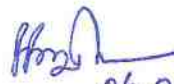
Hence, internal examination was carried out by TRB wing on 21.04.2026. Copper granules & burnt insulation paper were found spread out in LV 'Y' phase core & coil area. Transformer oil was found carbonized. It was suspected that LV 'Y' phase coil was defective. As the same could not be attended at site, the power transformer was declared as failed.

In order to normalise the supply, the failed unit was replaced by a healthy 8 MVA power transformer of Vijay Electricals Ltd., make bearing Sl.No.89794 and the same was commissioned on 11.05.2026. Hence, this estimate has been evolved to regularize the replacement made already at Sriperumbudur Indoor 33/11 kV SS.

In this regard, it is to be stated that the failed power transformer at Sriperumbudur Indoor 33/11 kV SS is available at the substation and is yet to be lifted for carrying out the rectification works.

Details of Works:

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


06.08.2026

EXECUTIVE ENGINEER/MASTER PLAN-I

**Replacement of failed 8 MVA power transformer by healthy unit of same capacity at
Sriperumbudur Indoor 33/11 kV SS in Kanchipuram EDC of Kanchipuram Region**

Part I : New Asset Chargeable to Capital

SL NO	DESCRIPTION	QTY	RATE in Lakhs	PER	AMOUNT in Lakhs
1	8 MVA, 33/11 kV Power Transformer (Rate as per cost data 2018-19)	1 No.	52.864	E	52.86
2	Cost of materials				52.86
3	Labour and transport charges		actual		3.103
4	Sub total				55.97
5	Estt & supervision charges @ 15%				8.40
6	Sub total				64.36
7	Dismantling charges		actual		0.44
8	Gross				64.81
9	Less credit				54.65
10	Nett				10.16

Part I (a) : Dismantling Charges

0.44

PART II: Accumulated depreciation charges

SL NO	DESCRIPTION	Original cost	Full Life Period	Useful Life Period	Accumulated depreciation
1	8 MVA, 33/11 KV Power Transformer	54.65	25	13	25.58
					25.58

Part III : Devolution of old equipment to store

$$\text{Part III:Part IV - Part II} = 54.65 - 25.58 = \mathbf{29.07}$$

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 **	43.200	4.32	7.13	54.65
	Total				54.65

** Rate as per cost data 2013-14

ABSTRACT

Part I : New Asset Chargeable to Capital

Rs.in Lakhs

64.81 Gross

10.16 Nett

0.44

25.58

29.07

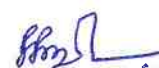
54.65

Part I (a) : Dismantling Charges

Part II : Accumulated Depreciation Charges

Part III:Devolution of old equipment to store

Part IV : Removal of old assets Charges


06.08.2026
Executive Engineer/Master Plan I

