

**TAMIL NADU POWER DISTRIBUTION CORPORATION LTD.**

**ABSTRACT**

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Electricity - Trichy Region - Dindugal EDC - Replacement of failed 5 MVA power transformer with a healthy 5 MVA power transformer at Vallipatty 33/11 kV SS - Administrative approval - Accorded.  
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**TECHNICAL BRANCH**

(Per). MD.TNPDCL Proceedings No.32

Dated: 12.05.2026.  
Sri Parapava Varudum,  
Chithirai: 29,  
Thiruvalluvar Aandu 2057.

**READ:** Chairman Cum Managing Director's approval dated 18.03.2026.

**PROCEEDINGS:**

1. The Tamil Nadu Power Distribution Corporation Limited hereby approves the proposal for replacement of failed 5 MVA power transformer with a healthy unit of same capacity at Vallipatty 33/11 kV SS in Dindugal EDC of Trichy Region at an estimated cost of Rs.28.15 lakhs Gross and Rs.17.16 lakhs Nett. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to TNPDCL - Funds - Capital Expenditure - Dindugai EDC - A/C code No:ERP 10 20 400.
3. By virtue of the provisions contained in sub-section (2) (a) of section 185 of the Electricity Act, 2003, the TNPDCL 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 has to be taken up on emergency, 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/Distn./Trichy Region.

(Per). MD.TNPDCL Proceedings No.32, dated: 12.05.2026.

Copy to:

The Director/Distribution/TNPDCL/Chennai-2

The Director/Finance/TNPDCL/Chennai-2

The Chief Engineer/MM/Chennai -2

The Superintending Engineer/Dindugal EDC.

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

The Company Secretary/TNPDCL/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

Enclosure to (Per). MD.TNPDCL Proceedings No.32, dated: 12.05.2026.

### **REPORT TO ACCOMPANY THE ESTIMATE**

This proposal envisages replacement of failed 5 MVA power transformer with a healthy unit of same capacity at Vallipatty 33/11 kV SS in Dindugal EDC of Trichy Region at an estimated cost of Rs.28.15 lakhs Gross and Rs.17.16 lakhs Nett.

#### **NEED:**

Vallipatty 33/11 kV SS was in service with 1x8+1x5 MVA power transformers. The 5 MVA Indotech make power transformer bearing serial No.6243 was in service at Vallipatty 33 kV SS from 06.03.1991.

On 16.07.2007 at 10.55 hrs., the above 5 MVA power transformer got tripped due to actuation of Buchholz relay. Oil spurt out on top of the inspection cover of both HV & LV side. Hence, the Power Transformer was isolated from service. The supply was managed with the existing other 8 MVA Power Transformer. The year of manufacture of the above power transformer is 1984 and has served 23 years.

The MRT wing test results revealed that all the test results were satisfactory except core balance test. The DGA test results on oil samples revealed that Hydrogen, Methane, Ethylene and Acetylene gas levels were high and are beyond the permissible limit. It was suspected that the same might be due to circulating current/overheated joints. Hence, internal examination of power transformer was suggested.

During internal examination, the core stampings were found bent & damaged and wooden wedges were found dislocated. As the above power transformer has served more than 23 years, it was suspected that internal fault had occurred due to ageing and the power transformer was declared as failed. Considering the life served by the above Power Transformer, the same was condemned and the auction made as scrap.

As the peak reached at Vallipatty 33/11 kV SS during the above failure period was about 2 MVA to 3 MVA only, the supply was managed with the available other 8 MVA Power Transformer at Vallipatty 33/11 kV SS.

However, presently, the existing 8 MVA Power Transformer at Vallipatty 33/11 kV SS is loaded more than 85% of its capacity and to avoid overloading of existing 8 MVA Power Transformer, it becomes essential to replace the failed 5 MVA Power Transformer with a healthy unit of same capacity at Vallipatty 33/11 kV SS. Hence, this proposal has been evolved.

#### **Details of works:**

- Erection of 1 No. 5 MVA Power Transformer at Vallipatty 33/11 kV SS.
- Dismantling of the failed 1 No.5 MVA Power Transformer at Vallipatty 33/11 kV SS.

  
EXECUTIVE ENGINEER/MASTER PLAN II

**Estimate for replacement of failed 5 MVA Power Transformer with a healthy unit of same capacity at the existing Vallipatty 33/11 kV SS in Dindugal EDC of Trichy Region**

**Part I : New Asset**

Rs.in Lakhs

Sl. No	Description	Qty	Rate	Per	Total
1	5 MVA, 33/11 kV Power Transformer (rate as per cost data 2006-07)	1 No.	16.286	E	16.286
2	Cost of materials				16.286
3	Contigencies @ 1%				0.163
4	Sub total				16.449
5	Labour and transport inclusive of GST			LS	8.000
6	Subtotal				24.449
7	Estt & Sup. Charges 15%				3.667
8	Subtotal				28.116
9	Add Dismantling Charges	actuals			0.033
10	Gross				<b>28.15</b>
11	Less Credit				10.99
12	Nett.				<b>17.16</b>

**Part I (a) : Dismantling Charges**

1 Dismantling Charges = **0.033 lakhs**

**Part II: Accumulated Depreciation Charges**

SL. No.	Description	Original cost	Full Life Period	Useful Life Period	Accum. depre. 0.9(Cl.3x Cl.5/ Cl.4)
1	Released materials as per Part IV	10.988	25	23	9.098
	Total				<b>9.098</b>

**Part III : Devolution of old equipment to store**

Part III : Part IV - Part II = 10.99 - 9.10 = **1.89 lakhs**

**Part IV : Removal of old assets Charges**

SL. NO	Name of the item	QTY	Original Cost	Original Erection Charges 10%	Original Centages 15%	Original Cost of Asset
1	5 MVA, 33/11 kV Pr.Tr. (Scrap value)	1 No.	8.686	0.87	1.43	10.988
2	Total					<b>10.99</b>

**ABSTRACT**

Part I : New Asset Chargeable to Capital

Rs in Lakhs

**28.15 Gross**

**17.16 Nett**

Part I (a) : Dismantling Charges

**0.03**

Part II : Accumulated Depreciation Charges

**9.10**

Part III : Devolution of old equipment to store

**1.89**

Part IV : Removal of old assets Charges

**10.99**

**Executive Engineer / Master Plan II**

*[Signature]*  
12/05/26