

TAMILNADU POWER DISTRIBUTION CORPORATION LIMITED
ABSTRACT

Electricity – Vellore Region – Establishment of 33/11 kV SS and Augmentation of power transformer capacity at the existing 33/11 kV SS – Proposed to be executed - Revised Administrative approval - Accorded.

TECHNICAL BRANCH

(Per). MD TNPDC Proceedings No:79

Dated:21.09.2026
Sri Parabava Varudam
Puratasi - 4
Thiruvalluvar Aandu 2057

READ: Chairman cum Managing Director's approval dated: 10.09.2026.

PROCEEDINGS:

1. The Tamil Nadu Power Distribution Corporation Ltd. hereby approves the revised proposal for the sanctioned 20 Nos. establishment of 33/11 kV SS & 8 Nos. Augmentation of power transformer capacity at the existing 33/11 kV SS in Vellore EDC, Tirupattur EDC and Krishnagiri EDC of Vellore Region at a total estimated cost of Rs.16747.08 lakhs Gross and Rs.16475.55 lakhs Nett. by superseding the approval already accorded for the said substations as detailed below :-

(i) Establishment of 33/11 kV SS:-

Sl No	Name of EDC	Name of the 33 /11 kV substation	Already approved vide BP.No and date	Already Sanctioned Amount in Rs. lakhs	Revised Sanctioned Amount in Rs. lakhs
1	Vellore	Kunnathur	03/05.01.2023	640.64	748.32
2	Vellore	Valarpuram	39/03.03.2023	556.95	659.68
3	Vellore	Thellur	40/03.03.2023	566.35	645.63
4	Vellore	Attupakkam	49/13.03.2023	529.21	630.01
5	Vellore	Virpatchipuram	38/28.03.2025	661.43	744.68
6	Vellore	Kalambattu	38/28.03.2025	745.63	807.82
7	Vellore	Nagavedu	38/28.03.2025	728.64(G) 619.45(N)	845.26(G) 723.82(N)
8	Tirupattur	Pullaneri	13/21.01.2023	477.24	561.58
9	Tirupattur	Kumaramangalam	70/19.06.2025	587.67	639.51
10	Tirupattur	Natham	10/21.09.2024	735.81	753.48
11	Tirupattur	Veppur	38/28.03.2025	732.52	796.64
12	Tirupattur	Vellakuttai	38/28.03.2025	682.18	796.11

13	Tirupattur	Elagiri	38/28.03.2025	707.06	895.30
14	Krishnagiri	Theertham	12/21.01.2023	598.02	703.90
15	Krishnagiri	Nochipatty	241/05.12.2022	549.61	643.58
16	Krishnagiri	Sevaganapally	89/05.04.2023	663.06	825.96
17	Krishnagiri	Thandarai	38/28.03.2025	683.02	803.62
18	Krishnagiri	Upparapatty	38/28.03.2025	699.71	739.01
19	Krishnagiri	Ulagam	38/28.03.2025	660.22	696.13
20	Krishnagiri	Jakkeri	38/28.03.2025	539.02(G) 516.11(N)	612.25(G) 589.33(N)

(ii) Augmentation of power transformer capacity at the existing Substation:-

Sl No	Name of EDC	Name of the 33 /11 kV substation	Already approved vide BP.No and date	Already Sanctioned Amount in Rs. lakhs	Revised Sanctioned Amount in Rs. lakhs
1	Vellore	Karivedu - Enhancement	78/05.07.2025	155.04	203.07
2	Vellore	Keeraiathu - Enhancement	78/05.07.2025	155.04	203.07
3	Vellore	Musiri - Enhancement	88/08.08.2025	155.04	203.07
4	Tirupattur	Kunichi - Enhancement	89/12.08.2025	155.04	203.07
5	Tirupattur	Singarapet - Enhancement	38/28.03.2025	183.61	223.61
6	Krishnagiri	Jawalagiri - Enhancement	38/28.03.2025	243.26	283.72
7	Krishnagiri	Denkanikottai - Enhancement	38/28.03.2025	238.33(G) 212.23(N)	281.82(G) 255.73(N)
8	Krishnagiri	Titan - Enhancement	38/28.03.2025	541.26(G) 507.67(N)	597.18(G) 496.10(N)

The detailed estimates and report are annexed to these proceedings.

- The expenditure is chargeable to TNPDC - Funds - Capital Expenditure - Vellore EDC, Tirupattur EDC and Krishnagiri EDC – New SS - A/c code no. 14.555, ERP A/c code no 1020300 and Augmentation of power transformer capacity – A/c code no.14.655, ERP 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 work is to be taken up after ensuring 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.

Copy to:

The Director/Distribution/TNPDC/Chennai-2

The Director/Finance/ TNPDC / Chennai – 2

The Chief Engineer/ Material Management /Chennai -2

The Chief Engineer/ IT & R-APDRP /Chennai -2

The Superintending Engineer/ Vellore EDC

The Superintending Engineer/ Tirupattur EDC

The Superintending Engineer/ Krishnagiri EDC

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 to file

// FORWARDED BY ORDER //


Executive Engineer / Master Plan II

REPORT TO ACCOMPANY THE ESTIMATE

This proposal envisages revised proposal for the sanctioned 20 Nos. establishment of 33/11 kV SS & 8 Nos. Augmentation of power transformer capacity at the existing 33/11 kV SS in Vellore EDC, Tirupattur EDC and Krishnagiri EDC of Vellore Region at a total estimated cost of Rs.16747.08 lakhs Gross and Rs.16475.55 lakhs Nett. by superseding the approval already accorded for the said substations.

Need:

Administrative approval for 20 Nos. establishment of 33/11 kV SS & 8 Nos. Augmentation of power transformer capacity at the existing 33/11 kV SS in Vellore EDC, Tirupattur EDC and Krishnagiri EDC of Vellore Region were sanctioned during 2022 -2025, based on the field requirement to meet out the load growth.

In the above sanctions, the rate as per prevailing cost data at that time and standard rates for civil works has been adopted.

Subsequently, schemes were proposed to be taken up under RDSS funding and the rates were standardized during 11/2022. Hence, revised administrative approval was accorded during 03/2025 for the schemes sanctioned between 2018-2022 by adopting the above standardized rates.

However, the above schemes were not taken up as the funding was not sanctioned. Now, it is proposed to take up the sanctioned schemes with necessary fund tie-up. In the meanwhile, TNPDC's schedule of rates for the year 2025-26 has been communicated vide Lr.No.CE/Plg&RC/SE/RE&I(D)/EE/PC-I/F.SoR25-26/D.164/25, dt. 22.10.2025.

As the cost of materials and labours have increased, the administratively approved cost is not adequate. Hence, it is requested to accord revised administrative approval based on the latest available cost data, so as to float fresh tenders."

Further, the Chief Engineer/Distribution/Vellore has stated that the civil estimate for the substation namely Nagavedu 33/11 kV SS, Thandarai 33/11 kV SS, Sevaganapalli 33/11 kV SS, Vellakuttai 33/11 kV SS and Elagiri 33/11 kV SS has to be revised based on the contour survey report.

Nagavedu 33/11 kV SS:

Increase in cost is due to filling of yard with gravel for a depth more than 0.45 m (as per original sanction), provision towards protection wall to prevent canal water from entering the SS premises and culvert for road crossing.

Elagiri 33/11 kV SS:

Increase in cost for Elagiri 33/11 kV SS (Hilly area) is due to an additional 40 % cost increase for Labour rate , 25% cost increase for materials and 40% cost increase for Head load conveyance as per the PWD Schedule of Rates for the year 2025-26.

Vellakuttai 33/11 kV SS, Sevaganapalli 33/11 kV SS and Nagavedu 33/11 kV SS:

Increase in cost is due to filling of yard with gravel for a depth more than 0.45 m (as per original sanction) and retaining wall in PCC around filling.

As the above substation schemes were sanctioned based on 11/2022 rates and are proposed to be executed in this financial year, it becomes essential to revise the estimate as per the schedule of rates for the year 2025-26 and as per the field condition, so as to take up the works.

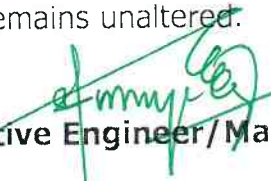
Accordingly, the estimate for the above schemes have been revised for Vellore Region and the details of original sanction and the revised estimated cost are as below:

Sl No	Name of EDC	Name of the 33/11 kV substation	Sanctioned vide BP.No and date	Sanctioned Amount in Rs. lakhs	Revised estimate cost in Rs. Lakhs	% increase
1	Vellore	Kunnathur	03/05.01.2023	640.64	748.32	16.81
2	Vellore	Valarpuram	39/03.03.2023	556.95	659.68	18.45
3	Vellore	Thellur	40/03.03.2023	566.35	645.63	14.00
4	Vellore	Attupakkam	49/13.03.2023	529.21	630.01	19.05
5	Vellore	Virpatchipuram	38/28.03.2025	661.43	744.68	12.59
6	Vellore	Kalambattu	38/28.03.2025	745.63	807.82	8.34
7	Vellore	Nagavedu	38/28.03.2025	728.64(G) 619.45(N)	845.26(G) 723.82(N)	16.01
8	Vellore	Karivedu (Enhancement)	78/05.07.2025	155.04	203.07	30.97
9	Vellore	Keeraisathu (Enhancement)	78/05.07.2025	155.04	203.07	30.97

10	Vellore	Musiri (Enhancement)	88/08.08.2025	155.04	203.7	30.97
11	Tirupattur	Pullaneri	13/21.01.2023	477.24	561.58	17.67
12	Tirupattur	Kumaramangalam	70/19.06.2025	587.67	639.51	8.82
13	Tirupattur	Natham	10/21.09.2024	735.81	753.48	2.40
14	Tirupattur	Veppur	38/28.03.2025	732.52	796.64	8.75
15	Tirupattur	Vellakuttai	38/28.03.2025	682.18	796.11	16.70
16	Tirupattur	Elagiri	38/28.03.2025	707.06	895.30	26.62
17	Tirupattur	Kunichi (Enhancement)	89/12.08.2025	155.04	203.07	30.97
18	Tirupattur	Singarapet (Enhancement)	38/28.03.2025	183.61	223.61	21.78
19	Krishnagiri	Theertham	12/21.01.2023	598.02	703.90	17.71
20	Krishnagiri	Nochipatty	241/05.12.2022	549.61	643.58	17.10
21	Krishnagiri	Sevaganapally	89/05.04.2023	663.06	825.96	24.57
22	Krishnagiri	Thandarai	38/28.03.2025	683.02	803.62	17.66
23	Krishnagiri	Upparapatty	38/28.03.2025	699.71	739.01	5.62
24	Krishnagiri	Ulagam	38/28.03.2025	660.22	696.13	5.44
25	Krishnagiri	Jakkeri	38/28.03.2025	539.02(G) 516.11(N)	612.25(G) 589.33(N)	13.59
26	Krishnagiri	Jawalagiri (Enhancement)	38/28.03.2025	243.26	283.72	16.63
27	Krishnagiri	Denkanikottai (Enhancement)	38/28.03.2025	238.33(G) 212.23(N)	281.82(G) 255.73(N)	18.25
28	Krishnagiri	Titan (Enhancement)	38/28.03.2025	541.26(G) 507.67(N)	597.18(G) 496.10(N)	10.33
			Total	14570.61(G) & 14378.82(N)	16747.08(G) & 16475.55(N)	

As the cost variation of the schemes are either more than 10% (or) individual material cost is more than 5% from the already approved cost, revised approval is necessary to take up the works.

The work involved as per the original sanction remains unaltered.

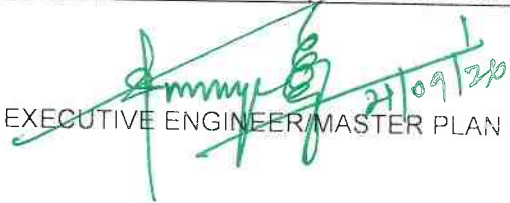

Executive Engineer / Master Plan II

ABSTRACT

In lakhs

SL. NO	DESCRIPTION	Gross	Nett
	Vellore Region		
	Vellore EDC		
1	Establishment of Kunnathur 33/11 kV SS with 1x8 MVA power transformer	748.32	748.32
2	Establishment of Valarpuram 33/11 kV SS with 1x8 MVA power transformer	659.68	659.68
3	Establishment of Thellur 33/11 kV SS with 1x8 MVA power transformer	645.63	645.63
4	Establishment of Attupakkam 33/11 kV SS with 1x8 MVA power transformer	630.01	630.01
5	Establishment of Virpatchipuram 33/11 kV SS with 2x8 MVA power transformers	744.68	744.68
6	Establishment of Kalambattu 33/11 kV SS with 2x8 MVA power transformers	807.82	807.82
7	Establishment of Nagavedu 33/11 kV SS with 2x8 MVA power transformers	845.26	723.82
8	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Karivedu 33/11 kV SS	203.07	203.07
9	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Keerasathu 33/11 kV SS	203.07	203.07
10	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Musiri 33/11 kV SS	203.07	203.07
		5690.61	5569.17
	Tirupattur EDC		
1	Establishment of Pullaneri 33/11 kV SS with 1x8 MVA power transformer	561.58	561.58
2	Establishment of Kumaramangalam 33/11 kV SS with 1x8 MVA power transformer	639.51	639.51
3	Establishment of Natham 33/11 kV SS with 1x8 MVA power transformer	753.48	753.48
4	Establishment of Veppur 33/11 kV SS with 1x8 MVA power transformer	796.64	796.64
5	Establishment of Velakuttai 33/11 kV SS with 2x8 MVA power transformers	796.11	796.11
6	Establishment of Elagiri 33/11 kV SS with 1x8 MVA power transformer	895.30	895.30
7	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Kunichi 33/11 kV SS	203.07	203.07
8	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Singarapet 33/11 kV SS	223.61	223.61
		4869.30	4869.30

	Krishnagiri EDC		
1	Establishment of Theertham 33/11 kV SS with 1x8 MVA power transformer	703.90	703.90
2	Establishment of Nochipatty 33/11 kV SS with 1x8 MVA power transformer	643.58	643.58
3	Establishment of Sevaganapally 33/11 kV SS with 1x8 MVA power transformer	825.96	825.96
4	Establishment of Thandarai 33/11 kV SS with 1x8 MVA power transformer	803.62	803.62
5	Establishment of Upparapatty 33/11 kV SS with 1x8 MVA power transformer	739.01	739.01
6	Establishment of Ulagam 33/11 kV SS with 1x8 MVA power transformer	696.13	696.13
7	Establishment of Jakkeri 33/11 kV SS with 1x8 MVA power transformers and dismantling of Kelamangalam 33 kV LT SS	612.25	589.33
8	Enhancement of power transformer capacity from 1X8 MVA to 2X8 MVA at Jawalagiri 33/11 kV SS	283.72	283.72
9	Enhancement of power transformer capacity from 2X8 MVA to 1X16+1X8 MVA at Denkanikottai 33/11 kV SS	281.82	255.73
10	Enhancement of power transformer capacity from 2X8 MVA to 2X16 MVA at Titan 33/11 kV SS	597.18	496.10
		6187.17	6037.08
	Grand Total	16747.08	16475.55


 EXECUTIVE ENGINEER MASTER PLAN II

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT KUNNATHUR IN VELLORE EDC

Part I: Cost of new asset					Rs. In Lakhs	
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				50.000	
	room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS		
2					175.000	
3	Total				225.000	225.00
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.7070	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.7370	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				79.122	
24	Contingencies @ 1%				0.791	
25	Total for materials				79.913	
26	Labour and Transport charges @ 15%				11.987	
27	GST on labour & transport @ 18%				2.158	
28	Total for material and labour				94.058	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.932	
33	Estt & Sup.Charges 15%				28.640	
34	Sub total				219.572	219.57
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	11 kV Link line with 7/4.09 ACSR	7.35 kms.	8.000	km	58.800	
40	33 kV line with Dwg conductor	11.13 kms.	12.000	Loc	133.560	
41	Subtotal				303.75	303.75
42	Total Gross & Nett.					748.32

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT VALARPURAM IN VELLORE EDC

Part I: Cost of new asset					Rs. In Lakhs	
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				4.223	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				179.223	179.223
II	Electrical Works					
1	33 kV AB Switch	4 Nos	0.466	E	1.864	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				79.352	
24	Contingencies @ 1%				0.794	
25	Total for materials				80.146	
26	Labour and Transport charges @ 15%				12.022	
27	GST on labour & transport @ 18%				2.164	
28	Sub total material and labour				94.331	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				191.205	
33	Estt & Sup.Charges 15%				28.681	
34	Sub total				219.886	219.89
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 kV capacitor bank 2.4 MVAR	1.00 Set	27.008	set	27.008	
39	33 kV line with Dog conductor	8.165 km.	12.000	Loc	97.980	
40	11 kV link line with 7/4.09 conductor	6.40 km.	8.000	Loc	51.200	
41	Subtotal				260.569	260.569
42	Total Gross & Nett.					659.6781

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV
POWER TRANSFORMER AT THELLUR IN VELLORE EDC**

Part I: Cost of new asset				Rs. In Lakhs		
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				4.470	
	room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS		
2					175.000	
3	Total				179.470	179.47
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.7070	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.7370	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				79.122	
24	Contingencies @ 1%				0.791	
25	Total for materials				79.913	
26	Labour and Transport charges @ 15%				11.987	
27	GST on labour & transport @ 18%				2.158	
28	Total for material and labour				94.058	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.932	
33	Estt & Sup.Charges 15%				28.640	
34	Sub total				219.572	219.57
35	Plinth for breakers	5 Nos.	2.5000	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	11 kV Link line with 7/4.09 ACSR	9.4 kms.	8.000	km	75.200	
40	33 KV feeder bay extension*	1 No	0.000		0.000	
41	33 kV line with Doq conductor	5 kms.	12.000	Loc	60.000	
42	Sub total				246.59	246.59
43	Total Gross & Nett.					645.63

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT ATTUPAKKAM IN VELLORE EDC

Part I: Cost of new asset					Rs. In Lakhs	
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals) with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	2.795	
2					175.000	
3	Total				177.795	177.80
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.7070	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.7370	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				78.886	
24	Contingencies @ 1%				0.789	
25	Total for materials				79.675	
26	Labour and Transport charges @ 15%				11.951	
27	GST on labour & transport @ 18%				2.151	
28	Total for material and labour				93.777	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.651	
33	Estt & Sup.Charges 15%				28.598	
34	Sub total				219.249	219.25
35	Plinth for breakers	5 Nos.	2.5000	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	11 kV Link line with 7/4.09 ACSR	3.46 kms.	8.000	km	27.680	
40	33 kV line with Doq conductor	7.825 kms.	12.000	Loc	93.900	
41	Subtotal				232.97	232.97
42	Total Gross & Nett.					630.01

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 2x8 MVA, 33/11 kV POWER TRANSFORMER AT VIRUPATCHIPURAM IN VELLORE EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				2.486	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	180.000	
3	Fire protection wall				3.000	
4	Total				185.486	185.486
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (2 LV+4 fdrs)	6 Nos	1.626	E	9.756	
7	11 kV CTS	18 Nos	0.250	E	4.500	
8	11 kV AB Switch	11 Nos	0.236	E	2.596	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	6 Nos	0.018	E	0.108	
11	11 kV LAS distn. Type	12 Nos	0.008	E	0.096	
12	Earthing painting and Yard lighting				10.000	
13	Control cable				10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	17.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				86.660	
24	Contingencies @ 1%				0.867	
25	Total for materials				87.527	
26	Labour and Transport charges @ 15%				13.129	
27	GST on labour & transport @ 18%				2.363	
28	Total for material and labour				103.019	
29	2x8 MVA 33/11 kV Pr.Tr. with OLTC	2 Nos	88.374		176.748	
30	Labour and transport including GST	2 Loc	8.000	Loc	16.000	
31	Earthing	2 Loc	0.500	Loc	1.000	
32	Sub Total				296.767	
33	Estt & Sup.Charges 15%				44.515	
34	Sub total				341.282	341.28
35	Plinth for breakers	7 Nos.	2.500	E	17.500	
36	33 kV Structure	1 set	38.09	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	33 kV line with dog conductor	6.88 km	12.000	km	82.560	
39	11 kV Link line with 7/4.09 ACSR	2.4 km	8.000	Km	18.960	
40	11 kV Capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
41	Sub Total				217.909	217.909
42	Total Gross & Nett					744.68

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 2x8 MVA, 33/11 kV POWER TRANSFORMER AT KALAMBATTU IN VELLORE EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost	Actuals			2.866	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	180.000	
2	Fire protection wall				3.000	
3	Total				185.866	185.866
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (2 LV+4 fdrs)	6 Nos	1.626	E	9.756	
7	11 kV CTS	18 Nos	0.250	E	4.500	
8	11 kV AB Switch	11 Nos	0.236	E	2.596	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	6 Nos	0.018	E	0.108	
11	11 kV LAS distn. Type	12 Nos	0.008	E	0.096	
12	Earthing painting and Yard lighting				10.000	
13	Control cable				10.000	
14	110 V, 120 AH Battery with 2 charge	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				17.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				86.660	
24	Contingencies @ 1%				0.867	
25	Total for materials				87.527	
26	Labour & Transport @ 15%				13.129	
27	GST on L&T @ 18%				2.363	
28	Total for material and labour				103.019	
29	2x8 MVA 33/11 kV Pr.Tr. with OLTC	2 Nos	88.374		176.748	
30	Labour and transport including GST	2 Loc	8.000	Loc	16.000	
31	Earthing	2 Loc	0.500	Loc	1.000	
32	Sub Total				296.767	
33	Estt & Sup.Charges 15%				44.515	
34	Sub total				341.282	341.28
35	Plinth for breakers	7 Nos.	2.500	E	17.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	33 kV line with dog conductor	7.89 km	12.000	km	94.680	
39	11 kV Link line with 7/4.09 ACSR	8.7 km	8.000	Km	69.600	
40	11 kV Capacitor bank/2.4 MVAR	1 set	27.008	set	27.008	
41	Sub Total				280.669	280.669
42	Total Gross & Nett					807.82

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DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 2x8 MVA, 33/11 kV POWER TRANSFORMER AT NAGAVEDU IN VELLORE EDC

Part I : New Asset Chargeable to Capital					RS. in Lakhs	
SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS	Actuals			45.477	
1	Land cost			LS	209.000	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)					
3	Fire protection wall				3.000	
4	Total				257.477	257.477
II	Electrical Works					
1	33 kV AB Switch	4 Nos	0.466	E	1.864	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (2 LVs+4 fdrs)	6 Nos	1.626	E	9.756	
7	11 kV CTS	18 Nos	0.250	E	4.500	
8	11 kV AB Switch	11 Nos	0.236	E	2.596	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	6 Nos	0.018	E	0.108	
11	11 kV LAS distn. Type	12 Nos	0.008	E	0.096	
12	Earthing painting and Yard lighting				10.000	
13	Control cable				10.000	
14	110 V, 120 AH Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				17.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				87.126	
24	Contingencies @ 1%				0.871	
25	Total for materials				87.997	
26	Labour & Transport @ 15%				13.200	
27	GST on Labour & Transport @ 18%				2.376	
28	Total for material and labour				103.573	
29	2x8 MVA 33/11 kV Pr.Tr. with OLTC	2 Nos	88.374		176.748	
30	Labour and transport including GST	2 Loc	8.000	Loc	16.000	
31	Earthing	2 Loc	0.500	Loc	1.000	
32	Sub Total				297.321	
33	Estt & Sup.Charges 15%				44.598	
34	Sub total				341.919	341.92
35	Plinth for breakers	7 Nos.	2.500	E	17.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
38	33 kV line with dog conductor from Punnai 110 kV SS to Nagavedu 33 kV SS	7.5 km	12.000	km	90.000	
39	11 kV Link line with 7/4.09 ACSR	3.8 km	8.000	Km	30.400	
40	11 kV Capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
41	Fire protection wall				3.000	
42	Add dismantling charges				6.072	
43	Sub Total				245.861	245.861
44	Total Gross					845.26
45	Less credit					121.44
46	Total Nett					723.82

Part I (a) : Dismantling Charges Charges

1 Dismantling Charges = 6.072 lakhs

PART II ACCUMULATED DEPRECIATION CHARGES

SL. No.	DESCRIPTION	Original cost a	Full Life Period b	Useful Life Period c	Accum. depre. axc/bx.9
1	Dismantling of 33 kV Punnai - Arakkonam feeder	121.440	35	39	109.296
	Total	121.440			109.296

PART III-DEVOLUTION OF OLD ASSET-DEBIT TO STOCK

(PART IV-PART II)

12.144 lakhs

PART IV

Removal of old assets Charges

Sl.No	Description	Qty in Nos/KM.	Original cost in lakhs	Original erection charges	Original centages	Original cost of asset in lakhs
1	Dismantling of 33 kV Punnai - Arakkonam feeder*	16	96.000	9.600	15.840	121.440
	Total		96.000	9.600	15.840	121.440

* 50% value of 33 kV dog conductor from cost data 2025-26 is adopted

ABSTRACT

	Rs in Lakhs
Part I : New Asset Charges	845.26 Gross
	723.82 Nett
Part I (a) : Dismantling Charges	6.07
Part II : Accumulated Depreciation Charges	109.30
Part III : Devolution of old equipment to store	12.14
Part IV : Removal of old assets Charges	121.44

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**DETAILED ESTIMATE FOR ENHANCEMENT OF EXISTING 33/11 KV POWER
TRANSFORMER CAPACITY FROM 1x8 MVA TO 2x8 MVA AT KARIVEDU 33/11KV SS
IN VELLORE EDC (Annexure I)**

RS. in Lakhs					
S.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT
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 (LV Breaker)	1 No	1.626	E	1.626
4	11 KV AB switch	2 Nos	0.236	E	0.472
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	2.500	E	2.500
8	Control and Relay panel				17.000
9	Control cable				10.000
10	Fire fighting equipment				3.000
11	Earthing,Painting and Yard lighting			LS	10.000
12	Sub total				45.982
13	Contingencies 1%				0.460
14	Cost of Material				46.442
15	Labour and Transport charges @ 15%				6.966
16	GST on labour & transport @ 18%				1.254
17	Total for material and labour				54.662
18	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	88.374		88.374
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%				23.488
22	Sub total				180.074
23	33 kV and 11 kV structure modifications				13.000
24	Civil works such as Fire protection wall,sand filling , cable duct etc.,				10.000
25	Total Gross & Nett				203.07

**DETAILED ESTIMATE FOR ENHANCEMENT OF EXISTING 33/11 KV POWER
TRANSFORMER CAPACITY FROM 1x8 MVA TO 2x8 MVA AT KEERASATHU 33/11KV
SS IN VELLORE EDC (Annexure II)**

RS. in Lakhs

S.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT
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 (LV Breaker)	1 No	1.626	E	1.626
4	11 KV AB switch	2 Nos	0.236	E	0.472
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	2.500	E	2.500
8	Control and Relay panel				17.000
9	Control cable				10.000
10	Fire fighting equipment				3.000
11	Earthing,Painting and Yard lighting			LS	10.000
12	Sub total				45.982
13	Contingencies 1%				0.460
14	Cost of Material				46.442
15	Labour and Transport charges @ 15%				6.956
16	GST on labour & transport @ 18%				1.254
17	Total for material and labour				54.662
18	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	88.374		88.374
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%				23.488
22	Sub total				180.074
23	33 kV and 11 kV structure modifications etc.,				13.000
24	Civil works such as Fire protection wall,sand filling , cable duct etc.,				10.000
25	Total Gross & Nett				203.07

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

S.NO	DESCRIPTION	QTY	RATE	RS. in Lakhs	
				PER	AMOUNT
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 (LV Breaker)	1 No	1.626	E	1.626
4	11 KV AB switch	2 Nos	0.236	E	0.472
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	2.500	E	2.500
8	Control and Relay panel				17.000
9	Control cable				10.000
10	Fire fighting equipment				3.000
11	Earthing,Painting and Yard lighting			LS	10.000
12	Sub total				45.982
13	Contingencies 1%				0.45982
14	Cost of Material				46.44182
15	Labour and Transport charges @ 15%				6.966273
16	GST on labour & transport @ 18%				1.253929
17	Total for material and labour				54.66202
18	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	88.374		88.374
19	Plinth, labour & Transport inclusive of GST.	1 No	13		13
20	Earthing				
21	Estt and Supervision charges 15%	1 No	0.55		0.55
22	Sub total				23.4879
23	33 kV and 11 kV structure modifications				180.0739
24	Civil works such as Fire protection wall,sand filling , cable duct etc.,				13.000
25	Total Gross & Nett				203.07

**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	0.466	E	0.466
2	33 KV LAS	3 Nos	0.038	E	0.114
3	11 kV VCB (LV Breaker)	1 No	1.626	E	1.626
4	11 KV AB switch	2 Nos	0.236	E	0.472
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	2.500	E	2.500
8	Control and Relay panel				17.000
9	Control cable				10.000
10	Fire fighting equipment				3.000
11	Earthing,Painting and Yard lighting			LS	10.000
12	Sub total				45.982
13	Contingencies 1%				0.460
14	Cost of Material				46.442
15	Labour and Transport charges @ 15%				6.966
16	GST on labour & transport @ 18%				1.254
17	Total for material and labour				54.662
18	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	88.374		88.374
19	Plinth, labour & Transport inclusive of GST.	1 No	13		13.000
20	Earthing	1 No	0.55		0.550
21	Estt and Supervision charge @ 15%				23.488
22	Sub total				180.074
23	33 kV and 11 kV structure modifications				13.000
24	Civil works such as Fire protection wall,sand filling , cable duct etc.,				10.000
25	Total Gross & Nett				203.07

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT PULLANERI IN THIRUPATTUR EDC

Part I: Cost of new asset			Rs. In Lakhs			
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				4.666	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				179.666	179.666
II	Electrical Works					
1	33 kV AB Switch	4 Nos	0.466	E	1.864	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific Instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				79.352	
24	Contingencies @ 1%				0.794	
25	Total for materials				80.146	
26	Labour and Transport charges @ 15%				12.022	
27	GST on labour & transport @ 18%				2.164	
28	Sub total material and labour				94.331	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				191.205	
33	Estt & Sup.Charges 15%				28.681	
34	Sub total				219.886	219.89
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 kV capacitor bank 2.4 MVAR	1.00 Set	27.008	set	27.008	
39	33 kV line with Dog conductor	1.87 km.	12.000	Loc	22.440	
40	11 kV link line with 7/4.09 conductor	3.53 km.	8.000	Loc	28.200	
41	Subtotal				162.029	162.029
42	Total Gross & Nett.					561.5811

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS AT KUMARAMANGALAM WITH 1x8 MVA,
33/11 kV POWER TRANSFORMER IN TIRUPATTUR EDC**

Part I: Cost of new asset					Rs. In Lakhs	
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				1.502	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				176.502	176.502
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.477	No	4.477	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				78.862	
24	Contingencies @ 1%				0.789	
25	Total for materials				79.651	
26	Labour and Transport charges @ 15%				11.948	
27	GST on labour & transport @ 18%				2.151	
28	Total for material and labour				93.749	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.623	
33	Estt & Sup.Charges 15%				28.593	
34	Sub total				219.216	219.22
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 kV Link line with 7/4.09 ACSR	4.55 kms.	8.000	km	36.400	
39	11 kV capacitor bank 2.4 MVAR	1 Set	27.008	set	27.008	
40	33 kV line with Dog conductor	8.00 km.	12.000	Loc	96.000	
41	Subtotal				243.789	243.789
42	Total Gross & Nett.					639.51

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT NATHAM IN THIRUPATTUR EDC

Part I: Cost of new asset				Rs. In Lakhs		
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				7.172	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				182.172	182.172
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	No	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				78.886	
24	Contingencies @ 1%				0.789	
25	Total for materials				79.675	
26	Labour and Transport charges @ 15%				11.951	
27	GST on labour & transport@ 18%				2.151	
28	Total for material and labour				93.777	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.651	
33	Estt & Sup.Charges 15%				28.598	
34	Sub total				219.249	219.25
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	2 set	33.791	set	67.582	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	33 kV line with Dog conductor	11.24 km.	12.000	Loc	134.880	
40	11 kV link line with 7/4.09 conductor	9.00 km.	8.000	Loc	72.000	
41	Subtotal				352.060	352.06
42	Total Gross & Nett.					753.481

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV
POWER TRANSFORMER AT VEPPUR IN TIRUPATTUR EDC**

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost				2.256	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				177.256	177.256
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1 LV+4 fdrs)	5 Nos	1.626	E	8.130	
7	11 kV CTS	15 Nos	0.250	E	3.750	
8	11 kV AB Switch	10 Nos	0.236	E	2.360	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	12 Nos	0.008	E	0.096	
12	Earthing painting and Yard lighting				10.000	
13	Control cable				10.000	
14	110 V Battery with 2 charger	1 set	8.7070	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.7370	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				81.994	
24	Contingencies @ 1%				0.820	
25	Total for materials				82.814	
26	Labour and Transport charges @ 15%				12.422	
27	GST on labour & transport @ 18%				2.236	
28	Total for material and labour				97.472	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				194.346	
33	Estt & Sup.Charges 15%				29.152	
34	Sub total				223.458	223.50
35	Plinth for breakers	6 Nos.	2.500	E	15.000	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	33 kV line with dog conductor to the proposed Veppur 33/11 KV SS	15.5 km	12.000	km	186.000	
39	Erection of 11 kV Link lines with 7/4.09 ACSR	7.0 km	8.000	Km	56.000	
40	Erection of Railway crossing structure				40.000	
41	11 kV Capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
42	Sub Total				395.889	395.89
43	Total Gross & Nett.					796.64

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 2x8 MVA, 33/11 kV POWER TRANSFORMER AT VELLAKUTTAI IN TIRUPATTUR EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost	Actuals			10.120	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	205.000	
3	Fire protection wall				3.000	
	Total				218.120	218.120
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (2 LVs+4 fdrs)	6 Nos	1.626	E	9.756	
7	11 kV CTS	18 Nos	0.250	E	4.500	
8	11 kV AB Switch	12 Nos	0.236	E	2.832	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	6 Nos	0.018	E	0.108	
11	11 kV LAS distn. Type	12 Nos	0.008	E	0.096	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	17.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				86.896	
24	Contingencies @ 1%				0.869	
25	Total for materials				87.765	
26	Labour and Transport charges @ 15%				13.165	
27	GST on labour & transport @ 18%				2.370	
28	Total for material and labour				103.299	
29	2x8 MVA 33/11 kV Pr.Tr. with OLTC	2 Nos	88.374		176.748	
30	Labour and transport including GST	2 Loc	8.000	Loc	16.000	
31	Earthing	2 Loc	0.500	Loc	1.000	
32	Sub Total				297.047	
33	Estt & Sup.Charges 15%				44.557	
34	Sub total				341.604	341.60
35	Plinth for breakers	7 Loc	2.500	Loc	17.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	33 kV line with dog conductor	8.0 km	12.000	km	96.000	
39	11 kV Link line with 7/4.09 ACSR	3.0 km	8.000	Km	24.000	
40	11 kV Capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
41	Sub Total				236.389	236.389
42	Total Gross & Nett					796.11

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT ELAGIRI IN THIRUPATTUR EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost	Actuals			10.120	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, levelling of site and revetment (Hill), yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses. all statutory levies etc.)			LS	290.000	
	Total				300.120	300.120
II	Electrical Works					
1	33 kV AB Switch	2 Nos	0.466	E	0.932	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1 LV+2 fdrs)	3 Nos	1.626	E	4.878	
7	11 kV CTS	9 Nos	0.250	E	2.250	
8	11 kV AB Switch	6 Nos	0.236	E	1.416	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	6 Nos	0.008	E	0.048	
12	Earthing painting and Yard lighting				10.000	
13	Control cable				10.000	
14	110 V, 120 AH Battery with 2	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	C&R panel				15.000	
19	Fire Fighting equipments		3.000	E	3.000	
20	P&T Phone	1 No	0.100	E	0.100	
21	Scientific Instruments				5.000	
22	Sub Total				74.639	
23	Contingencies @ 1%				0.746	
24	Total for materials				75.385	
25	Labour and Transport charges @ 15%				11.308	
26	GST on labour & transport @ 18%				2.035	
27	Total for material and labour				88.729	
28	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
29	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
30	Earthing	1 Loc	0.500	Loc	0.500	
31	Sub Total				185.603	
32	Estt & Sup.Charges 15%				27.840	
33	Sub total				213.443	213.44
34	Plinth for breakers	4 Nos.	2.500	E	10.000	
35	33 kV Structure	1 set	38.09	set	38.090	
36	11 kV Structure	1 set	33.791	set	33.791	
37	33 kV line with dog conductor,	15.0 kms	12.000	km	180.000	
38	11 kV Link line with 7/4.09 ACSR	5.0 kms	8.000	Km	40.000	
39	11 kV capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
40	33 kV bay extension *	1.0 No	0		0.000	
41	Railway crossing				52.850	381.739
	Total Gross & Nett					895.30

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

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

RS. in Lakhs					
S.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT
II	Electrical Works				
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 (2 LV Breaker+1 feeder)	3 Nos	1.626	E	4.878
4	11 KV AB switch	5 Nos	0.236	E	1.180
5	11 kV CT	9 Nos	0.250	E	2.250
6	11 kV LAS (Station type)	3 Nos	0.018	E	0.054
7	11 KV LAS (Distribution type)	3 Nos	0.008	E	0.024
8	Plinth for breaker	3 Nos	2.500	E	7.500
9	Control and Relay panel				17.000
10	Control cable				10.000
11	Sub total				43.466
12	Contingencies 1%				0.435
13	Cost of Materials				43.901
14	Labour and Transport inclusive of GST,EPF& ESI				8.000
15	Total for materials and labour				51.901
16	8 MVA, 33/11 kV Pr Tr with OLTC	1 No	88.374		88.374
17	Plinth, labour &Transport inclusive of GST,EPF& ESI	1 No	13		13.000
18	Earthing				0.550
19	Estt and Supervision charges 15%				23.074
20	Total				176.898
21	11 kV link line	2 kms	8.000	kms	16.000
22	33 kV and 11 kV structure modifications				13.000
23	Station Yard , cable duct & Fire protection wall etc.,				10.000
24	33 KV 1X630 sqmm UG	0.05 kms	5.87	km	5.870
25	11 kV 3x300 sqmm UG cable	0.05 kms	1.84	km	1.840
26	Total for works Gross & Nett				223.61

**Estimate for laying of 0.05 km. route length of 11 KV ,3 X 300 sq mm cable for a
Route Length of 0.05 km. by open cut method.**

Sl. No.	Description	Quantity	Units	Rate in lakhs	PER	Total in Lakhs
1	11 KV 3 X 300 sq mm UG cable	0.05	km	19.2900	Km	0.965
2	11KV, 3X300 sqmm HS straight joints	0	Nos.	0.0000	No	0.000
3	11 KV V trough	0	Nos.		Each	0.000
4	PVC pipe 160 mm	0	mtr		mtr.	0.000
5	11KV, 3X300 sqmm HS OD termination kits	2	No	0.0250	Each	0.050
6	11KV, 3X300 sqmm HS ID termination kits	0	No		Each	0.000
	Cost of Material					1.015
	Contingencies 1 %					0.010
	Sub Total					1.025
	Labour and Transport	0.05	Km	10	Km	0.50
	Sub total-1					1.52
	Estt & supervision charges @ 15 %					0.23
	Sub total-2					1.75
	GST on labour & transport @ 18%					0.090
	Road - cut charges **	0	Km	10	Km	0.00
	Total (RATE FOR 0.05 Km)					1.84
	Or say Rs.1.84 lakhs					

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER
TRANSFORMER AT THEERTHAM IN KRISHNAGIRI EDC**

Part I: Cost of new asset			Rs. In Lakhs			
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				8.046	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
3	Total				183.046	183.046
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 2 fdrs)	3 Nos	1.626	E	4.878	
7	11 kV CTS	9 Nos	0.250	E	2.250	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	6 Nos	0.008	E	0.048	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				76.486	
24	Contingencies @ 1%				0.765	
25	Total for materials				77.251	
26	Labour and Transport charges @ 15%				11.588	
27	GST on labour & transport @ 18%				2.086	
28	Sub total				90.924	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				187.798	
33	Estt. & Sup.Charges 15%				28.170	
34	Sub Total				215.968	215.97
35	Plinth for breakers	4 Nos.	2.500	E	10.000	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 kV capacitor bank 2.4 MVAR	1.00 Set	27.008	set	27.008	
39	33 kV line with Dog conductor	14.00 km.	12.000	Loc	168.000	
40	11 kV link line with 7/4.09 conductor	3.50 km.	8.000	Loc	28.000	
41	Subtotal				304.889	304.889
42	Total Gross & Nett.					703.903

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT NOCHIPATTY IN KRISHNAGIRI EDC

Part I: Cost of new asset			Rs. In Lakhs			
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				1.933	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
2						
3	Total				176.933	176.93
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.7070	set	8.707	
15	100 kVA. 11 kV/433 V Stn. Tr.	1 No	4.7370	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				79.122	
24	Contingencies @ 1%				0.791	
25	Total for materials				79.913	
26	Labour and Transport charges @ 15%				11.987	
27	GST on labour & transport @ 18%				2.158	
28	Total for material and labour				94.058	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.932	
33	Estt & Sup.Charges 15%				28.640	
34	Sub total				219.572	219.57
35	Plinth for breakers	5 Nos.	2.5000	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	11 kV Link line with 7/4.09 ACSR	5.01 kms.	7.39	km	37.024	
40	33 kV line with Dog conductor	8.7 kms.	11.340	Loc	98.658	
41	Subtotal				247.07	247.07
42	Total Gross & Nett.					643.58

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT SEVAGANAPALLY IN KRISHNAGIRI EDC

Part I: Cost of new asset						Rs. In Lakhs
SL.NO	DESCRIPTION	QTY	RATE	PER	AMOUNT	TOTAL
I	CIVIL WORKS					
1	Land Cost (actuals)				54.300	
2	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	238.000	
3	Total				292.300	292.30
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PTs	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV Breaker (1 LV+ 3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	7 Nos	0.236	E	1.652	
9	11 kV Bus PT	3 Nos	0.511	S	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting			LS	10.000	
13	Control cable			LS	10.000	
14	110 V Battery with 2 charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	Fire fighting equipments				3.000	
17	P&T Phone				0.100	
18	Scientific instruments				5.000	
19	C&R panel			LS	15.000	
20	DC panel	1 No	0.980	E	0.980	
21	AC panel	1 No	1.028	E	1.028	
22	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
23	Sub Total				78.886	
24	Contingencies @ 1%				0.789	
25	Total for materials				79.675	
26	Labour and Transport charges @ 15%				11.951	
27	GST on labour & transport @ 18%				2.151	
28	Total for material and labour				93.777	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.651	
33	Estt & Sup.Charges 15%				28.598	
34	Sub total				219.249	219.25
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	11 kV Link line with 7/4.09 ACSR	4.44 kms.	8.000	km	35.520	
40	33 kV line with Doq conductor	15 kms.	12.000	Loc	180.000	
41	Subtotal				314.41	314.41
42	Total Gross & Nett.					825.96

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT THANDARAI IN KRISHNAGIRI EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost	Actuals			12.700	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	231.000	
2						
3	Total				243.700	243.700
II	Electrical Works					
1	33 kV AB Switch	2 Nos	0.466	E	0.932	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1 LV+3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting				10.000	
13	Control cable 110 V, 120 AH Battery with 2				10.000	
14	charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				15.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				78.656	
24	Contingencies @ 1%				0.787	
25	Total for materials				79.443	
26	Labour & Transport @ 15%				11.916	
27	GST on L&T@ 18%				2.145	
28	Total for materials and labour				93.504	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.378	
33	Estt & Sup.Charges 15%				28.557	
34	Sub total				218.935	218.93
35	Plinth for breakers	5 Loc	2.500	Loc	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	33 kV line with dog conductor	16.00 kms	12.000	km	192.000	
39	11 kV Link line with 7/4.09 ACSR	4.70 kms	8.000	Km	37.600	
40	11 kV capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	340.989
41	Total Gross & Nett					803.62

DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV POWER TRANSFORMER AT UPPARAPATTY IN KRISHNAGIRI EDC

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost				8.700	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses. all statutory levies etc.)			LS	175.000	
2						
3	Total				183.700	183.700
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1LV+3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	8 Nos	0.236	E	1.888	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting				10.000	
13	Control cable 110 V, 120 AH Battery with 2				10.000	
14	charger	1 set	8.707	set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.280	E	1.280	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				15.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				79.374	
24	Contingencies @ 1%				0.794	
25	Total for materials				80.168	
26	Labour & Transport @ 15%				12.025	
27	GST on L&T@ 18%				2.165	
28	Total for material and labour				94.357	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				191.231	
33	Estt & Sup.Charges 15%				28.685	
34	Sub total				219.916	219.92
35	Plinth for breakers	5 Nos.	2.500	E	12.500	

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
39	33 kV line with dog conductor	14.0 kms	12.000	km	168.000	
40	11 kV Link line with 7/4.09 ACSR	7.00 kms	8.000	Km	56.000	
	33 kV bay extension at Uthangarai	1 No			0.000	335.389
41	110 kV SS*					
42	Total Gross & Nett				335.389	739.01

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV
POWER TRANSFORMER AT ULAGAM IN KRISHNAGIRI EDC**

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO.	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost				9.800	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses, all statutory levies etc.)			LS	175.000	
2	Total				184.800	184.800
II	Electrical Works					
1	33 kV AB Switch	3 Nos	0.466	E	1.398	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTS	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1LV+2fdrs)	3 Nos	1.626	E	4.878	
7	11 kV CTS	9 Nos	0.250	E	2.250	
8	11 kV AB Switch	6 Nos	0.236	E	1.416	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	6 Nos	0.008	E	0.048	
12	Earthing painting and Yard lighting				10.000	
13	Control cable 110 V, 120 AH Battery with 2		8.707		10.000	
14	charger	1 set		set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				15.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				76.250	
24	Contingencies @ 1%				0.763	
25	Total for materials				77.013	
26	Labour & Transport @ 15%				11.552	
27	GST on L&T@ 18%				2.079	
28	Total for materials and labour				90.644	
29	1x8 MVA 33/11 kV Pr.Tr. with OLTC	1 No	88.374		88.374	
30	Labour and transport including GST	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				187.518	
33	Estt & Sup.Charges 15%				28.128	
34	Sub total				215.645	215.65
35	Plinth for breakers	4 Nos.	2.500	E	10.000	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
38	11 KV capacitor bank	1 set	27.008		27.008	
	33 kV Bay extension at Rayakottai					
39	110 kV SS*	1 No			0.000	
40	33 kV line with dog conductor	11.5 kms	12.000	km	138.000	
41	11 kV Link line with 7/4.09 ACSR	6.10 kms	8.000	Km	48.800	295.689
42	Total Gross & Nett				295.689	696.13

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

**DETAILED ESTIMATE FOR ESTABLISHMENT OF 33/11 kV SS WITH 1x8 MVA, 33/11 kV
POWER TRANSFORMER AT JAKKERI AND DISMANTLING OF KELAMANGALAM 33/11 kV
LINE TAP SS WITH 1x5 MVA, 33/11 kV POWER TRANSFORMER IN KRISHNAGIRI EDC**

Part I : New Asset Chargeable to Capital

RS. in Lakhs

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
I	CIVIL WORKS					
1	Land cost	Actual			13.420	
	Civil works such as construction of control room with lighting, cable duct, road, fencing & gate, culvert, yard filling, retaining wall, borewell & water works, watering arrangement for earth pits, power transformer plinth, provision for sand drums & sand, supply of furnitures, T & P etc. (inclusive of contingencies, labour, administrative expenses. all			LS	175.000	
2	Total				188.420	188.420
II	Electrical Works					
1	33 kV AB Switch	2 Nos	0.466	E	0.932	
2	33 kV SF6 Breaker	1 No	2.930	E	2.930	
3	33 kV CTs	3 Nos	0.308	E	0.924	
4	33 kV PT	3 Nos	0.336	E	1.008	
5	33 kV LAS stn. Type	3 Nos	0.038	E	0.114	
6	11 kV breaker (1 LV+3 fdrs)	4 Nos	1.626	E	6.504	
7	11 kV CTS	12 Nos	0.250	E	3.000	
8	11 kV AB Switch	9 Nos	0.236	E	2.124	
9	11 kV Bus PT	3 Nos	0.511	E	1.533	
10	11 kV LAS stn. Type	3 Nos	0.018	E	0.054	
11	11 kV LAS distn. Type	9 Nos	0.008	E	0.072	
12	Earthing painting and Yard lighting				10.000	
13	Control cable 110 V, 120 AH Battery with 2		8.707		10.000	
14	charger	1 set		set	8.707	
15	100 kVA, 11 kV/433 V Stn. Tr.	1 No	4.737	set	4.737	
16	DC panel	1 No	0.980	E	0.980	
17	AC panel	1 No	1.028	E	1.028	
18	110 V DC Annunciator Panel	1 No	1.145	E	1.145	
19	C&R panel				15.000	
20	Fire Fighting equipments		3.000	E	3.000	
21	P&T Phone	1 No	0.100	E	0.100	
22	Scientific Instruments				5.000	
23	Sub Total				78.892	
24	Contingencies @ 1%				0.789	
25	Total for materials				79.681	
26	Labour & Transport @ 15%				11.952	
27	GST on L&T@ 18%				2.151	
28	Total for material and labour				93.784	
29	1x8 MVA 33/11 kV Pr.Tr. with	1 No	88.374		88.374	
30	Labour and transport including	1 Loc	8.000	Loc	8.000	
31	Earthing	1 Loc	0.500	Loc	0.500	
32	Sub Total				190.658	
33	Estt & Sup.Charges 15%				28.599	
34	Sub total				219.257	219.26
35	Plinth for breakers	5 Nos.	2.500	E	12.500	
36	33 kV Structure	1 set	38.090	set	38.090	
37	11 kV Structure	1 set	33.791	set	33.791	
	33 kV line with dog conductor to	2.77 kms	12.000	km	33.240	
38	Jakkeri 33kV SS					
39	11 kV Link line with 7/4.09 ACSR	7.35 kms	8.000	Km	58.800	

SL. NO	DESCRIPTION	QTY	RATE	PER	AMOUNT in Lakhs	TOTAL
40	11 kV capacitor bank/2.4 MVAR	1.0 set	27.008	set	27.008	
41	Add dismantling charges				1.146	
42	Sub Total				204.575	204.575
43	Total Gross					612.25
44	Less credit					22.92
45	Total Nett					589.33

Part I (a) : Dismantling Charges

1 Dismantling Charges = **1.146 lakhs**

PART II ACCUMULATED DEPRECIATION CHARGES

SL. No.	DESCRIPTION	Original cost a	Full Life Period b	Useful Life Period c	Accum. depre. axc/bx.9
1	33/11 KV,5 MVA Power Transformer	20.602	25	36	18.542
2	33 kV AB switch	0.295	25	18	0.191
3	33 kV HG fuse	0.012	25	18	0.008
4	11 kV HG fuse	0.013	25	18	0.008
5	11 kV VCB	1.028	25	20	0.740
6	11 kV CT	0.474	25	16	0.273
7	Other materials	0.500	25	18	0.324
8	Total	22.924			20.086

PART III-DEVOLUTION OF OLD ASSET-DEBIT TO STOCK

(PART IV-PART II)

2.838 lakhs

PART IV

Removal of old assets Charges

Sl.No	Description	Qty in Nos/K M.	Original cost in lakhs	Original erection charges	Original centages	Original cost of asset in
1	33/11 KV,5 MVA Power Transformer	1	16.286	1.629	2.687	20.602
2	33 kV AB switch	1	0.233	0.023	0.038	0.295
3	33 kV HG fuse	1	0.010	0.001	0.002	0.012
4	11 kV HG fuse	1	0.010	0.001	0.002	0.013
5	11 kV VCB	1	0.813	0.081	0.134	1.028
6	11 kV CT	3	0.375	0.038	0.062	0.474
7	Other materials					0.500
8	Total		0.000	1.773	2.925	22.924

As the value of 5 MVA, 33/11 kV power transformer is not available in cost data 2006-07 onwards, the value of the same in cost data 2006-07 has been adopted.

* 50% rate for item No 2 to 6 has been adopted from cost data 25-26.

ABSTRACT

	Rs in Lakhs
Part I : New Asset Charges	612.25 Gross
	589.33 Nett
Part I (a) : Dismantling Charges	1.15
Part II : Accumulated Depreciation Charges	20.09
Part III : Devolution of old equipment to store	2.84
Part IV : Removal of old assets Charges	22.92

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

Part I : New Asset Chargeable to Capital

Rs.in Lakhs

Sl No	Description	Qty	Rate	Per	Total
I	Electrical works				
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+ 2feeders)	3 Nos	1.626	E	4.878
4	11 kV CTs	9 Nos	0.250	E	2.250
5	11 kV LAS(Station type)	3 Nos	0.018	E	0.054
6	11 kV LAS(Distribution type)6	6 Nos	0.008	E	0.048
7	11 kV AB switch	4 Nos	0.236	E	0.944
8	Plinth for breaker	3 Nos	2.500	E	7.500
9	Control and relay panel				15.000
10	Control cable				10.000
11	Earthing, yard lighting & painting				10.000
12	Cost of materials				51.254
13	Contigencies @1%				0.513
14	Sub total				51.767
15	Labour and Transport charges @ 15%				7.765
16	GST on labour & transport				1.398
17	8 MVA,33/11 kV Pr.Tr	1 No.	88.374	E	88.374
18	Plinth , Labour and transport inclusive of GST	1 No.	13.000	E	13.000
19	Earthing	1 No	0.500	E	0.550
20	Establishment and supervision charges 15%				24.428
21	33 kV and 11 kV structure and bus modification				13.000
22	Contol room extension				30.000
23	Civil works inclusive of Yard filling with gravel and cable duct & Fire protection wall				10.000
24	11 kV link line with ACSR 7/4.09 mm conductor	5.43 km	8.00	km	43.440
25	Total Gross & Nett.				283.721

Detailed estimate for enhancement of power transformer from 2x8 MVA to 1x16+1x8 MVA at Denkanikottai 33/11 kV SS in Krishnagiri EDC

Part I : New Asset Chargeable to Capital

				Rs.in Lakhs	
Sl No	Description	Qty	Rate	Per	Total
1	ELECTRICAL WORKS				
1	33 kV AB Switch	3 Nos	0.466	E	1.398
2	Control and relay panel				10.000
3	Control cable				10.000
4	Fire fighting equipment				3.000
5	Earthing, yard lighting & painting				10.000
6	Subtotal				34.398
7	Contingencies 1%				0.344
8	Cost of Material				34.742
9	Labour and Transport @15%			LS	5.211
10	GST on labour & transport@15%				0.938
11	Sub total				40.891
12	16 MVA,33/11 kV Pr.Tr	1 Nos.	169.900	E	169.900
13	Plinth alteration and labour and transport inclusive of GST	1 Nos	10.500		10.500
14	Earthing	1 Nos.	0.500	E	0.550
15	Establishment and supervision charges 15%				33.276
16	33 kV structure and 11 kV structure modifications				13.000
17	33 kV bay extension at Denkanikottai 110 KV SS				0.000
18	Erection of 33 KV Dog conductor	0.2 km	12.000	No	2.400
19	Civil works				10.000
20	Add dismantling charges				1.305
21	Sub total				281.822
22	Total Gross				281.822
23	Less Credit				26.097
24	Total Gross & Nett				255.725

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

Part I (a) : Dismantling Charges

1 Dismantling Charges 1.305 Lakhs

Part II: Accumulated Depreciation Charges

Sl.No	Description	Qty	Original cost of asset in lakhs	Full life period	useful life period	Acc.Dep = $0.9 * (\text{col.4} * \text{col.6} / \text{col.5})$
1	8 MVA power transformer	1	26.097	25	26	23.487
3	Total		26.097			23.487

Part III Devolution of old equipment to store

Part III = Part IV - Part II = 26.097 - 23.487 = 2.61 lakhs

Part IV Removal of old assets Charges

Sl.No	Description	Qty	Original cost *	Original erection charges 10%	Original centage s 15%	Original cost of asset in lakhs
1	8 MVA power transformer (as per cost data 1998)	1	20.63	2.063	3.404	26.097
3	Total		20.630	2.063	3.404	26.097

Abstract		Rs. In Lakhs
Part I: New Asset Chargeable to capital	Gross	281.82
	Nett	255.73
Part I (a):Dismantling charges Charges		1.30
Part II: Accumulated Depreciation Charges		23.49
Part III :Devolution of old equipment to store		2.61
Part IV :Removal of old assets Charges		26.10

**Detailed estimate for enhancement of power transformer from 2x8 MVA to 2x16 MVA at Titan
33/11 kV SS in Krishnagiri EDC**

Part I : New Asset Chargeable to Capital

Rs.in Lakhs

Sl No	Description	Qty	Rate	Per	Total
1	ELECTRICAL WORKS			ILT	
1	33 kV AB Switch	2 Nos	0.466	E	0.932
2	33 kV SF6/VCB Breaker	1 No	2.930	E	2.930
3	33 kV CTs	3 Nos	0.308	E	0.924
4	33 kV LAS strn. Type	3 Nos	0.038	E	0.114
5	11 kV VCB (2 fdrs)	2 Nos	1.626	E	3.252
6	11 kV CTs	6 Nos	0.250	E	1.500
7	11 kV LAS(Distribution type)	6 Nos	0.008	E	0.048
8	11 kV AB switch	5 nos	0.236	E	1.180
9	Control and relay panel				10.000
10	Plinth for breaker	3 Nos	2.500	E	7.500
11	Earthing, yard lighting & painting				10.000
12	Control cable				10.000
13	Subtotal				48.380
14	Contingencies 1%				0.484
15	Cost of Material				48.864
16	Labour and Transport @15%			LS	7.330
17	GST on labour & transport@15%				1.319
18	Sub total				57.513
19	16 MVA,33/11 kV Pr.Tr	2 Nos.	169.900	E	339.800
20	Plinth alteration labour and transport inclusive of GST	2 Nos	10.500	E	21.000
21	Earthing	2 Nos.	0.550	E	1.100
22	Establishment and supervision charges 15%				62.912
23	33 kV structure and 11 kV structure modifications				13.000
24	33 kV feeder from Hosur 110 kV SS to Titan 33 kV SS with Ddg conductor	3.9 kms	12	km	46.800
25	Civil works inclusive of Yard filling with gravel and cable duct				10.000
26	Control room modification				40.000
27	33 kV bay extension at Hosur 230 kV SS	1 No	0.000	No	0.000
28	Add dismantling charges				5.054
29	Sub total				597.178
30	Total Gross				597.178
31	Less Credit				101.074
32	Total Gross & Nett				496.105

* 33 kV Bay extension at source 110 kV SS is under the scope of TANTRANSCO

Part I (a) : Dismantling Charges

1 Dismantling Charges 5.054 Lakhs

Part II: Accumulated Depreciation Charges

Sl.No	Description	Qty	Original cost of asset in lakhs	Full life period	useful life period	Acc.Dep = 0.9*(col.4*col.6/col.5)
1	8 MVA power transformer	1	26.097	25	27	23.487
2	8 MVA power transformer	1	74.977	25	17	67.479
3	Total		101.074			90.966

Part III Devolution of old equipment to store

Part III = Part IV - Part II = 101.074

90.966 10.11 lakhs

Part IV Removal of old assets Charges

Sl.No	Description	Qty	Original cost *	Original erection charges 10%	Original centage s 15%	Original cost of asset in lakhs
1	8 MVA power transformer (as per cost data 1999)	1	20.63	2.063	3.404	26.097
2	8 MVA power transformer (as per cost data 2007)	1	59.27	5.927	9.780	74.977
3	Total		79.900	7.990	13.184	101.074

Abstract		Rs. In Lakhs
Part I: New Asset Chargeable to capital	Gross	597.18
	Nett	496.10
Part I (a):Dismantling charges Charges		5.05
Part II: Accumulated Depreciation Charges		90.97
Part III :Devolution of old equipment to store		10.11
Part IV :Removal of old assets Charges		101.07