

# TAMIL NADU TRANSMISSION CORPORATION LTD

## ABSTRACT

TANTRANSCO – Strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 365 to 389 with Leopard conductor by Panther conductor in Thanjavur Operation circle of System Operation/Trichy - Revised administrative approval by partially superseding the administrative approval already accorded vide (Per) CH.TANTRANSCO Proceedings No. 197,dt.20.11.2013 – Revised Administrative approval – Reg.

## TECHNICAL BRANCH

(Per) CH TANTRANSCO Proceedings No: 48

Dated:08.05.2026.  
Parabhaava varudam,  
Chithirai-25 ,  
Thiruvalluvar Aandu 2057.

**READ:** Chairman/TANTRANSCO approval dated 15.04.2026.

## PROCEEDINGS:

1. The Tamil Nadu Transmission Corporation Limited hereby approves for the proposal towards the balance work of replacement of 110 KV Kadalangudi - Aduthurai - Neyveli feeder Loc 365 to 389 with Leopard conductor by Panther conductor at an estimated cost of Rs. 518.50 lakhs Gross and Rs. 505.83 Lakhs Nett in Thanjavur Operation Circle in System Operation/Trichy by partially superseding the administrative approval already accorded vide (Per) CH.TANTRANSCO Proceedings No. 197,dt.20.11.2013 for the proposal towards strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 189 to 389 with Leopard conductor by Panther conductor and Conversion of 110KV SC line to Jayankondan 110KV SS tapped off the above feeder into LILO arrangement by erecting 110KV DC line with Panther conductor. The detailed estimate and report are annexed to these proceedings.
2. The expenditure is chargeable to "TANTRANSCO - Funds - Capital expenditure – Thanjavur Operation Circle - 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, TANTRANSCO being the Transmission utility, Licensee and successor entity of Tamil Nadu Electricity Board will exercise the powers of the Telegraph Authority under the provisions of section 164 of the Electricity Act, 2003, which have already been conferred upon the Board under section 51 of the Indian Electricity Act, 1910.

4. The works will be taken up after ensuring the budget provision.

// BY ORDER OF THE CHAIRMAN/TANTRANSCO //

J.PREMALATHA  
CHIEF ENGINEER / TRANSMISSION

Encl: Report and detailed estimate.

To

The Chief Engineer/ TP & System Operation/Trichy

Copy to:

The Managing Director/TANTRANSCO/Chennai-2.

The Director/Transmission Projects/TANTRANSCO/Chennai-2.

The Director/Operation/TANTRANSCO/Chennai-2.

The Director/Distribution/TNPDCL/Chennai-2.

The Director/Finance/ TANTRANSCO /Chennai-2.

The Chief Engineer/Transmission/ Chennai-2.

The Chief Engineer/Civil Transmission /Chennai -2.

The Superintending Engineer /Planning/Transmission/ Chennai - 2

The Superintending Engineer /System Studies /Chennai - 2

The Superintending Engineer / Operation / Thanjavur

The Superintending Engineer/GCC/ Trichy .

The Resident Audit Officer (AGO's Unit) / Chennai -2

B .P. Section (Administrative Branch)

Stock file

//FORWARDED BY ORDER//

*[Handwritten Signature]*  
08/05/2020

EE/MASTER PLAN II

Enclosure to (Per) CH TANTRANSCO Proceedings No:48 dated.08.05.2026.

**REPORT TO ACCOMPANY THE ESTIMATE**

This proposal envisages the balance work of replacement of 110 KV Kadalangudi - Aduthurai - Neyveli feeder Loc 365 to 389 with Leopard conductor by Panther conductor at an estimated cost of Rs. 518.50 lakhs Gross and Rs. 505.83 Lakhs Nett in Thanjavur Operation Circle in System Operation/Trichy by partially superseding the administrative approval already accorded vide (Per) CH.TANTRANSCO Proceedings No. 197,dt.20.11.2013 for the proposal towards strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 189 to 389 with Leopard conductor by Panther conductor and Conversion of 110KV SC line to Jayankondan 110KV SS tapped off the above feeder into LILO arrangement by erecting 110KV DC line with Panther conductor.

**Need :**

Administrative approval has been accorded vide (Per) CH. TANTRANSCO Proceedings No.197, dt.20.11.2013 towards Strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 189 to 389 with Leopard conductor by Panther conductor and Conversion of 110KV SC line to Jayankondan 110KV SS tapped off the above feeder into LILO arrangement by erecting 110KV DC line with Panther conductor in Thanjavur Operation Circle in System Operation/Trichy at an estimated cost of Rs 2864.08 Gross and Rs. 1785.92 lakhs Nett. as detailed below.

Sl No	Description of Work	Quantity	Total amount in Lakhs
i.	Erection of 110 KV DC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder for a length of 12.217 kms. (LILO portion to Jayamkondam 110 KV SS)	12.217 Kms.	665.09
ii.	Erection of 110 kv SC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 189 to 389	46.39 kms.	2145.07

**Erection of 110 kV SC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder Loc 189 to 389 for a length of 46.39 kms.**

The existing 110 kV Kadalangudi – Aduthurai– Neyveli feeder consists Panther conductor from old locations 189 to 364 (new loc 1 to 124) and of Leopard conductor for a section from loc 365 to 389 between Thirupanandal and Aduthurai 110 KV SS and the conductor is erected on MS towers which had served for more than 50 years.

SE/GCC/Trichy dt. 06.01.2026 has furnished the following details regarding Present status of works

Sl. No	Description	Amount as per BP	Status of work completed as on 03.03.2026
1	Erection of 110 kV SC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder Loc 189 to 389 for a length of 46.39 kms	665.09 Lakhs (Gross)	i. Loc 189 to Loc 364( New loc 1 to 124): Erection of DC Tower and Stringing of Panther Conductor completed ii. New loc 124 to 155): Stub setting, concreting completed except 5 locations iii. Actual executed amount is Rs. 1025.49 lakhs out of Amount as per BP of Rs 2145.07 Lakhs

In this regard, it is stated that as per above Proceedings, strengthening work had to be carried out between Locations 1 to 155 (Old location 139 to 389) for 40.83 Kms. Out of this, the strengthening work between Loc 1 to 124 has been completed for 34.1 Kms. at a cost of Rs 1025.49 lakhs. The 110 KV line is in service with panther and leopard conductors. Remaining work could not be continued due to non availability of tower materials and the agreements were short closed due to escalation of rates. Also OPGW erection work for the above Leopard section is yet to be carried out.

At present, in the existing 110 kV Kadalangudi –Aduthurai –Neyveli feeder,

the section between loc 365 to loc 389 is in service with life served Leopard conductor. Further, the MS towers have been rusted due to ageing. In the above strengthening work, after getting LC in phased manner, erection of DC tower, stringing of Panther conductor have been completed from Loc 189 to 364 (New Loc 1 to 124) and from Loc. 124 – 155 stub setting, concreting has been completed except 5 locations for the proposed to be erected 31 towers for the length of 6.73 kms.

The maximum capacity of the Leopard conductor is 56 MVA. The peak reached in the 110 kV Kadalangudi –Aduthurai –Neyveli feeder is 76 MVA and the line is overloaded. The following 110 kV SS are connected on the above feeder:

- i. Jayamkondam 110/33-11 kV SS
- ii. Thirupurambium 110/33-11 kV SS
- iii. Thirupanandal 110/11 kV SS
- iv. Pappakudy 110/33-11 kV SS

Further, the above feeder is a grid feeder, connecting Neyveli TS I and Kadalangudy 230 kV SS.

Hence, it has been proposed to replace the Leopard section in the above feeder with the standard conductor as Panther for 110 kV line.

On completion of balance strengthening work in remaining Locations (old) 365 to 389, it will be possible to extend the supply from Kumbakonam 230 KV SS to Aduthurai 110 KV SS in case of break downs. (pg.no.3)

Hence, the balance work of strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder between Loc 365 to 389 with Leopard conductor by Panther conductor is proposed for increasing the loading capacity of 110 KV Kadalangudi - Aduthurai - Neyveli feeder.

**Erection of 110 KV DC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder for a length of 12.217 kms (LILO portion to Jayamkondam 110 KV SS) for a length of 12.217**

**Kms:**

SE/GCC/Trichy dt 06.01.2026 has furnished the following details regarding Present status of works:

Sl.No	Description	Amount as per BP	Status of work completed as on 03.03.2026
1	Erection of 110 KV DC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder for a length of 12.217 kms (LILO portion to Jayamkondam 110 KV SS)	Rs.665.09 Lakhs (Gross)	<p>i. Stub setting completed on all location except 2 Loc and tower erection completed 10 Loc out of 54 have been evolved.</p> <p>ii. Actual executed amount is Rs 293.71 lakhs out of sanctioned Rs. 665.09 Lakhs as per B.P.</p> <p>iii. Balance works could not be completed due to RoW issues.</p>

The proposal towards Erection of 110 KV DC line on DC tower with Panther conductor in 110 KV Kadalangudi - Aduthurai - Neyveli feeder for a length of 12.217 kms (LILO portion to Jayamkondam 110 KV SS) as per (Per) CH. TANTRANSCO Proceedings No.197, dt.20.11.2013 has been partially completed at a cost Rs 293.71 lakhs out of BP cost of Rs 665.09 Lakhs. The balance works as per (Per) CH. TANTRANSCO Proceedings No.197, dt.20.11.2013 are pending to be completed.

CE/TP&SO/Trichy dt. 03.03.26 stated that In order to provide alternate reliable supply to Jayamkondam 110 kV SS , administrative approval has already been sanctioned vide (Per) CH.TANTRANSCO Proceedings No.54, dt.28.04.2023 to extend supply from Poyyur 230/110 KV SS and also it is proposed to open the jumper (towards Jayamkondam 110 KV SS) at T off point of 110 KV Kadalangudi - Aduthurai - Neyveli feeder after commissioning of the alternate source arrangement from Poyyur 230/110 KV SS. On completion of the undergoing extension works from Poyyur 230 KV SS, main alternate source will be available to Jayamkondam 110 kV SS.


### **3.0. Necessity for Revised Administrative Approval:**

Sl.No	Description	Cost in Lakhs	Remarks
1	Strengthening of 110 kV Kadalangudi - Aduthurai - Neyveli feeder from loc 189 to 389 with Leopard conductor by Panther conductor and Conversion of 110 kV SC line to Jayamkondam 110 kV SS tapped off the above feeder into 110kV DC line with Panther conductor	Rs.2864.08 Lakhs Gross  and Rs.1785.92 Lakhs Nett.	Approved vide (Per) CH.TANTRANSCO Proceedings No.197, dt.20.11.2013
2.	Balance work of strengthening of 110 KV Kadalangudi - Aduthurai - Neyveli feeder from Loc 365 to 389 with Leopard conductor by Panther conductor.	Rs. 518.50 lakhs Gross  and Rs. 505.83 Lakhs Nett.	Revised estimate submitted for approval.
3.	Difference in cost (Less)	Difference in cost could not be arrived since partial work of the original BP has already been completed and this proposal is partially superseding the administrative sanction already accorded.	

The entire work accorded vide the (Per) CH.TANTRANSCO Proceedings No.197, dt.20.11.2013 had to be completed within five years from the date of administrative approval, and hence revised administrative approval is necessary for floating of tenders for executing the balance work.

#### **Details of work involved:**

- Erection of new 110 KV SC line on DC tower with panther conductor in 110 kV Kadalangudi- Aduthurai- Neyveli feeder from loc 365 to 389 for a route length of 7 kms.
- Dismantling of 110 KV SC line with Leopard conductor in 110kV Kadalangudi - Aduthurai - Neyveli feeder from loc 365 to 389 for a route length of 7 kms.

  
Executive Engineer/  
Master Plan II

**Strengthening of 110 KV Kadalangudi-Aduthurai-Neyveli feeder from loc 365 to 389 with Leopard conductor by panther conductor. ( location 125 to 155) in Thanjavur Operation Circle of System Operation/Trichy**

**ABSTRACT**

Sl.No.	Description	Estimated cost in Lakhs	
		Gross	Nett
1	Strengthening of 110 KV Kadalangudi-Aduthurai-Neyveli feeder from loc 365 to 389 with Leopard conductor by panther conductor. ( location 125 to 155)	518.50	505.83
	<b>Total</b>	<b>518.50</b>	<b>505.83</b>

*Hein 08/12/2020*  
**EXECUTIVE ENGINEER/MASTER PLAN-II**

**Strengthening of 110 KV Kadalangudi-Aduthurai-Neyveli 110 KV SC line on DC towers with Panther conductor from LILO point of Thirupananthal 110 KV SS to Aduthurai 110 KV SS (Loc 365-389)**

**PART I CHARGEABLE TO NEW ASSET**

				Rs. IN LAKHS	
SL NO	DESCRIPTION	QUANTITY	RATE	PER	TOTAL AMOUNT
1	Strengthening of 110 KV Kadalangudi-Aduthurai-Neyveli feeder from loc 365 to 389 with Leopard conductor by panther conductor. ( location 125 to 155) CIVIL &ERECTION WORKS as per Schedule A				95.76877
2	Strengthening of 110 KV Kadalangudi-Aduthurai-Neyveli feeder from loc 365 to 389 with Leopard conductor by panther conductor. ( location 125 to 155) -Supply of Materials as per Schedule B.				208.84
3	sub total				304.61
4	<b>Total (including contingencies @1%,Establishment &amp; Supervision charges @15%, &amp; GST @18%)</b>				<b>417.49</b>
5	Dismantling charges				10.02
6	Provision for Tree/Crop Compensation for 7km @ Rs.10,00,000/- Per km				70.00
7	Provision for Land Compensation for stringing only@ Rs.3,00,000/- per KM for 7KM				21.00
8	<b>Gross</b>				<b>518.50</b>
9	Less credit				12.67
10	<b>Nett</b>				<b>505.83</b>

**Part I A: Dismantling Charges Chargeable to A/c code No. 77.540** **10.02**

**Part II : Accumulated Depreciation Chargeable to (STOCK) A/c code No. 12.500**

1	Total Life period :	35 years			
2	Life served:	58 years			
3	Depreciation:	12.67 X(35/35)X90/100			11.40

**PART III DEVOLUTION OF OLD EQUIPMENT TO STORES CHARGES**

Part II - Part IV = 12.668 - 11.40 = 1.267

**PART IV REMOVAL OF OLD ASSET CHARGABLE TO A/c No. 10.543**

Sl.No	Name of the item	QTY	Rate in Rs	per	Amount in Rs.
1	GI Tower parts (Scrap)	41.63	20000.00	MT	832600.000
2	Leopard conductor	7	50000.00	MT	350000.00
3	120KN Insulator	63	45.00	E	2835.00
4	90 KN Insulator	360	35.00	E	12600.00
5	GI Earth wire	3.17	20000.00	MT	63400.000
6	GI Fitting scrap	0.3	18000.00	MT	5400.000
					1266835.00
<b>Total Rs. In Lakhs</b>					<b>12.67</b>



**Name of work : Earthwork excavation, stub setting, concreting, Supply,transport and erection of towers including Supply of Panther Conductor & Earthwire with fittings for the improvement work by replacing SC line on SC tower with Leopard conductor into SC line on DC tower with Panther conductor between LILO point of Thirupanandal 110KV SS & Aduthurai 110KV SS in the existing 110KV Kadalangudi-Aduthurai-Neyveli line (New Loc.125 to 155).**

**ABSTRACT ESTIMATE - Civil & Erection - Schedule A**

Sl No	Quantity	Description	Rate	Unit	Amount
1.00	5400.00	sqm Clearing juliflora jungle with uprooting including all cost of labour, lead, lift etc complete.	11.00	sqm	59400.00
2.00	5.00	Loc Conducting check survey,pit marking for tower foundation as per the approved profile including cost of all T & Ps, transport, labour, lead lift etc complete.	1966.00	loc	9830.00
3.00	322.00	cum Earthwork excavation in hard stiff clay, black cotton, hard red earth, shales, murrum, gravel, stoney earth and earth mixed with small size boulders and hard gravelly soil including all cost of lead lift etc complete.	247.00	Cum	79534.00
4.00	0.00	Fixing of stub and cleat,template including assembling of template setting of stub , cleat and dismantling of template and shifting the template from loc to loc and reassembling including cost of template , all labour, T&P , lead, lift , fabrication charges etc complete. as per approved drawing, and specification.	0.00		0.00
4.01	3.00	loc GCO tower	14404.00	loc	43212.00
4.02	2.00	loc HCO tower	30266.00	loc	60532.00
5.00	30.00	cum PCC 1:3:6 using 20mm metal for foundation without formwork including cost of all materials lead lift etc complete.	8092.00	Cum	242760.00
6.00	40.00	cum PCC 1:2:4 using 20mm metal for foundation and chimney concrete with steel form box including cost of all materials, lead, lift, chimney box, etc complete .	13548.00	Cum	541920.00
7.00	252.00	cum Refilling with the excavated earth other than sand including watering consolidation in 150mm layers and forming platform with excess earth in the leg of the tower etc complete.	55.00	Cum	13860.00
8.00	5.00	loc Supply and Providing pipe type earthing including necessary excavation for fixing 3m long 25mm dia GI "B" class pipe and refilling with excavated earth mixed with soft charcoal and connect the earthstrip with the leg of the stub including all cost of materials, lead, lift etc complete.	2134.00	loc	10670.00
9.00	70.00	cum Removal of surplus earth in a low lying area to a average distance of 200m by head load.	115.00	Cum	8050.00
10.00	17.00	hrs. Dewatering charges during excavation and concreting with 3/5 HP Diesel motor with Pump including hire charges, labour, fuel,oil,transport etc complete.	621.00	hours	10557.00
11.00	175.00	sqm Providing shoring and shuttering in foundation using wooden planks and scantling including all cost of materials, labour, lead, lift etc complete.	329.00	sqm	57575.00
12.00	139.00	MT Erection of towers including sorting out of tower parts, bolts and nut etc. as per the requirement and punching of bolt & nuts, final checking and all other incidental charges for erection,including cost of T &P,labour, lead, lift etc complete.as per approved drawing , BOM and specification. The rectification of defects found by operation staff during handing over of line to be done at free of cost.(Under LC Condition)	28431.00	MT	3951909.00

13.00	9.00	MT	Labour charges for fixing and tightening of hot dipped galvanised iron Bolt and Nut, packing washers, Spring washers, conforming to IS 2427/1988 and IS 387 part XIII of latest issue during erection of towers including cost of materials, lead, lifts, etc, complete.	11753.00	MT	105777.00
14.00			Labour charges for transporting and hoisting of 7 units of 90 KN single suspension insulators from department store, transport and fixing of SS fittings for panther and U bolt including all cost of labour, lead, lift, T & P etc complete			
14.01	51.00	Sets	With PA rod for panther	1143.00	set	58293.00
14.02	24.00	sets	Without PA rod for panther	1030.00	set	24720.00
15.00			Labour charges for transporting and hoisting of 8 units of 120 KN single suspension insulators/long rod from department store and fixing of ST fittings for panther with all allied hardwares including all cost of labour, lead, lift, T & P etc complete			
15.01	81.00	sets	with ST fittings.	1512.00	set	122472.00
15.02	12.00	sets	with DT fittings.	2978.00	set	35736.00
16.00			Labour charges for transport of 3Nos of Panther conductor, fixing of panther conductor hardwares (ie. SB damper, Dshackle, U bolt etc), paying out, jointing, rough sagging, tensioning, clipping, providing vibration dampers at tension locations including jumber connections, providing trussals at various intervals for avoiding damages of conductor including transport charges, loading, unloading, lead, lift, labour and cost of T&P etc complete.			
16.01	6.31	KM	Continuous span Under LC	177451.00	KM	1119716.00
16.02	4.00	span	Single Span Under LC	48800.00	span	195200.00
17.00	2.00	span	Labour charges for transport of 6Nos of Panther conductor, fixing of panther conductor hardwares (ie. SB damper, Dshackle, U bolt etc), paying out, jointing, rough sagging, tensioning, clipping, providing vibration dampers at tension locations including jumber connections, providing trussals at various intervals for avoiding damages of conductor including transport charges, loading, unloading, lead, lift, labour and cost of T&P etc complete. (Under LC condition in road crossing)	87838.00	span	175676.00
18.00			Labour charges for transport of 7/3.55mm GI earthwire from Department store and fixing of GI earthwire hardwares (ie ST fittings, SS fittings, D shackle, U bolt etc) wherever required, paying out, jointing, rough sagging, tensioning, including jumber connection transport charges, loading, unloading, lead, lift, cost of T&P, etc complete.			
18.01	6.31	KM	Continuous span Under LC	52902.00	KM	333812.00
18.02	6.00	span	Single Span Under LC	14548.00	span	87288.00
19.00	12.00	cum	PCC 1:2:4 using 20mm metal for muffing coping concrete with form work including cost of all materials, labour, lead, lift, etc complete.	14940.00	Cum	179280.00
20.00	128.00	sqm	Plastering with CM 1:3, 12 mm thick for muffing coping concrete including cost of all materials, labour, lead, lift etc complete.	364.00	sqm	46592.00

19.00	51.00	Nos.	Supply transport & Labour charges for fixing of number plates, danger board, phase plate including all cost of materials, labour transport, lead, lift, etc complete.	777.00	each	39627.00
20.00	6.00	sqm	Supply, fabrication and fixing of name board with 18 gauge plate including cost of materials, labour for writing name of the line etc complete.	1399.00	sqm	8394.00
21.00	31.00	Loc	Painting with two coats of anticorrosive paint over tower leg at a height of 45cm including all cost of materials, labour, lead, lift etc complete.	445.00	each	13795.00
22.00	14773.00	Nos.	Providing full welding of all bolts and nuts in the erected towers from ground level to the cross arm bottom level in the tower including painting of bolts and nuts with two coats of best quality of cold galvanised paint having atleast 90% zinc content and approved by the Engineer at site including cost of paint and all other materials, hire charges for diesel generator and welding transformer, all labour, transport charges etc complete.	18.00	each	265944.00
23.00			Labour charges for removal of trees			
23.01	200.00	Nos.	Large tree	190.00	each	38000.00
23.02	100.00	Nos.	Small tree	137.00	each	13700.00
24.00	12.00	Loc	Providing temporary guys wherever necessary including excavation, burying out of anchor for stay wire, tightening, dismantling the same after completion of works including cost of all materials, lead, lift, labour etc	4298.00	each	51576.00
25.00	60.00	Nos.	Lowering the HT/LT Line during stringing of power conductor and earthwire after restringing the same in original position including labour, lead, lift etc complete.	7665.00	each	459900.00
26.00	28.00	Nos.	Providing trustels for major and minor road crossing including cost of all materials, labour, lead lift etc. Complete.	3921.00	each	109788.00
27.00	5.00	span	Releasing, lowering and restringing of existing 3 Nos. panther conductor from existing tower to newly erected tower including all labour, transport lead,	27517.00	span	137585.00
28.00	5.00	span	Releasing, lowering and restringing of Existing 1 No 7/3.55 mm GI earthwire from existing tower to newly erected tower including all labour, transport, lead,	8711.00	span	43555.00
29.00	69.00	Sets	Dismantling of existing 7 Nos. suspension insulator with SS fittings and devoluted into stores including all labour, transport lead, lifts, T&P, etc complete. under LC	612.00	sets	42228.00
30.00	18.00	Sets	Dismantling of existing 8 Nos. tension insulator with fittings and devoluted into stores including all labour, transport lead, lifts, T&P, etc complete. under LC	802.00	sets	14436.00
31.00	10.00	MT	Dismantling of existing 3 Nos. leopard conductor and devoluted into stores including all labour, transport lead, lifts, T&P, etc complete. under LC	14752.00	MT	147520.00
32.00	3.00	MT	Dismantling of Existing 1 No 7/3.55 mm GI earthwire and devoluted into stores including all labour, transport, lead, lifts, T&P, etc complete. under LC	20523.00	MT	61569.00
33.00	37.00	MT	Dismantling of existing tower sorting out of tower parts at site and devoluted to store for re use including all labour lead lifts etc complete. under LC	14997.00	MT	554889.00
<b>Total work portion for civil and erection works</b>						<b>9576877.00</b>

**Name of work: Earthwork excavation, stub setting, concreting, Supply,transport and erection of towers including Supply of Panther Conductor & Earthwire with fittings for the improvement work by replacing SC line on SC tower with Leopard conductor into SC line on DC tower with Panther conductor between LILO point of Thirupanandal 110KV SS & Aduthurai 110KV SS in the existing 110KV Kadalangudi-Aduthurai-Neyveli line (New Loc.125 to 155).**

**ABSTRACT ESTIMATE**

Supply of Materials - SCHEDULE B

SI No	Quantity	Description	Rate	Unit	Amount
1.00	140.50	MT Supply of GI tower/extension parts/DP structures/X arm including stub & cleat in accordance with boards design as per approved drawing and BOM as detailed in this specification including cost of all materials ,labour, transport,lead, lift etc complete . <b>MS Tower parts.</b>	93926.24	MT	13196636.72
2.00	8911.00	kg Supply and fixing of hot dipped glavanised iron Bolt and Nut, packing washers, Spring washers, conforming to IS 2427/1988, and IS 387 part XIII of latest issue including cost of materials, lead, lifts, etc, complete.	110.16	kg	981635.76
3.00	24.00	KM Supply & Transport of ACSR panther conductor as per IS specification and standards including cost of all materials, all labour, lead and lift etc., complete.	198583.19	KM	4765996.56
4.00	4.00	KM Supply & Transport of earth wire 7/3.5mm as per IS specification as directed by the engineer in charge of the work including cost of all materials, all labour, lead and lift etc., complete.	46239.59	KM	184958.36
5	560.00	nos 90 KN Anti-fog Insulator	580.77	no	325231.20
6	1600.00	nos 120 KN Anti-fog Insulator	656.13	no	1049808.00
7.00		Supply & transmission line hard wares as per IS conforming for ACSR panther conductor			
7.01	69.00	sets Single Suspension fitting	1074.42	set	74134.98
7.02	81.00	sets Single tension fitting.	1292.40	set	104684.40
7.03	12.00	sets Double tension fitting	3678.60	set	44143.20

7.04	108.00	sets SB Vibration Dampers	490.22	set	52943.76
7.05	51.00	sets PA rod for Panther.	590.98	set	30139.98
8.00		Supply & transmission line hard wares as per IS conforming for 7/3.5 mm earth wire			
8.01	17.00	sets SS fitting for Earth wire	457.49	set	7777.33
8.02	24.00	sets ST fitting for Earth wire .	821.39	set	19713.36
8.03	41.00	sets Aluminium earth bond	423.37	set	17358.17
9.00		Supply & transmission line hard wares as per IS conforming			
9.01	20.00	Nos. Mid span for Panther	438.87	No	8777.40
9.02	15.00	Nos. Repair sleeve for Panther	235.42	No	3531.30
9.03	31.00	Nos. Number Plate	218.76	No	6781.56
9.04	15.00	Nos. Phase plate ( Set of Three )	252.41	No	3786.15
9.05	15.00	Nos. Danger board	242.95	No	3644.25
9.06	10.00	Nos. Mid span for earth wire	213.50	No	2135.00
		<b>Sub total</b>			<b>20883817.44</b>
		Or say			<b>20883820.00</b>

### Dismantling Estimate

SI No	Quantity	Description	Rate	Unit	Amount
1.00	5.00	span Releasing,lowering and restringing of existing 3 Nos.panther conductor from existing tower to newly erected tower including all labour, transport lead, lifts,T&P,etc complete.	27517.00	span	137585.00
2.00	5.00	span Releasing,lowering and restringing of Existing 1 No 7/3.55 mm GI earthwire from existing tower to newly erected tower including all labour, transport, lead, lifts,T&P,etc complete.	8711.00	span	43555.00
3.00	69.00	Sets Dismantling of existing 7 Nos. suspension insulator with SS fittings and devoluted into stores including all labour,transport lead,lifts,T&P,etc complete.under LC	612.00	sets	42228.00
4.00	18.00	Sets Dismantling of existing 8 Nos. tension insulator with fittings and devoluted into stores including all labour, transport lead, lifts,T&P,etc complete under LC	802.00	sets	14436.00
5.00	10.00	MT Dismantling of existing 3 Nos. leopard conductor and devoluted into stores including all labour,transport lead, lifts,T&P,etc complete. under LC	14752.00	MT	147520.00
6.00	3.00	MT Dismantling of Existing 1 No 7/3.55 mm GI earthwire and devoluted into stores including all labour, transport, lead, lifts,T&P,etc complete.under LC	20523.00	MT	61569.00
7.00	37.00	MT Dismantling of existing tower sorting out of tower parts at site and devoluted to store for re use including all labour lead lifts etc complete.under LC	14997.00	MT	554889.00
<b>Total Dismantling Charges</b>					<b>1001782.00</b>