

TAMILNADU POWER DISTRIBUTION CORPORATION LIMITED

ABSTRACT

Electricity - Chennai Region – Chennai EDC / Central – Provision of 33 kV additional source to Kilpauk Police Quarters 33/11 kV SS from Chintadripet 110/33/11 kV SS by laying of 3 runs of 33 kV, 1x630 Sq.mm. XLPE cable - Administrative approval - Accorded.

TECHNICAL BRANCH

(Per). MD TNPDC Proceedings No.85

Dated: 03.10.2026.

Sri Parabava Varudum,

Purattasi: 16,

Thiruvalluvar Aandu 2057.

READ: Chairman cum Managing Director's approval dated: 28.09.2026.

PROCEEDINGS:

1. The Tamilnadu Power Distribution Corporation Limited hereby approves the proposal for Provision of 33 kV additional source to Kilpauk Police Quarters 33/11 kV SS from Chintadripet 110/33/11 kV SS by laying of 3 runs of 33 kV, 1x630 Sq.mm XLPE cable in Chennai EDC/Central of Chennai Region at an estimated cost of Rs.382.32 Lakh Gross & Nett. The detailed estimate and report are annexed to this proceeding.
2. The expenditure is chargeable to TNPDC - Funds - Capital Expenditure - Chennai EDC / Central - A/C code No.10 20 300
3. By virtue of the provisions contained in subsection (2)(a) of section 185 of the Electricity Act, 2003, the TNPDC being the Licensee and successor entity of Tamilnadu Electricity Board will exercise the powers of the Telegraph Authority under the provisions of section 164 of the Electricity Act, 2003, which have already been conferred upon the Board under section 51 of the Indian Electricity Act 1910
4. The work is to be taken up after ensuring budget provision.

// BY ORDER OF THE CMD //

N. SIVAGAMI

CHIEF ENGINEER / PLANNING & RC (FAC)

Encl: Report and detailed estimate.

To

The Chief Engineer/Distribution/Chennai Region.

(Per.) MD TNPDC Proceedings No:85 dt. 03.10.2026

Copy to:

The Director/Distribution/TNPDC

The Director/Finance/TNPDC

The Chief Engineer/Material Management/TNPDC

The Superintending Engineer/Chennai EDC/Central

The Superintending Engineer/CDC

The Superintending Engineer/RE & I (D)

The Company Secretary/TNPDC

The Resident Audit Officer (AGO'S Unit)

B.P. Section (Administrative Branch)

Stock to file

//FORWARDED BY ORDER//


05.10.2026

Executive Engineer/Master Plan I

REPORT TO ACCOMPANY THE ESTIMATE

This proposal envisages Provision of 33 kV additional source to Kilpauk Police Quarters 33/11 kV SS from Chintadripet 110/33/11 kV SS by laying of 3 runs of 33 kV, 1x630 Sq.mm XLPE cable in Chennai EDC/Central of Chennai Region at an estimated cost of Rs.382.32 Lakh Gross & Nett.

Need:

At present, the existing Kilpauk Police Quarters 33/11 kV SS is in service with 2x16 MVA power transformers and the sustained peak reached on the above power transformers are 6.70 MVA and 7.02 MVA.

The above substation is having 33 kV Source from both Cooks Road 110/33/11 kV SS and Anna Nagar 110/33-11 kV SS through 33 kV, 1x630 Sq. mm. UG cable.

The existing Cooks Road 110/33/11 kV SS is having 2x50 MVA power transformers. The peak reached in the above power transformers are 42.18 MVA and 38.34 MVA which is loaded to 84.36% and 76.68% of its capacity respectively.

Likewise, Anna Nagar 110/33-11 kV SS is having 2x50 MVA, 110/33 kV power transformers and the peak reached in the above power transformers are 33.95 MVA and 22.86 MVA which is loaded to 68% and 45.72% of its capacity respectively.

The existing UG cable from Cooks Road 110 kV SS to Kilpauk Police Quarters feeder UG cable feeder is having multiple joints due to cable punching by external agencies. During storm water drainage work, the cable portion between Chellappa street to Alagappa Road got damaged severely. Presence of multiple joints formed after repeated fault rectifications, the reliability of the above feeder has reduced considerably.

Moreover, the above feeder is under fault condition since 08.09.2020 and the same could not be attended as the cable is trapped inside the storm water pipe. As a result of which, 33 kV supply is being extended only from Anna Nagar 110 kV SS to Kilpauk Police Quarters 33/11 kV SS.

Under the above circumstances, it is essential to provide an additional 33 kV Source from the nearby Chintadripet 110/33/11 kV SS to Kilpauk Police Quarters 33/11 kV SS so as to ensure uninterrupted and reliable power supply to the Kilpauk Police Quarters area.

In this regard, the existing 33 kV Cooks Road feeder breaker at Kilpauk Police Quarters 33/11 kV SS is proposed to be utilized for the proposed new feeder. Provision towards 33 kV Bay (Indoor) extension at Chintadripet 110 kV SS end has been made for terminating the proposed 33 kV UG cable feeder.

The road cut restoration charges and labour charges for trenchless technology have been adopted as per the prevailing Chennai EDC schedule of rates in cost data. The

executing wing will be requested to adopt the road cut restoration charges as per the actual road type applicable at the time of execution of the work.

Adequacy of Transmission System

On materialization of the proposed UG cable, the existing 1x16 MVA Power Transformer at Kilpauk Police Quarters 33 kV SS is proposed to be fed from Chintadripet 110/33/11 kV SS and the other existing 16 MVA power transformer from Anna Nagar 110/33/11 kV SS. The adequacy of Source is discussed below:

Details of Source Substation:

a)	Name of the source SS	Chintadripet 110/33/11 kV SS
b)	110/33 kV power transformer	2x50 MVA (110/33 kV)
c)	Sustained Peak reached	77.1 MVA
d)	Proposed addition	16 MVA
e)	Total anticipated peak	93.1 MVA
f)	Whether Power Transformer capacity is adequate: Adequate at present. However on upgradation of existing Egmore 33/11 kV SS as 110/33/11 kV SS, the existing Egmore 33/11 kV SS (1x16 MVA) & Spur Tank Road 33/11 kV SS (2x16 MVA) which are presently fed from Chintadripet 110 kV SS will be fed from upgraded Egmore 110/33/11 kV SS.	

Details of Source feeder:

a)	Name of the feeder	Proposed 33 kV Chintadripet – Kilpauk Police Quarters feeder
b)	Size/capacity of conductor	33kV, 1x630 Sq.mm / 32.29 MVA
c)	Present loading in MVA	Nil (New feeder)
d)	Proposed addition in MVA	16 MVA
e)	Anticipated load in MVA	16 MVA
f)	Whether size of conductor is adequate	Adequate

Details of work involved:

- Laying of 33 kV 1x630 Sq.mm XLPE cable (3 runs) from Chintadripet 110/33 kV SS to Kilpauk Police Quarters 33 kV SS for a route length of 3.6 kms.
- 33 kV bay extension (indoor VCB) at Chintadripet 110/33/11 kV SS.
- The existing 33 kV Cooks Road feeder breaker at Kilpauk Police Quarters 33/11 kV SS will be utilized for the proposed feeder.


05.10.2026

Executive Engineer/Master Plan I

ABSTRACT		
SL NO	DESCRIPTION	Amount in Lakhs
1	Laying of UG cable from Chintadripet 110/33/11 kV SS to Kilpauk Police Quarters 33 kV SS	362.22
2	33 kV Bay extension at Chintadripet 110 kV SS	20.11
	Total	382.32


 05-10-2026
EXECUTIVE ENGINEER/MASTER PLAN I

**Estimate for Laying of 33 kV 3rd additional Source to Kilpauk Police Quarters 33 kV SS from
Chintadripet 110/33/11 kV SS in Chennai EDC/Central of Chennai Region**

Sno	Description	Quantity	Rate Rs in lakh	Per	Amount Rs. In lakh
1	33 kV, 1x630 Sq.mm XLPE UG Cable(3.6Kmsx3)	10.8 Kms	15.236	km	164.54
2	33 kV, 1x630 sqmm Straight Joints	21 Nos.	0.104	Each	2.18
3	33 kV, 1x630 Sq.mm HS ID termination kits	6 Nos.	0.056	Each	0.34
4	PVC pipe 140mm	30 mtr	0.017	Each	0.50
5	33 kV RCC Cover Slab	200 Nos.	0.003	Each	0.63
6	Clamp for 33 kV Cable	12 Nos.	0.003	Each	0.04
7	Cost of Materials				168.23
8	Contingencies 1%				1.68
9	Sub Total				169.91
10	Labour and Transport (Rs.3500*3500 mtrs+27*Rs.2500)				123.18
11	Sub total				293.08
12	Estt & Supervision charges @15%				43.96
13	Sub total				337.05
14	GST on labour & transport @18%				22.17
15	Road - cut charges **	25 mtrs	0.12	mtrs	3.00
16	Total				362.22

**Estimate for 33 kV Indoor bay extension at Chintadripet 110/33/11 kV SS in Chennai
EDC/Central of Chennai Region**

Sno	Description	Quantity	Rate Rs.in lakhs	Per	Amount Rs.in lakhs
1	33 KV VCB Indoor feeder Breaker	1 No	11.904	E	11.904
2	33 KV Bus Adapter	1 No	1.954	E	1.954
3	Earthing		LS		0.550
4	Control cable		LS		0.300
5	Cost of Materials				14.708
6	Contingencies @1%				0.147
7	Sub Total				14.855
8	Labour and Transport @15%				2.228
9	Sub total				17.083
10	GST on labour & transport @18%				0.401
11	Sub total				17.484
12	Estt & supervision charges @15%				2.623
13	Total				20.107