

I/29905/2023



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत संचार विकास प्रभाग

Power Communication Development Division



ONE EARTH - ONE FAMILY - ONE FUTURE

CEA Case No. : TN-697		
Induced Voltage (IV) calculation in respect of PTCC proposal for 765 kV D/C transmission line from proposed North Chennai Stage III Plant to proposed 765/400 kV North Chennai Pooling Station (6.449 km) - regd.		
S. No	Reference No.	Dated
(i)	TANTRANSCO: 018693/SE/TR-I/EE/TSM/A1/F.PTCC/21	27.12.2021
(ii)	TANTRANSCO: CE/TR/SE/TR-I/EE/TSM/AEE1/F.PTCC/D.No. 58	27.07.2023
(iii)	BSNL: Email	11.08.2023
(iv)	Southern Railway: W.384/3/2/1219	30.12.2021

The PTCC proposal submitted vide references (i) has been examined. While forwarding TANTRANSCO letter dated 27.07.2023, DET, BSNL vide reference (iii) above, has informed that telecom details from field offices are pending and would be submitted in due course of time. The LF induction on communication cables of Southern Railway with respect to details furnished vide above references (iv) have been computed. The voltage likely to be induced on paralleling communication cables of Southern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered.

Telecommunication details from Defense are awaited. Vide reference (ii) above, TANTRANSCO has shown urgency for charging the line for power evacuation and has submitted the undertaking that in case of any damage to telecom assets or personnel, TANTRANSCO will bear the cost. TANTRANSCO has requested for provisional PTCC clearance.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office. Information regarding EPR zones and existence of telecom assets within the EPR Zones for proposed substations will be intimated after receipt of telecom details from BSNL.

Encl.: As above

Director

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	With a request to forward telecom details at the earliest for IV calculation and EPR zone verification
2.	General Manager (S&T)	Southern Railway, Head Quarters Office, S&T Branch, Chennai - 600003	

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3.	Chief Engineer/Transmission (FAC)	TANTRANSCO, 5 th floor, TANTRANSCO HQ, 144, Anna Salai, Chennai - 600002	With a request to follow up with BSNL and Defense for furnishing of respective TD to this office at the earliest
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ANNEXURE-I

CEA Case No.: TN-697			Map Scale : 1 cm= 500 m		
Name of the Power line: 765 kV D/C transmission line from proposed North Chennai Stage III Plant to proposed 765/400 kV North Chennai Pooling Station			Total Length : 6.449 km		
			S.R. Value : 20000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Southern Railway Letter No: W.384/3/2/1219 Date: 30.12.2021					
1.	Todiarpeta - Tiruvottiyur	Out of parallelism			0
2.	Tiruvottiyur - Ennore	2.5	0.0028	16786	47
3.	Ennore – Attipattu Puduagar	4.4	0.0161	16149	260
4.	Attipattu Puduagar - Attipattu	0.2	0.0001	22486	2
5.	Attipattu – Minjur	Out of parallelism			0
6.	Minjur - Ponneri				0