

## भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत प्रणाली संचार विकास प्रभाग

## **Power System Communication Development**

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CEA Case No.: TN-742							
Induced Voltage (IV) calculation for PTCC proposal of 230 kV S/C line from existing Shoolagiri 400/230 kV SS to 230/110 kV Uddanapally SS(2.37 km)- regd.							
S. No	Reference No.	Dated					
(i)	TANTRANSCO: 09733/SE/TR-I/EE/TSM/AEE/F.PTCC	14.12.2023					
(ii)	TANTRANSCO: CE/TR/SE/TR-I/EE/TSM/AEE1/F.PTCC/D.No. 19	15.02.2024					
(iii)	TANTRANSCO: Provisional RAC -Undertaking	15.02.2024					
(iv)	BSNL: SR-PTCC/STN 5429/07	16.02.2024					
(v)	Southern Railway: W.384/3/2/1233	21.12.2023					

The PTCC proposal submitted vide references (i) has been examined. DET,(PTCC,) SZ, BSNL (Chennai) vide reference (iv) and Southern Railways vide reference (v) have issued No Objection Certificate (NOC).

The Telecommunication details from South Western Railway have not been received. However, the LF induction on Block and Telecom circuits of South Western Railway has been computed after considering the railway lines lying within the 8 km boundary of proposed transmission line on Topo map submitted vide above reference (i). The voltage likely to be induced on paralleling Block and Telecom circuits of South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. Screening factors as applicable have been considered.

Telecommunication details from DG Signals, MoD are awaited however, vide reference (ii) and (iii) above, TANTRANSCO has shown urgency for charging the line for power evacuation and has requested for provisional PTCC clearance. TANTRASCO has submitted an undertaking that in case of any damage to telecom assets/ personnel of Defense and Railway due to the charging of this line, TANTRANSCO shall take all responsibility for its remediation.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office. LF induction on telecommunication circuits of Defense, will be communicated after the receipt of details from DG Signals, MoD.

Encl.: As above

**Chief Engineer** 

## To,

1.	Divisional Engineer	BSNL, Inspection Circle,1st			
	(PTCC), Southern Zone	Floor, Raj Bhavan Exchange No.			
		26, Sardar Patel Road, Guindy,			
		Chennai-600032			
	Superintending	TANTRANSCO, 5th floor,			
2.	Engineer/Transmission-I	TANTRANSCO HQ, 144, Anna			
		Salai, Chennai - 600002			
	PCSTE	South Western Railway, Rail			
3.		Soudha, Gadag Road, Hubballi-			
		580020			
	Director General of Signals	General Staff Branch, Integrated	With a request to provide		
		HQ, MoD (army), Sena Bhawan,	details of Telecom		
4.		DHQ, PO, New Delhi- 110 105	assets/ NOC at the		
			earliest for issuance of		
			final RAC.		

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## **ANNEXURE-I**

**Map Scale** : 1 cm= 500 m

**Total Length**: 2.37 km

Name of the Power line: 230KV SC line from existing 400/230KV S.R. Value : 25000 Ohm-cm

Shoolagiri SS to existing 230/110KV Uddanapally SS

South Western Railway

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
1	KMLM-PRNT	1.5	0.002	23782	45
2	PRNT-RYC	0.79	0.0005	25999	14