



सत्यमेव जयते

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
Division

CEA Case No. : CHH-87		
Induced Voltage(IV) calculation for PTCC proposal of 400 kV D/c Raipur Pool to Dhamtari Transmission Line [Length-87.959 km] - Regd.		
S. No	Reference No.	Dated
(i)	PRPDTL: WR-I/Durg/TLC/PTCC/797	27.05.2024
(ii)	PRPDTL: e-Mail	23.10.2024
(iii)	BSNL: IC/MBI/PTCC/MP	10.10.2024
(iv)	South East Central Railway: SECR/S&T/PTCC/TD/480	31.07.2024
(v)	Defense: B/46937/Sigs7(b)/3876	23.09.2024

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on block & telecom circuits of South East Central Railway with respect to details furnished vide above references (iv) has been computed. The voltages likely to be induced on paralleling block & telecom circuits of South East Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors, as applicable, have been considered. DET-PTCC WZ,BSNL and DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iii) & (v) respectively.

In view of the above, PTCC route approval may be issued for the subject transmission line under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Bldg., Santa Cruz (West), Mumbai-400054	
2.	GM (S&T)	2 nd Floor, Zonal HQ SECR Bilaspur	
3.	DGM, PRPDTL	O/o DGM PRPDTL	Copy for information.

		Dhamdha, Durg	
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ANNEXURE-I

CEA Case No.: CHH-87			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C Raipur Pool to Dhamtari Transmission Line.			Total Length : 87.959 km		
			S.R. Value : 50000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
South East Central Railway: SECR/S&T/PTCC/TD/480 Dated 31.07.2024					
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Durg R/s to Rasmara R/s	1.5	0.0048	16500	79
2	Rasmara R/s to Murhipar R/s	3.0	0.006	17300	104
3	Murhipar R/s to Parmal Kasa R/s	-Out of Parallelism-			
4	Durg R/s to Durg Link Block Station R/s	-Out of Parallelism-			
5	Durg Link Block Station R/s to Maroda R/s	-Out of Parallelism-			
6	Maroda R/s to Risama R/s	2.5	0.0047	15500	73
7	Risama R/s to Gunderdehi R/s	-Out of Parallelism-			