



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.: HRA-254		
Induced Voltage (IV) calculation for PTCC proposal of LILO of 220 kV D/C PTPS-Jind Transmission Line at 400 kV PGCIL Khatkar S/s. (Length-5.133 km)- regd.		
S. No	Reference No.	Dated
(i)	HVPNL: 102/TSJ/EC-46	15.05.2024
(ii)	HVPNL: 13/TSJ/EC-46	03.09.2024
(iii)	HVPNL: e-Mail	03.09.2024
(iv)	BSNL:DET-PTCC/ND/DV-10361/HR-887/2024-25/	28.05.2024
(v)	Northern Railway: 342-SIG/1/PTCC/2024-25/06/01	03.06.2024

The PTCC proposal submitted vide reference (i), (ii) & (iii) has been examined. The LF induction on Block and Telecom circuits of Northern Railway with respect to details furnished vide above reference (v) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of Northern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET-PTCC, BSNL NZ has issued No Objection Certificate (NOC) vide reference (iv).

Telecommunication details from Defense are pending and the power utility has shown urgency for charging of the line and requested for provisional PTCC approval vide above reference (ii). Taking above into consideration, necessary action regarding issuance of provisional PTCC approval for the subject cited transmission line may be taken under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL, O/o PGM(North), QA & Inspection Circle D-Tax Building, Jan path, New Delhi	
2.	GM (S&T)	O/o GM (S&T), Northern Railways Baroda House, Delhi	
3.	Director General of Signals	General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ, PO, New Delhi- 110 105	With a request to provide details of Telecom assets/ NOC at the earliest for issuance of final RAC.
4.	Executive Engineer	O/o Executive Engineer HVPNL, Jind	Copy for information

ANNEXURE-I

CEA Case No.: HRA-254		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of 220 kV D/C PTPS-Jind Transmission Line at 400 kV PGCIL Khatkar S/s.		Total Length : 5.33 km			
		S.R. Value : 15000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Northern Railway Letter No 342-SIG/1/PTCC/2024-25/06/01			Dated 03.06.2024		
1.	Uchana R/s to Barsola R/s	0.75	0.0021	20500	43
2.	Barsola R/s to Jind R/s	4.0	0.005	12750	64
3	Jind R/s to Bishanpura Haryana R/s	-Out of Parallelism-			
4	Bishanpura Haryana R/s to Kinana R/s	-Out of Parallelism-			
5	Jind City R/s to Pandu Pindara R/s	-Out of Parallelism-			
6	Pandu Pindara R/s to Pilu Khera R/s	-Out of Parallelism-			