



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.: UP-631		
Induced Voltage (IV) calculation for PTCC proposal of LILO of 220 kV Muzaffarnagar - Shamli Transmission Line at 220 kV Khatauli S/s [Length-14.705 km] - Regd.		
S. No	Reference No.	Dated
(i)	UPPTCL: 718/ETD/ MZN/PTCC	18.08.2023
(ii)	UPPTCL: 296/ETD/ MZN/PTCC	24.02.2026
(iii)	BSNL: DE/PTCC/NZ/ BSNL-TD/DV-10248/UP-1139/2025-26	16.02.2026
(iv)	Northern Railway: 342-SIG/1/PTCC/2023-24/10/02	25.10.2023
(v)	Defense: B/46937/Sigs7(b)/3500	02.11.2023

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on Block & Telecom circuits of Northern 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 Northern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors, as applicable, have been considered. DET-PTCC NZ,BSNL and DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iii) & (v) respectively.

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC

Digitally signed by
Suman Kumar Maharana
Date: 25-02-2026
15:54:13
Chief Engineer

To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL, O/o PGM(North), QA & Inspection Circle D-Tax Building, Eastern Court, Janpath New Delhi-110001	
2.	GM (S&T)	Northern Railway Baroda House, Delhi	
3.	Executive Engineer UPPTCL	ETD - UPPTCL 220 kV S/s Muzaffarnagar	Copy for information.

ANNEXURE-I

CEA Case No.: UP-631			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of 220 kV Muzaffarnagar to Shamli Transmission Line at 220 kV Khatauli S/s			Total Length : 14.705 km		
			S.R. Value : 5000 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: 342-SIG/1/PTCC/2023-24/10/02 Dated 25.10.2023					
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Baman Heri R/s to Muzaffarnagar R/s	-Out of Parallelism-			
2	Muzaffarnagar R/s to Jarauda Nara R/s	5.0	0.0024	22500	54
3	Jarauda Nara R/s to Mansurpur R/s	4.0	0.0054	19200	104
4	Mansurpur R/s to Khatauli R/s	3.0	0.0011	20500	23
5	Khatauli R/s to Sakhoti Tanda R/s	-Out of Parallelism-			