



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-618		
Induced Voltage (IV) calculation for PTCC proposal of LILO of 220 kV S/C Chinhat – C.G City Transmission Line at 400 kV Mohanlalganj S/s [Length– 28.27 km]-Regd.		
S. No	Reference No.	Dated
(i)	UPPTCL: 411/ETD-III(L)/Ramnagar	10.04.2023
(ii)	UPPTCL: 1389/ETD-III(L)/220kVChinhatCG-CityLine	29.08.2024
(iii)	UPPTCL: e-Mail	04.09.2024
(iv)	BSNL: DET/PTCC/ND/DV-10383/UP-1198/2024-25/	06.07.2024
(v)	Northern Railway: 342-SIG/1/PTCC/2023-24/05/01	03.05.2023
(vi)	Defense: B/46937/Sigs7(b)/3355	21.07.2023

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 and DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv) & (vi) respectively.

Taking above into consideration, necessary action regarding issuance of 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	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	O/o ETD-III, SLDC Campus Vibhuti Khand , Lucknow	Copy for information.

ANNEXURE-I

CEA Case No.: UP-618			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of 220 kV S/C Chinhhat – C.G City			Total Length : 34.75 km		
Transmission Line at 400 kV Mohanlalganj S/s			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 Letter No: 342-SIG/1/PTCC/2023-24/05/01 Dated 03.05.2023					
<u>Affected Blocks & Telecom Circuits Details</u>					
<u>Lucknow-Barabanki Section</u>					
1	Lucknow R/s to Malhaur R/s	-Out of Parallelism-			
2	Malhaur R/s to Safedabad R/s	-Out of Parallelism-			
3	Safedabad R/s to Barabanki R/s	-Out of Parallelism-			
<u>Trivediganj - Lucknow Section</u>					
4	Utraitia R/s to Bakkas R/s	-Out of Parallelism-			
5	Bakkas R/s to Anupganj R/s	-Out of Parallelism-			
6	Anupganj R/s to Rahmat nagar R/s	5.5	0.0064	14800	96
7	Rahmat nagar R/s to Chandrauli R/s	-Out of Parallelism-			