



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-616		
Induced Voltage (IV) calculation for PTCC proposal of LILO of 220 kV Barabanki – Satrikh Road Transmission Line at 400 kV Mohanlalganj S/s [Length– 25.60 km]-Regd.		
S. No	Reference No.	Dated
(i)	UPPTCL: 260/ETD-III(L)/RSInfra	10.03.2023
(ii)	UPPTCL: 1390/ETD-III(L)/220kVBBK-SatrikhLine	29.08.2024
(iii)	UPPTCL: e-Mail	04.09.2024
(iv)	BSNL: DET/PTCC/ND/DV-10381/UP-1196/2024-25/	06.07.2024
(v)	Northern Railway: 342-SIG/1/PTCC/2023-24/04/02	19.04.2023
(vi)	Defense: B/46937/Sigs7(b)/3304	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-616			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of 220 kV Barabanki – Satrikh Road Transmission Line at 400 kV Mohanlalganj S/s			Total Length : 30.75 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 Letter No: 342-SIG/1/PTCC/2023-24/04/02 Dated 19.04.2023					
<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	4.0	0.0073	14200	104
7	Rahmat nagar R/s to Chandraulsi R/s	-Out of Parallelism-			