



सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

CEA Case No. : UP-534		
Induced Voltage (IV) calculation for PTCC approval for LILO of 400 kV Varanasi-Bihar Sharif Transmission Line on D/C and M/C Tower at 400 kV Sahupuri S/s [Length for Ckt-I- 26.213 km and for Ckt-II- 25.549 km]-Regd.		
S. No	Reference No.	Dated
(i)	UPPTCL: 872/ETD-S/	22.06.2021
(ii)	UPPTCL: e-Mail	09.01.2024
(iii)	BSNL: DET/PTCC/ND/DV-10175/UP-1111/2022-23/	18.03.2023
(iv)	North Central Railway: एनसीआर/एसएंडटी/2074/टेलीकॉम/पीटीसीसी(पार्ट-1)	30.01.2023
(v)	Defense: B/46937/Sigs7(b)/2456	19.07.2021

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

Director

I/32960/2024^{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)	North Central Railway Ganga Parisar, Prayagraj	
3.	Executive Engineer UPPTCL	ETD-III Sahupuri, Varanasi	Copy for information.

I/32960/2024

ANNEXURE-I

CEA Case No.: UP-534			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of 400 kV Varanasi-Bihar Sharif Transmission Line on D/C and M/C Tower at 400 kV Sahupuri S/s.			S.R. Value : 15,000 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 Central Railway Letter No: एनसीआर/एसएंडटी/2074/टेलीकॉम/पीटीसीसी(पार्ट-1) Dated 30.01.2023					
<u>Affected Blocks & Telecom Circuits Details</u>					
<u>Circuit-I for LILO Arrangement [Length- 26.213 km]</u>					
1	Kailihat R/s to DDU R/s	5.50	0.0071	25400	180
<u>Circuit-II for LILO Arrangement [Length- 25.549 km]</u>					
1	Kailihat R/s to DDU R/s	11.50	0.0082	24600	202