



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-680		
Induced Voltage (IV) calculation for PTCC proposal of LILO of one circuit of 400 kV D/C Tanda – Basti Transmission Line at 400 kV Gonda S/s [Length- 77 km] - Regd.		
S. No	Reference No.	Dated
(i)	SEUPTCL: SEUPPTCL/LKO/25/1226	22.07.2025
(ii)	SEUPTCL: e-Mail	19.11.2025
(iii)	BSNL:DE-PTCC/NZ/BSNL-TD/DV-10636/UP-1251/2025-26/	18.12.2025
(iv)	North Eastern Railway: NER-HQ0SndT(Tele)/31/2020-O/OPCSTE/HQ/NER	17.09.2025
(v)	Defense: B/46937/Sigs7(b)/5028	15.10.2025

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on Block and Telecom circuits of North Eastern 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 Eastern 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 vide reference (iii) has mentioned that only BTS and Un-Armored OFC is present with in 8km boundary and hence, IV computation is not done. DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (v).

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 provisional RAC

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), North Eastern Railways Gorakhpur	
3.	Project Manager M/s South East UP Power Transmission Ltd.	409, 4 th Floor, Shalimar Titanium Gomati Nagar, Lucknow	Copy for information

ANNEXURE-I

CEA Case No.: UP-680 Name of the Power line: LILO of one circuit of 400 kV D/C Tanda – Basti Transmission Line at 400 kV Gonda S/s.			Map Scale : 1 cm= 500 m Total Length : 77 km S.R. Value : 7500 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

North Eastern Railway: NER-HQ0SndT(Tele)/31/2020-O/OPCSTE/HQ/NER					Dated 17.09.2025
1.	Tikriganj R/s to Nawabganj R/s	3.5	0.0033	28500	94
2.	Nawabganj R/s to Katra R/s	5.0	0.0042	30500	128
3.	Katra R/s to Ramghat Halt R/s	-Out of Parallelism-			