



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. : UTR-33		
Induced Voltage (IV) calculation for PTCC proposal of 400 kV D/C Transmission Line from 400 kV Koteshwar (PGCIL) S/s to 400 kV Rishikesh (PTCUL) S/s [Length-38.55 km] - Regd.		
S. No	Reference No.	Dated
(i)	NRSS XXXVI Transmission Limited: NRSS/R/K-R/2024-25/54	25.11.2024
(ii)	BSNL: DE/PTCC/NZ/ BSNL-TD/DV-10577/UTR-40/2025-26	11.08.2025
(iii)	Northern Railway: 342-SIG/1/PTCC/2024-25/12/04	27.12.2024
(iv)	Defense: B/46937/Sigs7(b)/4311	22.04.2025

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

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.

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.	Project Head	Flat No 94, 3 rd Floor, Pocket-4 LIG Flats, Sector-11 Dwarka.	Copy for information.

ANNEXURE-I

CEA Case No.: UTR-33			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C Transmission Line from 400 kV Koteswar (PGCIL) S/s to 400 kV Rishikesh (PTCUL) S/s			Total Length : 38.55 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.

BSNL: DE/PTCC/NZ/ BSNL-TD/DV-10577/UTR-40/2025-26 Dated 11.08.2025

Affected Blocks & Telecom Circuits Details

1.	Narendra Nagar Exchange to Govt. Poly NDR	IV Less than 430 V			
2.	Narendra Nagar Exchange to Govt. Poly NDR	IV Less than 430 V			
3.	Narendra Nagar Exchange to Govt. Poly NDR	1.5	0.0127	22000	280
4.	Rishikesh Exchange to Bhadrakali Mandir	IV Less than 430 V			
5.	Napali Farm T-Point to Chidarwala	IV Less than 430 V			

ANNEXURE-II

CEA Case No.: UTR-33			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C Transmission Line from 400 kV Koteswar (PGCIL) S/s to 400 kV Rishikesh (PTCUL) S/s			Total Length : 38.55 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/2024-25/12/04			Dated 27.12.2024		
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Motichur R/s to Raiwala R/s	Out of Parallelism			
2	Raiwala R/s to Virbhadra R/s	1.5	0.0038	28500	108
3	Virbhadra R/s to Rishikesh R/s	2.0	0.0031	27000	84
4	Virbhadra R/s to Yognagri Rishikesh R/s	1.5	0.0025	27200	68
5	Raiwala R/s to Kansrao R/s	Out of Parallelism			