



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डवलपमेंट प्रभाग

Power Communication Development Division

No.:CEA/PCD/PTCC/UP-489/780-382

Date: 04.07.2019

DET (PTCC), Northern Zone,
Bharat Sanchar Nigam Ltd (BSNL),
O/o PGM(N), Inspection Circle,
CTS Compund, Netaji Nagar,
New Delhi – 110023

Subject: Induced Voltage Calculation in respect of PTCC proposal for 220 kV Matore (765 kV SS PGCIL) – Charla (220 kV S/S Charla) S/C Transmission Line

Reference: (i) BSNL letter no. DET/PTCC/ND/DV-9447/UP-701/2019-2020 dated 28.06.2019
(ii) Northern Railway letter no. 342-SIG/1/PTCC dated 10.05.2019

Sir,
The instant PTCC proposal has been examined. Low frequency induction on Block & Telecom circuits of Northern Railway with respect to details furnished vide above reference has been computed. The Soil Resistivity (SR) value has been taken as 5,000 Ohm-cm. The voltages likely to be induced on paralleling Block & Telecom circuits of Northern Railway under Single Line to Ground fault condition have been computed and are enclosed as Annex – I. The screening factors, as applicable, have been considered. Vide ref. (i) above, BSNL have issued No Objection Certificate (NOC).
Telecommunication details from Defense are pending and the power authority has shown urgency for charging the line. In view of this, you are requested to issue provisional PTCC route approval.

Encl.: As above


(Naresh Bhandari)
Chief Engineer

Copy to:

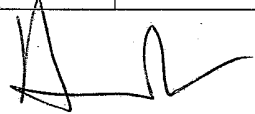
1. GM (S&T), Northern Railway, Headquarter Office, Baroda House, New Delhi - 110001
2. Executive Engineer, Electricity Transmission Division-II, UP Power Transmission Corporation Limited, "Pareshan Bhawan", IInd Floor, 130-D, Victoria Park, Meerut, UP - 250001

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ANNEXURE – I

Case No.: UP-489		Map Scale : 1cm=500mts Total Length : 5.170 km Soil Resistivity : 5,000 Ohm-cm			
Name of the Power line: 220 kV Matore (765 kV SS PGCIL) – Charla (220 kV S/S Charla) S/C Transmission Line					
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 dated 10.05.2019					
1	Shakhuti Tanda R/S – Daurala R/S	2.7	0.0004	8000	3
2	Daurala R/S – Pabli Khas R/S	OUT OF PARALLELISM			0


नरेश भंडारी / NARESH BHANDARI
मुख्य अभियन्ता / Chief Engineer
केन्द्रीय विद्युत प्राधिकरण / C.E.A.
विद्युत मंत्रालय / Ministry of Power
भारत सरकार / Govt. of India
नई दिल्ली / New Delhi-66