



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/HRA-230/14-16

Date: 07.01.2020

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

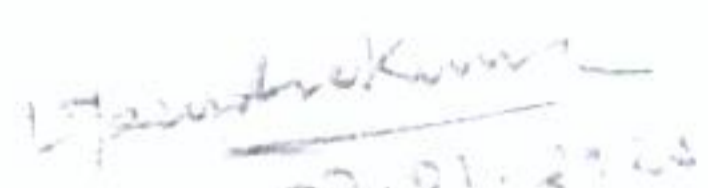
Subject: Induced Voltage calculation in respect of PTCC proposal of 220 KV D/C line from 400 kV S/S Kaithal (PGCIL) to 220 kV S/S Neemwala

Ref: (i) BSNL letter no. DET/PTCC/ND/DV-9629/HR840/2019-2020 dated 11.12.2019
(ii) North Railway letter no. 342-SIG/1/PTCC/2019-20/11/4 dated 18.11.2019

The instant PTCC proposal has been examined. The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii) respectively, has been examined. The Soil Resistivity value has been taken as 10,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL Telecom Cables and Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I and II respectively. The screening factors as applicable have been considered.

Telecommunication details from Defence are pending and power authority has shown urgency for charging of the line. In view of this, you are requested to issue provisional PTCC route approval.

Encl.: As above


07.01.2020
(Upendra Kumar)
Chief Engineer
मुख्य अभियंता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi

Copy to:

- 1) GM(S&T), North Eastern Railway, State Entry Road, Gorakhpur (Annex-II Only)
- 2) Executive Engineer, HVPNL, Transmission System Division, Kaithal, Haryana

M/C

Case No. : ITRA - 230

Name of the Power Line: 220 KV D/C Line on D/C Tower from 400
KV S/Strn PGCIL(Kaithal) to 220 KV
S/Strn Neemwala

Annexure I

Toposheet Scale : 1cm=500mts
Total Length : 31.949 Kms
S.R Value : 10,000 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts
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BSNL Reference No. DET/PTCC/ND/DV-9629/HR-840/2019-20 Date : 11.12.2019					
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BSNL Details					
1	Siwan to Malikpur (100Pr & 50 Pr)		← IV less than 430V →		

Upendra Kumar
07.01.2020
मुख्य अभियंता / Chief Engineer
केन्द्रीय विद्युत प्राधिकरण / C.E.A.
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भारत सरकार / Govt. of India
नई दिल्ली

