

# भारत सरकार

# Government of India विद्युत मंत्रालय

Ministry of Power केन्द्रीय विद्युत प्राधिकरण

# Central Electricity Authority पावर कम्युनिकेशन डवलपोंट प्रभाग

# Power Communication Development Division

No. CEA/PCD/ PTCC/UP-523/137-136

Date: 19.02,2020

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 LILO of Circuit –II (Loop Out) of 400 kV D/C PGCIL (Lucknow) – Unnao at 400 kV Jehata S/S

- Ref: (i) Executive Engineer, UPPTCL letter no. 2356/ETD(I) L/400 kV Line Jehta dated 23.11.2019
  - (ii) BSNL letter no. DET/PTCC/ND/DV-9655/UP-828/2019-2020 dated 14.01.2020
  - (iii) North Eastern Railway letter no. N/242/0/(Tele)PTCC-Pt.-II/987 dated 11.02.2020
  - (iv) Northern Railway letter no. 342-SIG/1/PTCC/2019-20/01/02 dated 10.01.2020

The PTCC case submitted vide reference (i) has been examined. BSNL vide above Ref. (ii) has accorded NOC for the line and North Eastern Railway Vide reference (iii) has accorded NOC. The low frequency induction on Northern Railway Telecommunication circuits as per details furnished vide above references (iv) has been examined. The Soil Resistivity value has been taken as 25,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex. The screening factors as applicable have been considered.

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

Encl.: As above

UpentoKome 19.02.220

(Upendra Kumar) Chief Engineer

### Copy to:

1) GM(S&T), Northern Railway, Headquarter Office, Baroda House, New Delhi.

MIC

GM(S&T), North Eastern Railway, State Entry Road, Gorakhpur.(Only cover letter)
Executive Engineer, Electricity Transmission Division-I, UPPTCL, Room No. 115-120, Pareshan Bhawan, Vibhuti Khand-II, Near Mantri Awas, Gomti Nagar, Lucknow - 226010

وللمائية المراجع **ANNEXURE** Map Scale Case No.: UP - 523 : 1cm=500mts Total Length: Name of the Power line: LILO of Circuit -II (Loop Out) of 12.620 Km. S.R. Value 400 kV D/C PGCIL (Lucknow) – Unnao at 400 kV Jehata S/S : 25,000 Ohms-cm Effective Length of Mutual Fault 1.7 Parallelism Coupling S.No. current Telecom. Details in in Km. in Ohms. in Amps. Volts. NORTHERN RAILWAY Ref. No: 342-SIG/1/PTCC/2019-20/01/02 DATED: 10-01-2020 Affected Blocks & Telcom Circuits Details Dilawar - Malihabad Outside IV consideration Zone 0 2 Malihabad - Kakori 0.5 0.0001 14500 7 3 Kakori – Alam Nagar Outside IV consideration Zone 0 मुख्य अभिवता/Chief Engineer केन्द्रीय विद्युत प्राधकरण/C.E.A. विद्युत मञ्जादाय/Ministry of Power भारत संस्कार/Govt. of India नई दिल्ली/New Delhi