



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/ASM-20/716-718

Date: 17.06.2019

DET (PTCC), Eastern Zone,
Inspection & QA Circle, BSNL
Q.A. Bhawan, EP-GP Block, Sector-V,
Salt Lake, Kolkata – 700091

Subject: Induced Voltage Calculation in respect of PTCC proposal for 400 kV D/C Silchar – Misa Transmission Line

Reference: (i) BSNL letter no. DE/PTCC/EAS 300820182128/01 dated 08.11.2018
(ii) Northeast Frontier Railway letter no. N/146/2/10 Pt. VI (TC) dated 15.11.2018
(iii) Defense letter no. B/46937/Sigs 7(b)/1163 dated 08.08.2018

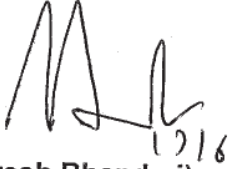
Sir,

The instant PTCC proposal has been examined. Low frequency induction on Block & Telecom Circuits of Northeast Frontier 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, based on field inspection by CEA officers. The voltages likely to be induced on paralleling Block & Telecom Circuits of Northeast Frontier 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). Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC) (enclosed as Annex – II).

Taking above into consideration, kindly take necessary action for PTCC route approval.

Encl.: As above

m/c


(Naresh Bhandari)
Chief Engineer

Copy to:

- (i) GM (S&T), Office of the General Manager (S&T), Northeast Frontier Railway, Maligaon, Guwahati, Assam – 781011 (Annex – I only)
- (ii) Construction Head, NER-II Transmission Limited, J.K. Kedia (Main Road), Opp. – HDFC Bank, 2nd floor, MRF Showroom, Hojai, Assam - 782435

ANNEXURE - I

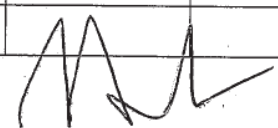
| Case No.: ASM - 20 Name of the Power line: 400KV D/C SILCHAR - MISA TRANSMISSION LINE | | Map Scale : 1cm=500mts Total Length : 175.7 Km. S.R. Value : 5,000 Ohms-cm | | | |
|---|------------------|--|--------------------------|----------------------------------|---------------|
| S.No. | Telecom. Details | Length of Parallelism in Km. | Mutual Coupling in Ohms. | Effective Fault current in Amps. | I.V in Volts. |

NORTH EAST FRONTIER RAILWAY

Ref. No: N / 146 / 2 / 10 PT. VI(TC) DATED: 15-11-2018

Affected Blocks & Telecom Circuits Details

| | | | | | |
|---|---------------------------------|--|--------|-------|----|
| 1 | Katakhal - Salchakra | OUTSIDE IV CALCULATION CONSIDERATION ZONE | | | 0 |
| 2 | Salchakra - Arunachal | 6.35 | 0.0047 | 13700 | 64 |
| 3 | Arunachal - Silchar | OUTSIDE IV CALCULATION CONSIDERATION ZONE | | | 0 |
| 4 | Jatinga Lampur - New Harangajao | 2.4 | 0.0003 | 10700 | 3 |
| 5 | New Harangajao - Ditokcherra | 1.6 | 0.0013 | 10200 | 13 |
| 6 | Ditokcherra - Bandarkhal | OUTSIDE IV CALCULATION CONSIDERATION ZONE | | | 0 |
| 7 | Jamunamukh - Jogijan | 2.9 | 0.0033 | 14100 | 47 |
| 8 | Jogijan - Hojai | 3.05 | 0.0007 | 13700 | 10 |
| 9 | Hojai - Dhalpukhuri | OUTSIDE IV CALCULATION CONSIDERATION ZONE | | | 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

Annex-II
ASMT 20

Tele : 23019746

Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi - 110011

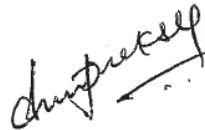
B/46937/Sigs 7(b)/1163/

08 Aug 2018

NER-II Transmission Ltd.
Construction Head
J.K. Kedia (Main Road)
Opp. HDFC Bank, Near Vishal Mega Mart
2nd Floor MRF Showroom, Hojai, Assam
Pin-782435

**SUBMISSION OF PTCC PROPOSAL OF 400 KV D/C (QUAD) SILCHAR-MISA
TRANSMISSION LINE UNDER NER SYSTEM STRENGTHENING SCHEME II (PART
B) & V BY NER-II TRANSMISSION LTD**

1. Reference your letter No NERII/SM/PTCC/2018-19/63 dt 11 Jun 2018 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(A Rawat)
Maj
GSO 1 (Comn)
for SO-in-C

Copy to :-

✓ Director(PTCC)
Central Electricity Authority
Power Communication Development Division
NRPC Complex, 18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi - 110016

- For information.