



सत्यमेव जयते

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/RAJ-617 / 392-94

Date: 04.04.2019

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 Surpura – Banar Line

Ref: (i) BSNL letter no. DET/PTCC/ND/DV-9412/Raj-1204/2018-19 dated 06.03.2019
(ii) Northern Western Railway letter no. SG/158/NWR/PTCC/676 dated 09.01.2018
(iii) Defense letter no. B/46937/Sigs 7(b)/814/ dated 07.02.2018

Sir,

The instant PTCC proposal has been examined. BSNL has accorded NOC vide above Ref.(i) for the above line. The low frequency induction on Railway Telecommunication circuits as per details furnished vide above cited references (ii) has been examined. The Soil Resistivity value has been taken as 20000 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. Defense has accorded NOC vide above Ref.(iii) for the line.

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval.

Encl.: As above


(Naresh Bhandari)
Chief Engineer

Copy to:

- 1 Dy. CSTE, North Western Railway, Head Quarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur – 302017. (Rajasthan)
- 2 Executive Engineer (PTCC), RRVNPL, First Floor, Room no. 129, Vidyut Bhawan, Jyoti Nagar, Jaipur – 302005

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ANNEXURE

Case No.: RAJ-617
 Name of the Power line: 220 KV D/C Surpura- Banar line

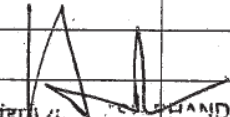
Map Scale : 1cm=500mts
 Total Length : 9.705 Km.
 S.R. Value : 20,000 Ohms-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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NORTH WESTERN RAILWAY
 Ref. No: SG / 158 / NWR / PTCC / 676 DATED: 09-01-2018

Affected Blocks & Telcom Circuits Details

1	Bhagat ki Kothi - Jodhpur				0
2	Jodhpur- Rai ka Bagh Palace Jn	-----out of //sm-----			0
3	Rai ka Bagh Palace Jn - Jodhpur Cantt	2.5	0.0125	7700	96
4	Jodhpur Cantt - Banar	2.5	0.0090	5300	48
5	Banar - Jajiwal	2.0	0.0003	6500	2
6	Rai ka Bagh Palace Jn - Mandor	5.5	0.0014	5500	8
7	Mandor - Marwar Mathaniya	5.2	0.0021	5700	12


 नरेश भंडारी / N. BHANDARI
 मुख्य अभियंता / Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi-06