



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डेवलपमेंट प्रभाग

Power Communication Development Division

No.:CEA/PCD/PTCC/RAJ-620 /556-58

Date: 09.05.2019

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 D/C Transmission Line from 220 kV GSS Basni to 220 kV GSS NPH Jodhpur

Reference: (i) BSNL letter no. DET/PTCC/ND/DV-9431/Raj-1213/2019-2020 dated 08.05.2019
(ii) North Western Railway letter no. SG/158/NWR/PTCC/723 dated 14.11.2018
(iii) Defense letter no. B/46937/Sigs 7(b)/1347 dated 01.01.2019

Sir,

The instant PTCC proposal has been examined. Low frequency induction on Block & Telecom circuits of North Western Railway with respect to details furnished vide above reference has been computed. The Soil Resistivity (SR) value has been taken as 50,000 Ohm-cm. The voltages likely to be induced on paralleling Block & Telecom circuits of North Western 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:

1. Dy. CSTE (Tele), North Western Railway, Head Quarter Office, Room no. 136, First Floor, Near Jawahar Circle, Jaipur – 302017 (Annexure-I only)
2. Executive Engineer (PTCC), RVPNL, Vidyut Bhawan, Janpath, Jyoti Nagar, Jaipur – 302005

ANNEXURE - I

Case No.: RAJ-620		Map Scale : 1cm=500mts			
Name of the Power line: 220 kV D/C Transmission Line from 220 kV GSS Basni to 220 kV GSS NPH Jodhpur		Total Length : 6.0 km			
		Soil Resistivity : 50,000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

North Western Railway letter no. SG/158/NWR/PTCC/723 dated 14.11.2018					
1	Mandor – Rai ka bag Palace Jn.	OUT OF PARALLELISM			0
2	Rai ka bag Palace Jn. – Jodhpur Cantt				0
3	Rai ka bag Palace Jn. – Jodhpur				0
4	Jodhpur – Bhagat ki Kothi	0.1	0.0003	10000	3
5	Bhagat ki Kothi – Basni	2.6	0.0154	10000	154
6	Basni – Salawas	1.9	0.0110	10000	110


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

Tele : 23019746

RAJ-620

Annex - II

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

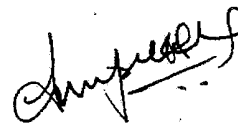
B/46937/Sigs 7(b)/1347 /

01 Jan 2019

✓ O/o Executive Engineer (PTCC)
Rajasthan Rajya Vidyut Prasaran Nigam Limited
Room No. 129, First Floor
Vidyut Bhawan, Janpath, Jyoti Nagar
Jaipur-302005

PTCC CASE OF 220 KV D/C BASNI-NPH, JODHPUR(220KV GSS) LINE

1. Ref your letter No RVPN/XEN (PTCC)/JPR/F.1840-A/D.271 dt 31 Oct 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

Enclosures : As above

Copy to :-

~~The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016~~

for information.