भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पावर कम्युनिकेशन डवलप्मेंट प्रभाग
Power Communication Development Division

No. CEA/PCD/PTCC/RAJ-586/ 319-321

Date: 19/03/2019

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

Subject: PTCC Route Approval for 400 kV D/C Bhilwara – Ajmer Transmission line

Reference:

i) BSNL letter no. DET/PTCC/ND/DV-9251/Raj-1107/2018-19 dated 22.02.2019
ii) Northern Western Railway letter no. SG/158/NWR/PTCC/629 dated 21.11.2016
iii) Defense letter no. B/46937/Sigs 7(b)/417/ dated 06.02.2017

Sir,

It is to inform that RRVPNL had submitted the PTCC proposal for the above line in the past also. CEA had conveyed induction details vide letter no. CEA/LD&T/PTCC/RAJ-518 dated 12/5/14 wherein all induced voltage values, both at BSNL and NW Railway telecom circuits, were within safe limit except at Gegal-Nokha BSNL telecom circuit. Based on CEA's IV comments, BSNL had issued RAC vide letter no. PTCC (T)/DV-8923/Raj-952 dated 16/5/14.

Subsequently, RRVPNL has submitted revised PTCC proposal for the above line where in route of the power line was slightly changed from 400kV Ajmer substation, to avoid parallelism of Gegal-Nokha BSNL telecom circuit.

The low frequency induction on BSNL and North Western Railway telecommunication circuits as per details furnished vide above cited references (i) and (ii) respectively has been examined. The average soil resistivity value has been taken as 25000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL and North Western Railway telecommunication circuits under SLG (Single Line to Ground) fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered. Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC), a copy is enclosed at Annex–III.

Taking above into consideration, kindly issue PTCC Route Approval.

Encl: As above

Yours faithfully,

19/3

(Naresh Bhandari)
Chief Engineer

सेवा भवन आर के पुरम, कटवारिया सराय नई दिल्ली 110016, टेलीफैक्स: 011-26565214, ईमेल: nbnareshbhandari@gmail.com

Case No. : RAJ - 586

Name of the Power Line: 400 KV D/C Bhilwara-Ajmer Transmission Line

Annexure I
Toposheet Scale : 1cm=500mts
Total Length : 160 Kms
S.R Value : 25,000 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts
BSNL Reference No. DET/PTCC/ND/DV-9251/Raj-1107/2018-19 Date : 22/2/19					
	BSNL Details				
1	Nasirabad Exch.to Tramji Chowk, Mochi Bazar				
2	Nasirabad Exch.to RSEB DILla, IOC				
3	Nasirabad Exch.to Sanskrit Pathshala				
4	Nasirabad Exch. to Ramleela Chowk				
5	Nasirabad Exch. to Gandhi Chowk				
6	Nasirabad Exch. to Tehsil Rly Stn				
7	Nasirabad Exch. to Kripal Bhawan				
8	Nasirabad Exch. to Inner Zone				
9	Srinagar Exch. to Srinyes Khera Bus Stand				
10	Srinagar Exch. to Joint Highway	IV less than 430 V →			
11	Srinagar Exch.. to Inside Village				
12	Bhatiya Exch. to Malio Ka khera Joint				
13	Bhatiya Exch. to Gujar Mohalla				
14	BDN Exch to Pillar 1				
15	BDN Exch to Pillar 2 & BDN Village				
16	BDN Exch toBishram Badi				
17	BDN Exch to Khedi				
18	Sareri Exch. to Kanwaliash				
19	Sareri Exch. to Sangam				
20	JLA Exch to Khutiya Gaon				

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

ANNEXURE – II

Case No.: RAJ-586
Name of the Power line: PTCC route approval for 400 KV D/C Bhilwara- Ajmer line

Map Scale : 1cm=500mts
Total Length : 160.0Km.
S.R. Value : 25,000 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 WESTERN RAILWAY				
	Ref. No:SG/158/NWR/PTCC/629 DATED:21.11.2016				
	Affected Blocks & Telcom Circuits Details				
1.	MADAR- LADPURA	----Out Of //sm-------			0
2.	LADPURA - GEGAL AKHRI	3.25	0.0153	10000	153
3.	GEGAL AKHRI - KISHANGARH	1.25	0.0100	10000	100
4.	RAJOSI - NASIRABAD	----Out Of //sm-------			0
5.	NASIRABAD - JHARWASA	----Out Of //sm-------			0
6.	JHARWASA - BANDANWARA	8	0.0046	8000	37
7	BANDANWARA - SINGWAL	8.5	0.0640	6000	384
8	SINGWAL - MOKHAMPURA	5	0.0400	6000	240
9	MOKHAMPURA - BIJAINAGAR	5.5	0.0160	6000	96
10	BIJAINAGAR - RUPAHELI	----Out Of //sm-------			0
11	RUPAHELI - SARERI				0
12	SARERI - RAILA ROAD				0
13	RAILA ROAD - LAMBIA				0
14	BHILWARA - MADAPIYA				0
					1/1

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-III

Tele : **33690** Raj-586

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

B/46937/Sigs 7(b)/417/

06 Feb 2017

Executive Engineer (PTCC)
Vidyut Bhawan, Room No 129.
Janpath, Jaipur - 302005

REVISED PTCC CASE OF 400 KV D/C BHILWARA – AJMER LINE

1. Reference your letter No. RVPN/XEN(PTCC/JPR/F.1752-A/ D.271 dt 02 Nov 2016.

2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.

3. Documents alongwith map sheets (in original) are forwarded herewith for your further necessary action.

(Roopesh Srivastava)
Lt Col
GSO 1 (Comn)
for SO-in-C

Encls : As above

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