



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत संचार विकास प्रभाग

Power Communication Development Division

No.: CEA/PCD/PTCC/RAJ-644/790-92

Date: 15.12.2020

Subject: PTCC proposal of 765 kV D/C Bikaner (PG) to Khetri (S/S) transmission line-regd.

Ref.: (i) Bikaner- Khetri Transmission Ltd. Ref. No. BKTL/JHU/PTCC/30 Dated: 20.03.2020
(ii) BSNL Ref. No. DET/PTCC/ND/DV-9811/Raj-1287/2020-21 Dated: 10.12.2020
(iii) North Western Railway Ref. No. SG/158/NWR/PTCC/780 Dated: 28.07.2020
(iv) Defense Ref. No. B/46937/Sigs 7(b)/2093 Dated: 18.09.2020

The PTCC proposal submitted vide ref. (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of North Western Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The average Soil Resistivity (SR) value has been taken as 50,000 Ohm-cm. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of North Western Railway under Single Line to Ground fault condition are enclosed at Annex-I and Annex-II respectively. The screening factors, as applicable have been considered. Defense has accorded NOC vide above ref. (iv) for this line (a copy enclosed at Annex-III).

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

Encl.: As above.

उपेन्द्र कुमार

(Upendra Kumar)
Chief Engineer

To,

1. The DET (PTCC), BSNL, Northern Zone O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi 110001. (Annex-I & III only)
2. Dy. CSTE/Tele, North Western Railway, Head Quarter office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur-302017. (Annex-II only)

M/C

Copy to: - Associate General Manager (Project), Bikaner- Khetri Transmission Ltd., 400 kV RVPN GSS, Jaipur Road, Raisar, Bikaner-334803.

Case No. : RAJ-644

Name of the Power Line: Bikaner(PG)-Khetri(S/S) 765 KV D/C
Transmission Line

Annexure I

Toposheet Scale : 1cm=500mts
Total Length : 240 Kms
S.R Value : 35,000 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volt
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BSNL

Reference No. DET/PTCC/ND/DV-9811/Raj-1287/2020-21 Dated:- 10.12.2020
Date :

BSNL Details					
1	Jamsar TE to Jamsar Village 10 /20 Pairs, 50 Pairs, 100 Pairs (1.5 KM)			} IV less than 430V	
2	Khara TE to Khara Village 10 /20 Pairs (2.5 KM)				
3	Khara TE to Khara Village 50 Pairs, 100 Pairs (2.0 KM)				

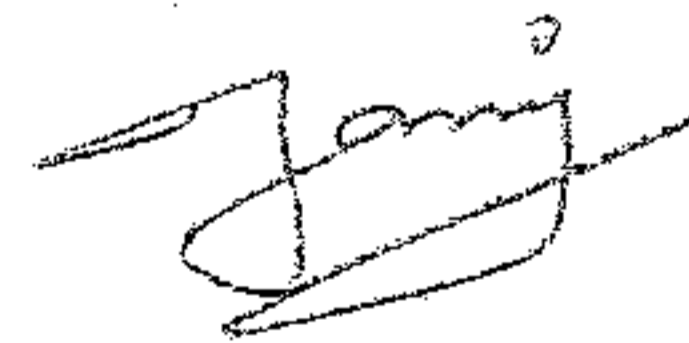
Jamuj

तनुज/TANUJ
सहायक निदेशक-II/Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत विभाग/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-68

ANNEXURE - II

Case No.: RAJ-644 Name of the Power Line: 765 kV D/C Bikaner (PG) to Khetri (S/S) transmission line.		Map Scale : 1 cm = 500 m. Route Length : 240 km Soil Resistivity : 50,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

NORTH WESTERN RAILWAY Ref. No: SG/158/NWR/PTCC/780		Dated: 28.07.2020			
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Jhunjhunu to Ratan Shahar	7.8	0.0098	18376	180
2	Ratan Shahar to Chirawa	6.8	0.0057	18041	103
3	Fatehpur Shekhawati to Ramgarh Shekhawati	0.9	0.0006	13896	08
4	Ramgarh Shekhawati to Bissau	7.6	0.0254	14333	365
5	Bissau to Churu	4.1	0.0015	14508	22
6	Ratangarh to Molisar	1.5	0.0004	13809	06
7	Molisar to Juharpur	4	0.0119	12666	151
8	Juharpur to Depalsar	7.6	0.0184	12535	231
9	Depalsar to Churu	2.7	0.0012	13500	16
10	Ratangarh to Sardar Shahar	3.6	0.0029	10083	29
11	Kanasar to Jamsar	0.2	0.0015	20000	30
12	Jamsar to Jagdewala	7.7	0.0086	19875	171



राज/तानुज
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Tele : 23019746

RAJ-644

Annex-III

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


B/46937/Sigs 7(b)/2093/

18 Sep 2020

Associate General Manager (Project)
Bikaner-Khetri Transmission Limited
400KV RVPN GSS, Jaipur Road,
Raisar, Bikaner-334803

CONSTRUCTION OF BIKANER (PG)-KHETRI (S/S) 765KV D/C TRANSMISSION LINE-PTCC
ROUTE APPROVAL

1. Ref your letter No BKTL/JHU/PTCC/32 dt 20 Mar 2020 (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

The DET(PTCC), Northern Zone
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Janpath
New Delhi-110001

- for information