



### 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-629/38 - 40

Date: 10.01.2020

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 765 kV D/C Fatehgarh – Bhadla transmission line associated with 400 kV pooling substation at Fatehgarh

Ref: (i) FDTL letter no.FBTL/PHL/July-34 dated 09.08.2019

- (ii) BSNL letter no. DET/PTCC/ND/DV-9652/Raj-1251/2019-2020 dated 17.12.2019
- (iii) North Western Railway letter no. SG/158/NWR/PTCC/748 dated 07.08.2019
- (iv) Defense letter no. B/46937/Sigs 7(b)/1761/ dated 03.10.2019

The PTCC case submitted vide reference (i) has been examined. BSNL vide above Ref. (ii) has accorded NOC for the line. The low frequency induction on Railway Telecommunication circuits as per details furnished vide above references (iii) has been examined. The Soil Resistivity value has been taken as 50,000 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-I. The screening factors as applicable have been considered. Defense vide above Ref.(iv) has accorded NOC for the line. (A copy enclosed at Annex-II)

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

Encl.: As above

(Upendra Kumar)
Chief Engineer

### Copy to:

1) Dy. CSTE, North Western Railway, Head Quarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur – 302017. (only Annex-I)

2) Associate Manager, Fatehgarh Bhadla Transmission Limited, Adarsh Nagar, Nr. Ghuvariya Basti Panchayat Smiti, Phalodi, jodhpur, Rajasthan - 342301

MIC

एन आर पी सी परिसर, कटवारिया सराय, नई दिल्ली-110016 टेलीफैक्स: 011-26565214 ईमेल: celdntcea@gmail.com वेबसाइट www.cea.nic.in NRPC Complex, Katwaria Sarai, New Delhi-110016 Telefax: 011-26565214 Email: celdntcea@gmail.com Website: www.cea.nic.in

Received on 10/01/2020

Case I	No.: RAJ- 629	ANNEXURE -			
Name of the Power line: 765 KV D/C Fatehgarh - Bhadla Transmission line associated with 400 KV pooling sub station at Fathegarh			Map Scale : 1cm=500mts Total Length : 149.693Km. S.R. Value : 50,000 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts
NORTI Ref. No:	H WESTERN RAILWAY SG/ 158 / NWR / PTCC / 748 DATED: 07	7-08-2019			
Affecte	d Blocks & Telcom Circuits Details				
1	Marwar khera – Marwar Bithri	0.5			
2	Marwar Bithri – Phalodi Jn.	9.5	0.0068	13000	88
3	Phalodi Jn Phalodi Jn.Cabin (jodhpur side)	3.5	0.0027	13200	36
	of the side of the	1.0	0.0002	13300	3
		Utpen	drakmn_		
			15/01/2020		
		नुष्य	अभिषंता/Chief Eng	meer	
		कन्द्राः विद्युत	मिन्दिता / Chief Engineer विद्युत के किन्द्रिक्ट E.A. ब्रालक / Managay of Power सरकार / Govt. of India		
		भारत	त सरकार Abovt of Ir नई दिल्ली/New Delh		

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)/1761/

33 Oct 2019

Associate Manager Fatehgarh Bhadla Transmission Limited Adarsh Nagar, Nr. Ghuvariya Basti Panchayat Smiti, Phalodi, Jodhpur, RJ-342301

## PTCC PROPOSAL FOR 765KV D/C FATEHGARH-BHADLA TRANSMISSION LINE ASSOCIATED WITH 400KV POOLING SUBSTATION AT FATEHGARH

- Ref your letter No FBTL/PHL/Jul-17 dt 29 Jul 2019 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
- 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 Kalwaria Sarai, New Delhi - 110016

Divisional Engineer Telegraph (PTCC) O/o GM (North); BSNL, QA & Inspection Circle, CTS Compound, Africa Avenue Road, Nelaji Nagar, New Delhi-110023

for information