



## 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/UP-504/17-19

Date: 07.01.2020

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 LILO of one circuit of 220 kV D/C Chhata – Manth (M-C) Transmission Line at 220 kV S/S Vrindavan.

Ref: (i) Executive Engineer, UPPTCL letter no. 1426/ETD(M) dated 30.07.2019

- (ii) BSNL letter no. DET/PTCC/ND/DV-9553/UP-767/2019-2020 dated 27.08.2019
- (iii) North Central Railway letter no. NCR/S&T/2074/Tele./PTCC (Part-I) dated 20.08.2019
- (iv) Defense letter no. B/46937/Sigs 7(b)/1800/ dated 27.11.2019

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 12,000 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) GM(S&T), North Central Railway, HQ's Office (S&T Branch), Ganga Parisar, Subject आधारित / Chief Engineer – 211015.(only Annex-I)

हिन्द्रा मंत्रालय/Ministry of Power

2) Executive Engineer, Electricity Transmission Division, UPPTCL, 132 kV Substation (New Delhi निर्माण किया) प्राचित्र प्राणिशिका रिक्स विल्ली/New Delhi

m/c

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

ANNEXURE -1

Case No.: UP - 504 Name of the Power line: LILO line of one circuit of 220 kV D/C Chhata – Manth (M-C) Transmission Line at 220 kV S/S Vrindavan.			Map Scale : 1cm=500mts Total Length : 22.912Km. S.R. Value : 12,000 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 CENTRAL RAILWAY NCR / S&T 2074 / Telcom./PTCC (	Part-I) DATED: 20-0	8-2019	+	
Affecte	d Blocks & Telcom Circuits Details				
	Mathura – Palwal				
1	Virndavan - Ajahi	4.5	0.0000		
2	Ajahi - Chhata		0.0029	7400	21
3	Chhata – Kosi Kalan	7.0	0.0037	7600	28
		5.0	0.0022	8100	18
			- de	Chief Engineer  Chief Engineer  Thisty of Power  Ministry of Power  Ministry of India  Move Delhi	
				Chief Engineer	
			मुख्य आभन्ता	प्राधिकांग / C.E.A.	
			विद्युत पंत्रालय /	Govt. of India	
			नई दिल्ल	INEW Dem	

lele: 23019746

Annex-11

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

B/46937/Sigs 7(b)/1800/

27 Nov 2019

UP-504

Office of the Executive Engineer
Electricity Transmission Division
U.P. Power Transmission Corporation Ltd.
132K.V. Sub Station,
Near Veterinary College, Aurangabad
Mathura-281001

## PTCC CLEARANCE FOR LILO OF 220KV (M-C) @ 220KV S/S VRINDAVAN TRANSMISSION LINE

- 1. Ref your letter No 1426/ETD(M)/ dt 30 Jul 2019. (copy att).
- 2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet ecceived 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

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

for information

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