

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power केन्द्रीय विद्यत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डवलप्मेंट प्रभाग

Power Communication Development Division

No. CEA/PCD/ PTCC/UP-477/ 6 21 - 23

Date: 29.05.2019

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 220 kV Muradnagar – Bagpat at 220 kV S/S Mandola Vihar

Ref: (i) BSNL letter no. DET/PTCC/ND/DV-9426/UP-687/2019-20/ dated 03.05.2019

(ii) Northern Railway letter no: 342-SIG/1/PTCC dated 28.03.2019

Sir,

The instant PTCC proposal has been examined. The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii) respectively has been examined. The Soil Resistivity value has been taken as 40000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL Telecom Cables and Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I&II respectively. The screening factors as applicable have been considered.

Telecommunication details from Defense are pending and the power authority has shown urgency for charging the line. In view of this, you are requested to issue provisional PTCC route approval.

Encl.: As above

Yours faithfully,

(Naresh Bhandari) Chief Engineer

Copy to:

1) GM(S&T), Northern Railway, Headquarter Office, Baroda Houşe, New Delhi (only annex-II)

2) Executive Engineer, Electricity Transmission Division - I, UPPTCL, 132 kV S/S Lal Kuan BSR Rd., Ghaziabad – 201002 (Uttar Pradesh)

MIC

3 Case No.: UP-477

Nai. of the Power Line: LILO of 220 KV D/C Muradnagar-Baghpat at 220 KV S/S Mandola Vihar Transmission Line

Annexure I

Toposheet Scale : 1cm=500mts Total Length : 10.242 Kms

S.R Value: 40,000 Ohm-cm

Sl. No.	Name of Telecom Line	LOP in Kms	MC in Ohms	Fault Current (Amps)	IV in Volts
BSNL Reference Date: 03	No. DET/PTCC/ND/DV-9426/UP-687/2019-202 .05.2019	0			
	BSNL Details				
1	Charayri Exchange to Ganauli Village (50 Pair UG cable)	7 < 1	less than	430v -	>
2	Charayri Exchange to Sarauli Village (50 Pair UG cable)	J			
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नरेश भंडारी/NARESH BHANDARI
मुख्य अभियन्ता/Chiet Engineer
मुख्य अभियन्ता/Chiet Engineer
कन्दीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

Coss	L. UD 477	ANNEXURE – II			
Name o	I o.: UP-477 Of the Power line: LILO of 220 kV D/C MUR AT AT 220 KV S/S MANDOLA VIHAR	Map Scale : 1cm=500mts Total Length : 10.242 Km. S.R. Value : 40,000 Ohms-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
	HERN RAILWAY NO. 342-SIG / 1 / PTCC DATED: 28-0	3-2019			
Affecte	d Blocks & Telcom Circuits Details		<u> </u>		*
1	Baghpat Road R/s - Khekra R/s	3.5	0.0012	6200	7
2	Khekra R/s – Noli R/s	5.0			
	Tuesday Tron 103	5.0	0.0094	8000	75
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