



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

No.: CEA/PCD/ PTCC/UP-512/ 76-76

Date: 28.01.2020

The Divisional Engineer (Telecom), BSNL  
PTCC O/o GM (North), Inspection Circle (T & D),  
CTS Compound, Netaji Nagar,  
Africa Avenue, New Delhi - 110023

**Subject:** PTCC proposal of 220 kV Ator-Madhuban Bapudham line on NBMC tower & D/C/  
M/C Monopole.

**Ref. :** (i) UPPTCL ref. No.1840 ETD-II/GZB Dated: 10.10.2019  
(ii) BSNL ref. No. DET/PTCC/ND/DV-9613/UP-809/2019-20 Dated: 09.01.2020  
(iii) Northern Railway ref. No. 342-SIG/1/PTCC/2019-20/10/5 Dated: 18.10.2019

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL cables and block circuits of Northern Railways as per details furnished vide ref. (ii) and ref. (iii) respectively has been examined. The Soil Resistivity value has been taken as 5,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL cables and Railway block circuits under single line to ground fault condition are enclosed at Annex-I and Annex-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.

*Upendra Kumar*  
28.01.2020

(Upendra Kumar)  
Chief Engineer

**Copy to :**

m/c

1. General Manager(S & T), Northern Railway, Headquarter Office, Baroda House, New Delhi-110001(Annex.-II only).
2. Executive Engineer, Electricity Transmission Division-II, U.P. Power Transmission Corporation Ltd., 132 kV Sub-station, Lal Kuan, B.S.R. Road, Ghaziabad-201002.

Case No. : UP-512

Name of the Power Line: 220 KV Ator- madhuban bapudham Line (12 KM) on NBMC Tower and D/C/M/C Monopole

Annexure I

Toposheet Scale : 1cm=500mts  
Total Length : 12 Kms  
S.R Value : 5,000 Ohm-cm

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

Reference No. DET/PTCC/ND/DV-9613/UP-809/2019-20  
Date : 09.01.2020

BSNL Details					
1	Duhai to Morta Road ( 100 pair) 2 KM				
2	Bahadurpur to Shamsheer ( 100 Pair) 3 KM	}	}	IV less than 430v	
3	Bahadurpur to Nangla to Ator Road ( 100 pair) 4 KM				
4	Sahapur to Morta Road ( 100 Pair) 4 KM				

*W. J. Kumar*  
28.01.2020

**ANNEXURE-II**

<b>Case No.: UP-512</b> <b>Name of the Power line</b> 220 KV ATOR – MADHUBAN BAPUDHAM ON NBMC TOWER AND D/C/M/C MONOPOLE			<b>Map Scale</b> : 1cm=500mts <b>Total Length</b> : 12Km. <b>S.R. Value</b> : 5,000 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 RAILWAY**  
 Ref. No: 342-SIG / 1/PTCC /2019 – 20 / 10/5      DATED: 18-10-2019

<b>Affected Blocks &amp; Telcom Circuits Details</b>					
S.No.	Block Name	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
1	Ghaziabad – Naya Ghaziabad	-----Out Side IV Consideration Zone-----			0
2	Naya Ghaziabad – Guldhar	0.5	0.0002	5800	1
3	Guldhar – Muradnagar	2.5	0.0109	6600	72

*Upendra Kumar*  
 28.10.2020