



भारत सरकार  
Government of India  
विद्युत मंत्रालय  
Ministry of Power  
केन्द्रीय विद्युत प्राधिकरण  
Central Electricity Authority  
विद्युत संचार विकास प्रभाग  
Power Communication Development Division

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Case No. : UP-535:

PTCC proposal for 220 kV D/C transmission line from 220/132 kV UPPTCL Substation Bithoor to UPMRC Kanpur Metro RSS at CSA: 8.87 km (approx.)

Reference:		
S. No.	Reference No.	Dated
(i)	UPMRC: UPMRC/PTCC/Priority Section/Kanpur metro	22.06.2021
(ii)	BSNL: DET/PTCC/ND/DV-9931/UP-978/2021-2022	18.08.2021
(iii)	North Eastern Railway: NER-HQ0SndT(TELE)/31/2020-O/O PCSTE/HQ/NER	18.08.2021
(iv)	Defense : B/46937/Sigs 7(b)/2458	04.08.2020

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of North Eastern Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of North Eastern Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors, as applicable, have been considered. The Defense Authority have accorded NOC vide above reference (iv) for the proposed power line.

Taking above into consideration, necessary action regarding issuance of PTCC route approval may be taken.

Encl.: As above.

Signature Not Verified  
Digitally signed by  
RAGHVENDRA PRATAP SINGH  
Date: 2021.09.09 15:05:23 IST

Director

To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi 110001.	Annexure-I only
2.	Dy. CSTE/Tele/GKP	North Eastern Railway, Office of General Manager (S&T), Gorakhpur.	Annexure-II only
3.	JGM/Tele	UPMRC: Administrative Building, Near Dr. Bhimrao Samajik Parivartak Sthal, Vipin Khand, Gomti Nagar, Lucknow-226010.	Copy for information

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Case No. : UP-535

Annexure I

Name of the Power Line: 220 KV transmission line (2-circuits) from  
220/132 KV UPPTCL Substation, Bithoor to  
UPMRC Kanpur Metro RSS at CSA

Toposheet Scale : 1cm=500mts  
Total Length : 8.87 Kms (approx)  
S.R Value : 50 00 : 0m/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-9931/UP-978/2021-22 Dated:- 18.08.2021

BSNL Details					
1	Sighpur to Bithoor turn at kalyanpur Metro Station of Kanpur Metro 100 pair ( 1.2 KM) & 200 pairs ( 2 KM) Underground copper cable	}			IV less than 430V
2	Bithoor turn at kalyanpur Metro Station to RSS Bldg of Kanpur Metro near Ramadental turn 100 pair ( 0.3 KM) , 200 pairs ( 0.5 KM) & 400 pairs ( 1.94 KM) Underground copper cable				
3	Bithoor turn at kalyanpur Metro Station to RSS Bldg of Kanpur Metro near Ramadental turn 24 Fiber ( 2.6 KM) , 48 Fibers ( 3.5 KM) & 96 Fiber ( 1.2 KM) Armoured Optical Fiber Cable				

*[Signature]*

DEPT. OF TELECOM  
STATE ENGINEERING COLLEGE  
KANPUR  
U.P.  
208002

**ANNEXURE-II**

Case No.: UP-535

Name of the Power line: 220 kV D/C transmission line from 220/132 kV UPPTCL Substation Bithoor to UPMRC Kanpur Metro RSS at CSA.

Map Scale : 1 cm=500 m  
Total Length : 8.87 km (approx.)  
S.R. Value : 5,000 ohm-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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North Eastern Railway: NER-HQ0SndT(TELE)/31/2020-O/O PCSTE/HQ/NER Dated: 21.01.2021

**Affected Blocks & Telecom Circuits Details**

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
1	Rawatpur to Kanpur Anwarganj		Out of Parallelism		00
2	Kanpur Anwarganj to Kanpur Central		Out of Parallelism		00
3	Rawatpur to Kalyanpur		Out of Parallelism		00
4	Kalyanpur to Mandhana	4.2	0.0021	6864	15

