



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत संचार विकास प्रभाग

Power Communication Development Division

Case No. : UP-511:
PTCC proposal of 400 kV D/C Jaunpur to Obra (up to LILO point of Obra-B to Obra -C) transmission line. (165.909 km)

Reference:		
S. No.	Reference No.	Dated
(i)	Obra-C Badaun transmission Ltd :OCBTL/Bareilly/PTCC/2019/130	26.09.2019
(ii)	BSNL: DET/PTCC/ND/DV-9790/UP-911/2020-2021	28.10.2020
(iii)	Northern Railway: 342-SIG/1/PTCC/2019-20/03/01	11.03.2020
(iv)	North Central Railway: NCR/S&T/2074/telecom/PTCC(part-1)	26.02.2020
(v)	North Eastern Railway: N/242/1(Tele)PTCC Part-I/2049	27.01.2020
(vi)	East Central Railway: ECR-HQ0SnT(CPTC)/1/2020-O/o Dy. CSTE /HQ/ECR/1900	10.03.2021
(vii)	Defense: B/46937/Sigs 7(b)/2144	08.01.2021

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL, Block & Telecom circuits of Northern Railway, North Central Railway, North Eastern Railway and East Central Railway with respect to details furnished vide above references (ii), (iii), (iv), (v) and (vi) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL, Block & Telecom circuits of Northern Railway, North Central Railway, North Eastern Railway and East Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I, Annexure-II, Annexure-III, Annexure-IV and Annexure-V respectively. The screening factors, as applicable, have been considered. Vide reference (vii) above, The Defence Authority have issued No Objection Certificate (NOC).

Taking above into consideration, kindly take necessary action for PTCC route approval.

Encl.: As above.

D. Prasad
D. Prasad
Date: 2021.09.04 16:45:30

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.	AESTE/UTS	Northern Railway, Office Headquarters, Baroda House, New Delhi-110001.	Annexure-II only
3.	ASTE/Tele/HQ,NCR/Allahabad	North Central Railway, HQ's Office (S&T Branch), Ganga Parishar, Subedarganj, Allahabad-211015.	Annexure-III only
4.	DRM(S&T), Varanasi	North Eastern Railway O/o Divisional Railway Manager (S&T), Varanasi- 221002.	Annexure-IV only
5.	Dy. CSE/HQ	East Central Railway O/o General Manager (S&T), Hajipur-844101.	Annexure-V only
6.	Manager (Projects)	Obra-C Badaun Transmission Ltd., House No.116, Green Park Colony, Bisalpur Road, Bareilly-243006.	Copy for information

Case No :

UP-511

Annexure I

Toposheet Scale : 1cm=500mts

Total Length : 165.909 Kms

S.R Value : 1000 Ohm-cm

Name of the Power Line: 400 KV DC Jaunpur-Oobra (upto LILO point of Oobra-B to Oobra-C) Line

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-9790/UP-911/20201-21 Dated:- 28.10.2020

Date :

BSNL Details					
1	Swinyawan TE to Mumhar 50 Pair (3 KM)	}	Outside I.V.	}	Consideration Zone
2	Swinyawan TE to Netanagar 200 Pair (2 KM)				
3	Swinyawan TE to Kasturipur 100 Pair (5 KM)				
4	Swinyawan TE to Kasturipur 50 Pair (5 KM)				
5	Swinyawan TE to Kasturipur 100 Pair (2 KM)				
6	Swinyawan TE to Kasturipur 200 Pair x 3 (0.5 KM)				
7	Oobra TE to Club No 1 & Colony 100 pair x 3, 50 Pair x 1 (1.5 KM)	}	Out of parallelism	}	
8	Oobra TE to Sectrop-9 & Colony 200 Pr x 1, 100 pair x 1, 50 Pair x 1 (3 KM)				
9	Oobra TE to Sectrop-8 & Colony 400 Pr (2.5 KM)				
10	Oobra TE to Convent School & market, 100 pair x 3, 50 Pair x 1 (1 KM)				
11	Oobra TE to Chopan Road & market, 100 pair x 3, 50 Pair x 1 (1.8 KM)	}	IV less than 430V	}	
12	Sakteshgarh (SKG) TE to Railway Crossing , 100 Pair (2.5KM)				
13	Railway crossing to Railway Station SKG, 5 Pair(1 KM)				
14	Sakteshgarh (SKG) TE to Nunoti, 100 Pair (2 KM)	}	IV less than 430V	}	
15	Bheri (BDI) TE to Vindya College, 20 Pair (3 KM)				
16	Magraha TE to Sikar , 100 Pair (3 KM)	}	IV less than 430V	}	
17	Magraha TE to Khanpur , 100 Pair (3 KM)				
19	Magraha TE to Batana , 50 Pair (2.5 KM)				
20	Magraha TE to Magraha Village , 50 Pair (1 KM)				

Januj

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ANNEXURE – II

Case No.: UP-511 Name of the Power Line: 400 kV D/C Jaunpur to Obra (up to LILO point of Obra-B to Obra –C) transmission line.		Map Scale : 1 cm = 500 m. Route Length : 165.909 km Soil Resistivity : 1,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

NORTHERN RAILWAY Ref. No: 342-SIG/1/PTCC/2019-20/03/01 DATED: 11.03.2020

Affected Blocks & Telecom Circuits Details

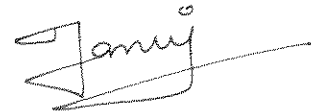
Janghai-Varanasi section

1	Mondh R/S to Bhadohi R/S	Outside IV consideration zone			00
2	Bhadohi R/S to Parsipur R/S	Outside IV consideration zone			00
3	Parsipur R/S to Kapsethi R/S	4.1	0.0011		11
4	Kapsethi R/S to Sewapuri R/S	Outside IV consideration zone			00

Section of Allahabad-Jaunpur Branch*

1	Barsathi R/S to Bhanaur R/S	Outside IV consideration zone			00
2	Bhanaur R/S to Warigaon Newada R/S	0.7	0.0003	10573	03
3	Warigaon Newada R/S to Mariahu R/S	Outside IV consideration zone			00

*The Section details are not present in the Annexure provided by Northern Railway but it is found in the Topo-map that proposed power line has crossed this section. In view of this, IV calculations have been done for this section.



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ANNEXURE – III

Case No.: UP-511 Name of the Power Line: 400 kV D/C Jaunpur to Obra (up to LILO point of Obra-B to Obra –C) transmission line.		Map Scale : 1 cm = 500 m. Route Length : 165.909 km Soil Resistivity : 1,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

NORTH CENTRAL RAILWAY Ref. No: NCR/S&T/2074/telecom/PTCC(part-1) DATED: 26.02.2020

Affected Blocks & Telecom Circuits Details

Allahabad-PT. Deen Dayal Upadhyay section

1	Jhingura to Pahara	Outside IV consideration zone			00
2	Pahara to Dagmagpur	1.4	0.0002	7681	02
3	Dagmagpur to Chunar	Outside IV consideration zone			00

Chunar-Chopan section

1	Viswanathpuri to Saktesh Garh	Outside IV consideration zone			00
2	Saktesh Garh to Lusa	12.8	0.0034	8856	30
3	Lusa to Khairahi	4.1	0.0013	10572	14
4	Khairahi to Sonbhadra	Outside IV consideration zone			00
5	Sonbhadra to Churk	Outside IV consideration zone			00
6	Churk to Agory Khas	Out of Parallelism			00
7	Agory Khas to Chopan	Outside IV consideration zone			00



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ANNEXURE – IV

Case No.: UP-511 Name of the Power Line: 400 kV D/C Jaunpur to Obra (up to LILO point of Obra-B to Obra –C) transmission line.		Map Scale : 1 cm = 500 m. Route Length : 165.909 km Soil Resistivity : 1,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

NORTH EASTERN RAILWAY Ref. No: N/242/1(Tele)PTCC Part-I/2049		DATED: 27.01.2020			
Affected Blocks & Telecom Circuits Details					
Nigatpur- Rajatalab at Km. No. 230/0-1					
1	Kataka to Kachawa Road	Outside IV consideration zone			00
2	Kachawa Road to Nigatpur	Outside IV consideration zone			00
3	Nigatpur to Rajatalab	1.9	0.0008	8856	07
4	Hardattpur to Rajatalab	Outside IV consideration zone			00

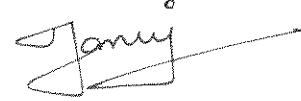


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ANNEXURE – V

Case No.: UP-511 Name of the Power Line: 400 kV D/C Jaunpur to Obra (up to LILO point of Obra-B to Obra –C) transmission line.		Map Scale : 1 cm = 500 m. Route Length : 165.909 km Soil Resistivity : 1,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

East Central Railway Ref no.: ECR-HQ0SnT(CPTC)/1/2020-O/o Dy. CSTE /HQ/ECR/1900 DATED: 10.03.2021					
Affected Blocks & Telecom Circuits Details					
Copan-Billi-Obradam section					
1	Copan to Billi	1.6	0.0002	14909	03
2	Billi to Obradam	Outside IV consideration zone			00
Copan-Billi-Gurmura section					
1	Billi to Salia Banawa	Outside IV consideration zone			00
2	Salia Banawa to Gurmura	Outside IV consideration zone			00



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