



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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के.वि.प्रा. केस सं. : MP-444
पी.टी.सी.सी. प्रस्ताव 2 <sup>nd</sup> circuiting of 220 kV DCSS line from Satna (220 kV S/S) to Chhatarpur (220 kV S/S) (160.0 km)

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	MPPTCL: 04-01/PTCC/2264/TR-I/6488	13.09.2018
(ii)	BSNL: IC/MBI/PTCC/MP-569	23.03.2019
(iii)	North Central Railway: NCR/S&T/2074/Telecom/PTCC received through MPPTCL email dated 20.12.2021	29.11.2018
(iv)	Defense: B/46937/ Sigs 7(b)/1262	01.11.2018

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। बीएसएनएल के टेलिकॉम केबल एवं उत्तर मध्य रेलवे के ब्लॉक एवं टेलिकॉम सर्किटों पर निम्न आवृत्ति प्रेरण गणना क्रमशः उपरोक्त संदर्भ (ii) एवं (iii) में दिए गए विवरणों के संबंध में की गई है। सिंगल लाइन टू ग्राउंड फाल्ट अवस्था में समानांतर बीएसएनएल के टेलिकॉम केबल एवं उत्तर मध्य रेलवे के ब्लॉक एवं टेलिकॉम सर्किटों पर प्रेरित वोल्टेज क्रमशः अनुलग्नक - I एवं अनुलग्नक - II में संलग्न है। स्क्रीनिंग कारक का मान यथानुरूप लिया गया है। रक्षा प्राधिकरण ने उपरोक्त संदर्भ (iv) के द्वारा अनापत्ति प्रमाण पत्र जारी किया है। (अनुलग्नक- III में संलग्न)।

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के संबंध में आवश्यक कार्रवाई की जाए।

संलग्न: ऊपरोक्त अनुसार

राजेश कुमार सिंह  
18.02.22  
निदेशक

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 <sup>rd</sup> Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	
2.	ASTE	North Central Railway, HQ's Office (S&T Branch), Ganga Parisar, Subedarganj, Prayagraj - 211015	Annex-II only
3.	Chief Engineer (Pig. & Design)	MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur - 482008	Copy for information

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आजादी का  
अमृत महोत्सव

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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CEA Case No. : MP-444
PTCC proposal of 2 <sup>nd</sup> circuiting of 220 kV DCSS line from Satna (220 kV S/S) to Chhatarpur (220 kV S/S) (160.0 km)

Reference:		
S. No.	Reference No.	Dated
(i)	MPPTCL: 04-01/PTCC/2264/TR-I/6488	13.09.2018
(ii)	BSNL: IC/MBI/PTCC/MP-569	23.03.2019
(iii)	North Central Railway: NCR/S&T/2074/Telecom/PTCC received through MPPTCL email dated 20.12.2021	29.11.2018
(iv)	Defense: B/46937/ Sigs 7(b)/1262	01.11.2018

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and block & telecom circuits of North Central Railway with respect to details furnished vide above reference (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 Central 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. Vide reference (iv) above, the Defence Authority have issued No Objection Certificate (NOC). (a copy enclosed as Annex-III).

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

Encl.: As above.

Raghunada Pratap Singh  
18.02.22

Director

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 <sup>rd</sup> Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	
2.	ASTE	North Central Railway, HQ's Office (S&T Branch), Ganga Parisar, Subedarganj, Prayagraj - 211015	Annex-II only
3.	Chief Engineer (Plg. & Design)	MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur - 482008	Copy for information

Annex - I

Office Case No.: <b>MP-444</b>		Map Scale: 1:50,000			
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-569		Route Length: <b>160.000</b> Kms			
Railway Office Case No.:		Average SR Value: 10000 Ohm cms			
Name of Power Line		2 <sup>nd</sup> circuiting of 220KV DCSS line from 220KV S/s Satna to 220KV S/s Chhatarpur.			
S. No.	Name of Telecom Line/ Cable	Length of Parallelism in Kms.	Mutual Coupling in Ohms	Fault Current in Amps	Induce Voltage in Volts
	SATNA SSA				
	SDOT Satna				
	BSNL U/G Cable: - existing within 8.00km to the proposed power line; i.e. 8.00km corridor on either side of proposed power line - NIL.				
	CHHATARPUR SSA				
	SDOT Khajuraho/ SDOP Chhatarpur				
(1)	Rajnagar T/Exchange				
	Cable-A (Towards Khajuraho) - 400 Pair				
	Cable-B (Towards Khajuraho) - 100 Pair				
	Cable-C (Towards Khajuraho) - 100 Pair				
	Cable-D (Towards Khajuraho) - 50 Pair				
	Cable-E (Towards Khajuraho) - 50 Pair				
(2)	Khauroho T/Exchange				
	Cable-A (Towards Bamitha) - 400 Pair				
	Cable-B (Towards Bamitha) - 200 Pair				
	Cable-C (Towards Bamitha) - 100 Pair				
	Cable-D (Towards Gol Market) - 200 Pair				
(3)	Basari T/Exchange				
	Cable-A - 50 Pair				
(4)	Chhatarpur (Chhatrasal Chowk) T/Exchange				
	Cable-A (Towards Market) - 1000 Pair				
	Cable-B (Towards Market) - 1000 Pair				
	Cable-C (Towards Market) - 400 Pair				
	Cable-D (Towards Bus Stand) - 800 Pair				
	Cable-E (Towards Bus Stand) - 400 Pair				
	Cable-F (Towards Panna Road) - 1000 Pair				
	Cable-G,H (Towards Panna Road) - 200 Pair				
	Cable-I (Towards Bijawar Naka) - 800 Pair				
(5)	Chhatarpur (Bus Stand) T/Exchange				
	Cable-A (Towards Nowgaon Road) - 400 Pair				
	Cable-B (Towards Nowgaon Road) - 200 Pair				
	Cable-C (Towards Mahoba Road) - 400 Pair				
	Cable-D (Towards Jawahar Road) - 200 Pair				

IV less than 430V

Prateek  
 Director  
 Director  
 Director  
 Director

(6)	<b>Chhatarpur (Galla Mandi) T/Exchange</b>				
	Cable-A (Towards Market) – 800 Pair				
	Cable-B (Towards Market) – 400 Pair				
	Cable-C,D (Towards Sarani Gate) – 200 Pair				
(7)	<b>Chhatarpur (Choubey Colony) T/Exchange</b>	IV	less than 430V		
	Cable-A (Towards Panna Road) – 400 Pair				
(8)	<b>Chhatarpur (Deri Road) T/Exchange</b>				
	Cable-A (Towards Sagar Road) – 800 Pair				
(9)	<b>Chhatarpur (Satai Road) T/Exchange</b>				
	Cable-A, B (Towards Satai Road) – 400 Pair				
	Cable-C, D (Towards Satai Road) – 200 Pair				
(10)	<b>Chhatarpur (BSNL Bhawan) T/Exchange</b>				
	Cable-A (Towards Panna Road) – 400 Pair				
	Cable-B, C (Towards Panna Road) – 200 Pair				

*Prateek*

श्री प्रदीप कुमार शर्मा  
 सहायक निदेशक/अवर निदेशक-II  
 कक्षा प्रभु साहू रोड/डी.डी.ओ.  
 पावर विभाग/मिनिस्ट्री ऑफ पावर  
 नई दिल्ली/भारत

**ANNEXURE-II**

<b>CEA Case No.:</b> MP-444		<b>Map Scale</b> : 1 cm=500 m			
<b>Name of the Power line:</b> 2nd circuiting of 220 kV DCSS line from Saina (220 kV S/S) to Chhatarpur (220 kV S/S)		<b>Total Length</b> : 160.0 km			
		<b>S.R. Value</b> : 10,000 $\Omega$ -cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

NORTH CENTRAL RAILWAY Ref. No: NCR/S&T/2074/Telecom/PTCC Dated: 29.11.2018  
**Affected Blocks & Telecom Circuits Details**

Mahoba - Khajuraho Section					
1	Khajuraho - Rajnagar K	2.6	0.0026	7500	20
2	Rajnagar K - Singhpur Dumra	1.1	0.0003	7500	2
Khajuraho - Lalipur Section					
1	Ishanagar - M.C.S. Chhatarpur	2.1	0.0040	10000	40
2	M.C.S. Chhatarpur - Basrai	5.9	0.0076	9100	69
3	Basrai - Duriyaganj	Out of IV consideration zone			0

*Prateek*  
प्रमुख अभियंता/Chief Engineer  
राज्यक विभाग-II/State Director-II  
केन्द्रीय विद्युत आयोग/CEA,  
विद्युत मंत्रालय/Ministry of Power  
भारत सरकार/Govt. of India  
नई दिल्ली/New Delhi

Annex-III

MP-444

Tele : 23019746

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

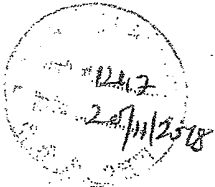
B/46937/Sigs 7(b)/1262/

01 Nov 2018

Madhya Pradesh Power Transmission Co. Ltd.  
Chief Engineer (Procurement)  
Block No. 3, Shakti Bhawan, Rampur,  
Jabalpur (M.P.) 482008

**PTCC ROUTE APPROVAL FOR CONSTRUCTION OF 2<sup>ND</sup> CIRCUITING OF 220 KV  
DCSS LINE FROM SATNA (220KV) TO CHHATARPUR (220KV)**

1. Ref your letter No 04-01/PTCC/2264/TR-I/6488 dt 13 Sep 2018 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



*(Signature)*  
(A Rawat)  
Maj  
GSO 1 (Comn)  
for SO-in-C

**Copy to :-**

✓ The Director (PTCC), CEA  
Power Communication Development Division  
NRPC Complex, 18-A Shaheed Jeet Singh Marg  
Katwaria Sarai, New Delhi - 110016

for information.

*(Signature)*, 39.11.18

*(Signature)*  
20/11