



**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. : GUJ-826
PTCC proposal of 220 kV S/C 800 Sqmm U/G cable line from 220 kV Shivlakha (GETCO) S/S to proposed Shivlakha TSS (RVNL) (2.555 km)

Reference:		
S. No.	Reference No.	Dated
(i)	GETCO: CE(Project)/SE (Planning)/1603	09.03.2022
(ii)	BSNL: IC/MBI/PTCC/WGJ100320223869	15.03.2022
(iii)	Western Railway: SG.158/28/12(1187)	21.03.2022

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and block & telecom circuits of Western Railway with respect to details furnished vide above reference (ii) & (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and block & telecom circuits of Western Railway under Single Line to Ground fault condition are enclosed at Annexure-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 the charging of the line. In view of this take necessary action regarding issuance of **provisional PTCC approval for 220 kV S/C 800 Sqmm U/G cable line from 220 kV Shivlakha (GETCO) S/S to proposed Shivlakha TSS (RVNL).**

Encl.: As above.

राजेश्वर प्रताप सिंह  
 Director 24.03.22

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.	GM(S&T)	Western Railway, Office of CSTE, S&T Dept., 5 <sup>th</sup> Floor, Station Building, Churchgate, Mumbai - 400020	Annex-II only
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	With general instruction to submit PTCC proposals of power lines owned by them only



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**Power Communication Development Division**

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<b>के.वि.प्रा. केस सं. : GUJ-826</b>
<b>पी.टी.सी.सी. प्रस्ताव 220 kV S/C 800 Sqmm U/G cable line from 220 kV Shivlakha (GETCO) S/S to proposed Shivlakha TSS (RVNL) (2.555 km)</b>

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	GETCO: CE(Project)/SE (Planning)/1603	09.03.2022
(ii)	BSNL: IC/MBI/PTCC/WGJ100320223869	15.03.2022
(iii)	Western Railway: SG.158/28/12(1187)	21.03.2022

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई बीएसएनएल के टेलिकॉम केबलों एवं पश्चिम 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 फॉल्ट अवस्था में समानांतर बीएसएनएल के टेलिकॉम केबलों एवं पश्चिम रेलवे के ब्लॉक एवं टेलिकॉम सर्किटों पर प्रेरित वोल्टेज क्रमशः अनुलग्नक -I एवं II में संलग्न है। स्क्रीनिंग कारक का मान यथानुरूप लिया गया है।

रक्षा प्राधिकरण से दूरसंचार विवरण लंबित हैं और बिजली प्राधिकरण ने लाइन की चार्जिंग के लिए तत्कालता दिखाई है। इसे देखते हुए 220 kV S/C 800 Sqmm U/G cable line from 220 kV Shivlakha (GETCO) S/S to proposed Shivlakha TSS (RVNL) के लिए अंतिम पीटीसीसी अप्रूवल जारी करने के संबंध में आवश्यक कार्रवाई की जाए।

**संलग्न:** ऊपरोक्त अनुसार

**शांति कानुन प्रगति**  
निदेशक 24.03.22

**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.	GM(S&T)	Western Railway, Office of CSTE, S&T Dept., 5 <sup>th</sup> Floor, Station Building, Churchgate, Mumbai - 400020	Annex-II only
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CEA office case No: GUJ - 826 Annex - I  
Map Scale: 1 Cm=500 Meters

DET (PTCC) Office Case No: WGJ100320223869 (2867)  
Route Length: 2.555 Kms

Railway Office Case No:  
Soil Resistivity: 7500 Ohm-Cm

Name of Power Line: **220KV 800sq mm Al corrugated sheathed U/G cable line from 220KV Shivilakha S/S(GETCO) to proposed Shivilakha TSS(RVNL).**

Telecom Details from BSNL

Details from Power Company/Authority

Sl No.	Name of the Telecom Cable/Line	Length of Parameter in Km	Mutual coupling in Ohms	Fault current in Amp	Induced Voltage in Volts
1	Lakadia Exchange				
1A	Lakadia Exchange to Local 400PX1, 100PX1, 50PX2				
2A	Lakadia Exchange to Local 200PX1, 50PX2, 20PX1				
3A	Lakadia Exchange to Local 50PX1, 20PX1				
4A	Lakadia Exchange to Local 20PX1				
2	Chitrod Exchange				
1B	Chitrod Exchange to Local 50PX1, 20PX1				
2B	Chitrod Exchange to Local 20PX1				

IV less than  
430 V

Prateek

प्रतिष्ठित अधिकारी  
सहायक निदेशक/Asst. Director-II  
केन्द्रीय विद्युत प्राधिकरण/C.E.A.  
विद्युत मंत्रालय/Ministry of Power  
भारत सरकार/Cent. of India  
नई दिल्ली/New Delhi

**ANNEXURE-II**

<b>CEA Case No.: GUJ-826</b> <b>Name of the Power line: 220 kV S/C 800 Sqmm U/G cable line from 220 kV Shivilakha (GETCO) S/S to proposed Shivilakha TSS (RVNL)</b>		<b>Map Scale : 1 cm=500 m</b> <b>Total Length : 2.555 km</b> <b>S.R. Value : 7500 ohm-cm</b>			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Western Railway : SG.158/28/12(1187)

Dated: 21.03.2022

**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	Samakhyali - Katariya	Out of parallelism			0
2	Katariya - Surbari				0
3	Kidiyanagar - Chitrod				0
4	Chitrod - Shivilakha				0
5	Shivilakha - Lakadiya	1.2	0.0004	10000	4
6	Lakadiya - Samakhyali	Out of parallelism			0

*Prateek*

प्रतीक श्रीवास्तव / PRATEEK SHRIWASTAVA  
सहायक निदेशक-II / Asst. Director-II  
केन्द्रीय विद्युत प्राधिकरण / C.E.A.  
विद्युत मंत्रालय / Ministry of Power  
भारत सरकार / Govt. of India  
नई दिल्ली / New Delhi