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आज़ादी 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. : MRA-1194 / 322-324

PTCC proposal of Conversion work of existing 220 kV D/C Hinjewadi-I – Infosys – Pegasus – Hinjewadi-II – Pirangut OG line into D/C UG cable (16.802 km)

Reference:

S. No.	Reference No.	Dated
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-585/07773	23.12.2021
(ii)	BSNL: IC/MBI/PTCC/MRA-2527	01.02.2022
(iii)	Central Railway: N.153/PTCC/220kV/MAH-802	16.03.2022

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of Central 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 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.

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 subject transmission line.

**Encl.:** As above.

राधेन्द्र प्रताप सिंह  
Director 1.04.22

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)	Central Railway, Headquarters Office, S&T Branch, 3 <sup>rd</sup> Floor, Annex Bldg., Mumbai CSMT	Annexure-II only
3.	Superintending Engineer (Project Schemes)	MSETCL, O/o Superintending Engineer (Project Schemes Dept.), Prakashganga, P. No. C19, #E, BKC, Bandra (East), Mumbai - 400051	Copy for information

etc



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Power Communication Development Division

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के.वि.प्रा. केस सं. : MRA-1194 / 322-324
पी.टी.सी.सी. प्रस्ताव Conversion work of existing 220 kV D/C Hinjewadi-I – Infosys – Pegasus – Hinjewadi-II – Pirangut OG line into D/C UG cable (16.802 km)

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	MSETCL: MSETCL/CO/PS/PTCC/In/B-585/07773	23.12.2021
(ii)	BSNL: IC/MBI/PTCC/MRA-2527	01.02.2022
(iii)	Central Railway: N.153/PTCC/220kV/MAH-802	16.03.2022

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। बीएसएनएल के टेलिकॉम केबलों एवं मध्य रेल के ब्लॉक और टेलीकॉम सर्किट पर निम्न आवृत्ति प्रेरण गणना क्रमशः उपरोक्त संदर्भ (ii) और (iii) में दिए गए विवरणों के संबंध में की गई है। सिंगल लाइन टू ग्राउंड फाल्ट अवस्था में समानांतर बीएसएनएल के टेलिकॉम केबलों एवं मध्य रेल के ब्लॉक और टेलीकॉम सर्किट पर प्रेरित वोल्टेज क्रमशः अनुलग्नक -I एवं अनुलग्नक -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 विषयांकित पॉवर लाइन के लिए अंतिम पीटीसीसी अप्रूवल जारी करने के संबंध में आवश्यक कार्रवाई की जाए।

संलग्न: ऊपरोक्त अनुसार

राधेशंकर प्रताप सिंह  
1.4.22  
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.	GM (S&T).	Central Railway, Headquarters Office, S&T Branch, 3 <sup>rd</sup> Floor, Annex Bldg., Mumbai CSMT	Annexure-II only
3.	Superintending Engineer (Project Schemes)	MSETCL, O/o Superintending Engineer (Project Schemes Dept.), Prakashganga, P. No. C19, #E, BKC, Bandra (East), Mumbai - 400051	Copy for information

Annex-2

CFA case No. 3 MRA-1194

DET(PTCC) office case no.	Route length- 16.802 km
Railway office case no.	Soil Sensitivity- 10000 - $\Omega$ cm
Name of the power line	

Sr No	Name of telecom line/cable	Length of cable KM	Mutual Coupling	Fault Current (A)	Induced Voltage (V)
01	Hinjewadi Ph 2 TE Bodakewadi to Mann Gao 200 Pr UG Cable	1km	IV less than 130 V		
02	Hinjewadi Ph 2 TE TO OF INFOSYS UG Cable 400 PAIR	1.5 km			
03	Hinjewadi Ph 2 TE TO Marunji RD UG Cable 200 PAIR	2 km			
04	Hinjewadi Ph 2 TE TO Wipro UG Cable 200 PAIR	1.5km			
05	Hinjewadi Ph 1 to MIDC UG cable 800Pr	2Km			
06	Hinjewadi Ph 1 TE to Bhumkar Chowk UG cable 800Pr	2.2Km			
07	Hinjewadi Ph 1 TE to Geometric UG cable 200Pr	500Mtr			
08	Hinjewadi Ph 1 TE to Geometric UG cable 100 Pr	200 Mtrs			
09	WAKAD TE to Beltika nagar UG cable 1200 Pr	1 Km			
10	WAKAD TE to Kalewadi UG cable 1200 Pr	1.5 Km			
11	WAKAD TE to Ashoka society UG cable 800 Pr	1 Km			

Prateek

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

DET(PTCC) office case No. Railway office case No.	Route length- 16.802 km Soil sensitivity 10000 $\Omega$ -cm
Name of the Power Line	

Sr. No.	Name of Telecom Line/Cable	Length of cable KM	Mutual Coupling	Fault Current(A)	Induced Voltage(V)
12	Chinchwad MDF to Morwadi 1200 pair	1.50 km	IV less than 430 V		
13	Chinchwad MDF to Yashwantnagar 1200 pair	2 km			
14	Chinchwad MDF to Sudarshan nagar 1200 pair	1 km			
15	Chinchwad MDF to Highway Tower 1200 pair	1.5 km			
16	Chinchwad MDF to Mohannagar 1200 pair	1.5 km			
17	Kharalwadi MDF to Lokhande Bhavan 1200 pair	1.5 km			
18	Kharalwadi MDF to Kamala cross 800 pair	1.5 km			
19	Kharalwadi MDF to Station Road 800 pair	1.5 km			
20	Kharalwadi MDF to Haffikine Pillar 1200 pair	1 km			
21	Kharalwadi MDF to Nehrunagar 1200 pair	1.5 km			
22	Kharawalwadi MDF to Fire Brigade 800 pair	1.5 km			
23	Kharalwadi MDF to HAL company 800 pair	1 km			
24	Shewale MDF to Gokhale Park 400 pair	1 km			
25	Shewale MDF to Pavananagar 1200 pair	1.5 km			
26	Shewale MDF to Gawade Colony 1200 pair	1.5 km			
27	Shewale MDF to Shreedhar Nagar 400 pair	1.5 km			

*Prateek*  
 प्रतीक श्रीवास्तव / PRATEEK SRIVASTAVA  
 सहायक निदेशक-II / Asstt. Director-II  
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.  
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 नई दिल्ली / New Delhi

**ANNEXURE – II**

<b>CEA Case No.: MRA-1194</b> <b>Name of the Power line:</b> Conversion work of existing 220 kV D/C Hinjewadi-I – Infosys – Pegasus – Hinjewadi-II – Pirangut OG line into D/C UG cable		<b>Map Scale</b> : 1 cm=500 m <b>Total Length</b> : 16.802 <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.

CENTRAL RAIWAY Ref. No: N.153/PTCC/220kV/MAH-802

Dated: 16.03.2022

**Affected Blocks & Telecom Circuits Details**

1	Dehu Rd - Akurdi	Outside IV consideration zone	0
2	Akurdi - Chinchwad		0
3	Chinchwad - Pimpri		0
4	Pimpri - Dapodi		0

*Prateek*

प्रतीक शर्मा / PRATEEK SHARMA  
सहायक निदेशक-II / Asst. Director-II  
केन्द्रीय विद्युत प्राधिकरण / C.E.A.  
विद्युत मंत्रालय / Ministry of Power  
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