



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

CEA Case No. : GUJ-781

PTCC proposal of 400 kV D/C Hadala - Shapar line (62.17 km)

Reference:

S. No.	Reference No.	Dated
(i)	GETCO: CE(Project)/EE (Tr.-3)/3276	01.04.2019
(ii)	BSNL: IC/MBI/PTCC/WGJ050420192407_WGJ300520192454_ WGJ011120213608	06.06.2022
(iii)	Western Railway: SG. 158/28/12 (1101)	18.10.2019
(iv)	Defense: B/46937/Sigs 7(b)/1561	29.06.2019

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. Defense Authority, vide reference (iv) above, has issued No Objection Certificate (NOC) (enclosed as Annexure-III).

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

Encl.: As above.

21/06/22 युवाय निरे
9.06.2022
Director

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL, Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	Annex-I only
2.	GM(S&T)	Western Railway, Office of CSTE, S&T Dept., 5 th Floor, Station Building, Churchgate, Mumbai - 400020	Annex-II only
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	For info

File No.CEA-PS-17-11(12)/41/2022-PCD Division/465-467



आजादी का
अमृत महोत्सव

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Power Communication Development Division

के.वि.प्रा. केस सं. : GUJ-781
पी.टी.सी.सी. प्रस्ताव 400 kV D/C Hadala – Shapar line (62.17 km)

क्रमांक	सन्दर्भ सं.	दिनांक
(i)	GETCO: CE(Project)/EE (Tr.-3)/3276	01.04.2019
(ii)	BSNL: IC/MBI/PTCC/WGJ050420192407_WGJ300520192454_ WGJ011120213608	06.06.2022
(iii)	Western Railway: SG. 158/28/12 (1101)	18.10.2019
(iv)	Defense: B/46937/Sigs 7(b)/1561	29.06.2019

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। 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 गयी है। सिंगल लाइन टू ग्राउंड फाल्ट 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 ने उपरोक्त संदर्भ (iv) के द्वारा अनापत्ति प्रमाण पत्र जारी किया है।

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

संलग्न: ऊपरोक्त अनुसार

राधेशंकर कुमार सिंह
निदेशक
09.06.2022

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054.	Annex-I only
2.	GM(S&T)	Western Railway, Office of CSTE, S&T Dept., 5 th Floor, Station Building, Churchgate, Mumbai – 400020	Annex-II only
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	For info

Annex-I

CEA Office Case No. --- GUS-781		Map scale- 1 Cms = 500 Meters			
DET (PTCC) Office Case No.: 2775		Route Length- 62.17 KMs			
Railway Office Case No.		Soil Resistivity: 15000 \approx 40000 Ω -cm			
Name of Power Line: 400 KV D/C Hadala S/S - Shapar S/S Line.					
DETAILS FROM BSNL SIDE		DETAILS FROM POWER COMPANY			
Sl.No.	Name of the Telecom line/Cable	Length of parameter in KM	Mutual coupling in Ohms	Fault Current in Amp	Induce Voltage in Volts
1 CHOTILA EXCHANGE					
1A	Chotila Exch.- Local - 800 *1 P	}			
2A	Chotila Exch.- Local - 800 *1 P				
3A	Chotila Exch.- Local - 400 *1 P				
4A	Chotila Exch.- Am Side - 200 *1 P				
5A	Chotila Exch.- Rjt Side - 100 *1 P				
2 BAMANBOR EXCHANGE					
1B	Bamanbor Exch.- Pillar- 400 *1 P	}			
2B	Pillar - Local- 50*1 P				
3B	Pillar - GIDC - 50*1 P				
4B	Bamanbore Exch.- R K Ind.-20*1 P				
3 KUWADVA EXCHANGE					
1C	Kuwadva Exch.- Chotila Side- 800*1 P	}	IV less than 430V		
2C	Kuwadva Exch.- Rjt Side- 400*1 P				
4 KHORANA EXCHANGE					
1D	khorana Exch.- Local- 400*1 P	}			
2D	khorana Exch.- Local- 400*1 P				
3D	khorana Exch.- Local- 100*2 P				
5 RATANPAR EXCHANGE					
1E	Ratanpar Exch.- local- 100*1 P	}			
2E	Ratanpar Exch.- Godavari Pillar- 100*2 P				
3E	Pillar - Local- 50*1 +20*1 P				
4E	Pillar - Local- 100*1 +50*1 P				
6 BAGHI EXCHANGE					
1F	Baghi Exch.- Local- 100*1 P	}			
2F	Baghi Exch.- Naranka - 50*1 P				

P. Prateek

प्रतीक श्रीवास्तव/PRATEEK SRIVASTAVA
 सहायक निदेशक-I/Asstt. Director-I
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Min. of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-66

ANNEXURE-II

CEA Case No.: GUJ-781

Name of the Power line: 400 kV D/C Hadala – Shapar line

Map Scale : 1 cm=500 m

Total Length : 62.17 km

S.R. Value : 40,000 Ω -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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WESTERN RAILWAY SG. 158/28/12 (1101)

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	Rajkot - Bileshwar	0.6	0.0003	7500	2
2	Bileshwar - Khorana	1.5	0.0016	7500	12
3	Khorana – Kankot	Out of parallelism			0

Prateek

प्रतीक श्रीवास्तव/PRATEEK SRIVASTAVA
सहायक निदेशक-1/Asstt. Director-I
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Min. of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

GUST-781

Annex-III

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)/1561/

24 Jun 2019

Chief Engineer (Project)
Gujarat Energy Transmission Corporation Ltd
Sardar Patel Vidyut Bhawan
Race Course, Vadodara - 390 007

**SUBMISSION OF PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO FOR PTCC
APPROVAL OF 400KV D/C HADALA-SHAPAR LINE**

1. Ref your letter No CE(Project)/EE(Tr.-3)/3276 dt 01 Apr 2019 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

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

Enclosures : As above

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.