File No.CEA-PS-17-11(12)/14/2022-PCD Division 1228-230

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

****

CEA Case No. : GUJ-736
PTCC proposal of LILO of one circuit of 220 kV D/C Hadala – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers (3.22 km)

Reference:		
S. No.	**Reference No.**	**Dated**
(i)	GETCO: CE(Project)/EE(Tr-3)/4876	28.11.2017
(ii)	BSNL: IC/MBI/PTCC/GUJ-2514	20.02.2019
(iii)	Western Railway: SG.158/28/12(849)	12.06.2018
(iv)	Defense: B/46937/ Sigs 7(b)/887 received through GETCO email dated 25.02.2022	12.04.2018

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) and reference (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 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.

Raghvendra Pratap Singh
Director 8.03.2022

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3rd 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., 5th Floor, Station Building, Churchgate, Mumbai – 400020	Annex-II only
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	Copy for information

File No.CEA-PS-17-11(12)/14/2022-PCD Division /228-230

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
****

के.वि.प्रा. केस सं. : GUJ-736
पी.टी.सी.सी. प्रस्ताव **LILO of one circuit of 220 kV D/C Hadala – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers (3.22 km)**

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	GETCO: CE(Project)/EE(Tr-3)/4876	28.11.2017
(ii)	BSNL: IC/MBI/PTCC/GUJ-2514	20.02.2019
(iii)	Western Railway: SG.158/28/12(849)	12.06.2018
(iv)	Defense: B/46937/ Sigs 7(b)/887 received through GETCO email dated 25.02.2022	12.04.2018

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई बीएसएनएल के टेलिकॉम केबलों एवं पश्चिम रेलवे के ब्लॉक एंड 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 केबलों एवं पश्चिम रेलवे के ब्लॉक एंड 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 सन्दर्भ (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

दाधीच 03.03.2022
निदेशक

To,

1.	Divisional Engineer (PTCC), Western Zone	BSNL; Inspection Circle, 3rd 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., 5th Floor, Station Building, Churchgate, Mumbai – 400020	Annex-II only
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	Copy for information

Annex-I

Con Office Case No.------ GUJ-736	Map scale- 1 Cms = 500 Meters
DET (PTCC) Office Case No. 2514	Route Length- 3.22 km
Railway Office Case No.	Soil Resistivity- 75000 Ω-cm

Name of Power Line: 220 KV M/C LILO at 220 KV Wankaner S/S from existing Hadala S/s - Sartanpur S/S .

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	**WANKANER EXCHANGE**				
1A	Wankaner Exch.- Local- 1200*1 P				
2A	Wankaner Exch.- Local- 800*1 P		TV tels 430 V		
3A	Wankaner Exch.- Local- 800*1 P				
4A	Wankaner Exch.- Local- 400*3+50*2 P				
5A	Wankaner Exch.- Local-200*2+100*1 P				
6A	Wankaner Exch.- Local-100*2 P				
7A	Wankaner Exch.- Local-200*2 P				

Plateel

प्रवीण पटेल/PRAVIN PATEL
सहायक निदेशक-II/Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi

ANNEXURE-II

CEA Case No.: GUJ-736 **Name of the Power line**: LILO of one circuit of 220 kV D/C Hadala – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers			**Map Scale** : 1 cm=500 m **Total Length** : 3.22 km **S.R. Value** : 75,000 Ω-cm		
S.No.	**Telecom. Details**	**Length of Parallelism in Km.**	**Mutual Coupling in Ohms.**	**Effective Fault current in Amps.**	**I.V in Volts.**
WESTERN RAILWAY Ref. No: SG.158/28/12(849) Dated: 31.12.2020					
Affected Blocks & Telecom Circuits Details					
1	Makansar - Wankaner	0.2	0.0010	9500	10
2	Wankaner – Lunsariya	2.8	0.0087	8600	75
3	Wankaner - Amarsar	0.1	0.0009	9500	9
4	Amarsar – Sindhavadar	Out of parallelism			0
5	Daladi - Lunsariya				0

Prateek

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

Annex - III

[redacted] 23019748

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

B/46937/Sigs 7(b)/887 /

12 Apr 2018

Chief Engineer (Project)
Gujarat Energy Transmission Corporation Ltd
Sardar Patel Vidyut Bhawan,
Race Course, Vadodara - 390007

SUBMISSION OF PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO FOR PTCC APPROVAL OF 66 KV LILO TO 220KV WANKANAR S/S FROM 220KV HADALA – SAKTARPAR LINE

1. Reference your letter CE (Project)/EE (Tr-3)/4878/ dt 28 Nov 2017.

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.

(A.V. Unnikrishnan)
Lt Col
GSO-1 (Comm)
for SO-in-C

Copy to :-

The Divisional Engineer Telegraph (PT-GC) For information
BSNL, Inspection Circle, Western Region
3rd Floor, 'D' Wing, Admin Building
Juhu Tara Road
Santracruz West, Mumbai – 400054