



सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पावर कम्युनिकेशन डवलपमेंट प्रभाग
Power Communication Development Division

सं.: CEA/PCD/PTCC/GUJ-722/130-32

Date: 31/01/2019

DET (PTCC), Inspection Circle,
Bharat Sanchar Nigam Limited,
3rd Floor, D-Wing, BSNL Admin Bldg.
Juhu Tara Road, Santacruz (West),
Mumbai-400054

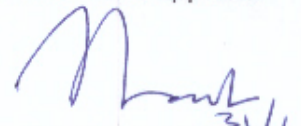
Subject: PTCC Route Approval for proposed 400kV D/C Bhachunda-Varsana line

Ref	(i) BSNL Ltr.No.IC/MBI/PTCC/GUJ-2472	dt. 20/12/2018
	(ii) Western Railway Ltr No.SG.158/28/12(831)	dt.12/06/2018
	(iii) Defense Letter No.B/46937/Sigs 7(b)/720	dt.2/02/2018

Sir,

The low frequency induction on telecom cables of Railway with respect to details furnished vide above reference (i), and (ii) respectively has been computed. The average Soil Resistivity (SR) value has been taken as 50,000 Ohm Cm, as intimated by the Power Authority, Gujarat Energy Transmission Corporation Limited.(GETCO). The voltages likely to be induced on paralleling telecom circuits of BSNL and Railway under Single Line to Ground fault condition have been computed and are enclosed at Annex-I & II respectively. The screening factors, as applicable, have been considered. Defense has accorded NOC vide above Ref.(iii) for the above line (a copy enclosed at Annex-III).

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval
Encl.: As above


(Naresh Bhandari)
Chief Engineer


Copy to:

1. GM(S&T), Western Railway, Office of CSTE,S&T DEpt.5th Floor, Station Building,Churchgate,Mumbai-400020(Annexure-II only)
2. Chief Engineer(Project), GETCO, Sardar Patel Vidyut Bhavan, Race Course,Vadodara-390007

ANNEXURE - I

Case No.: GUJ-722 Name of the Power line: 400KV D/C Bhachunda-Varsana line		Map Scale : 1cm=500mts Total Length : 138.08 Km. S.R. Value : 50,000 Ohms-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

BSNL DETAIL					
Ref. No. IC/MBI/PTCC/GUJ/2472		Dated at Mumbai, the 20/12/2018			
Morena SSA					
1.	BITTA EXCHANGE	IV less than 430 V			
3A.	Bitta Ex.-Local 100x1P.				
3A.	Bitta Ex.-Local-50x3P.				
3A.	Bitta Ex.-Local 20x2P.				
4A.	Bitta Ex.-Local 10x1P.				
2.	TERA EXCHANGE	IV less than 430 V			
1B	Tera Exch.-local-100*1+50*1P				
2B	Tera Exch.-local-100*1P				
3B	Tera Exch.-local-50*2P				
3	HAJAPAR EXCHANGE	IV less than 430 V			
1C	Hajapar Ex-Local-50x3P				
2C	Hajapar Ex-Local-50x2P				
3C	Hajapar Ex-Local-20x5P				
4C	Hajapar Ex-Local-510x4P				
4.	KOTDA EXCHANGE	IV Less than 430 V			
1D	Kotda Exch.-Local-400*1P				
2D	Kotda Exch.-Local-100*1P				
3D	Kotda Exch.-Local-50*2P				
5.	SUKHPAR EXCHANGE	IV less than 430 V			
1E	Sukhpar exchange-Local-50*2P				
2E	Sukhpar exchange-Local-100*1P				
3E	Sukhpar exchange-Local-400*2P				
4E	Sukhpar exchange-Local-100*1+20*2P				
6.	GADHSISA EXCHANGE	IV less than 430V			
1F	Gadhsisa exchange.-Local-400x1P				
2F	Gadhsisa exchange.-Local-100*1+10P				
3F	Gadhsisa exchange.-Devpar-400*1+100x1P				
4F	Gadhsisa exchange.-Virani-100x1+50*1P				
7.	DARSADI EXCHANGE.	IV less than 430V			
1G	Darsadi Exch.-Local-200*1P				
2G	Darsadi Exch.-Ludva-100*1+10*1P				
3G	Darsadi Exch.-Local-20*1+10P				
4G.	Darsadi Exch.-Mamlimora--50*2P				
8.	RAMPAR-VEKRA EXCHANGE	IV less than 430V			
1H	Rampar(v)Ex-Local-200x2P				
2H	Rampar(v)Ex-Local-100x1P				
3H	Rampar(v)Ex-Vekra-100x1P				
4H	Rampar(v)Ex-Mandvi Rd.-100x1P				


नरेश भंडारी/NARESH BHANDARI
 मुख्य अभियन्ता/Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-66

ANNEXURE - I

Case No.: GUJ-722 Name of the Power line: 400KV D/C Bhachunda-Varsana line		Map Scale : 1cm=500mts Total Length : 138.08 Km. S.R. Value : 50,000 Ohms-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
9.	DAHISARA EXCHANGE				
1I	Dahisara Exch.-Kera.Rd-200*2P	IV less than 430V			
2I	Dahisara Exch.-Godpar-50*1P	3.0	0.0521	7725	402
3I	Dahisara Exch.-Local ST BUS-100*2P	IV less than 430V			
10	KERA EXCHANGE				
1J	Kera Exch.-Baladia-400*1+200*1P	IV less than 430V			
2J	Kera Exch.-Naranpar-200*1+100*1+50P				
3J	Kera Exch.-Local -400*2+200*1+100P				
11	BHARAPAR EXCHANGE				
1K	Bharapar EXch.-Local-100*1P	IV less than 430V			
2K	Bharapar Exch.-Local*2P				
3K	Bharapar Exch.-Surajpar -200*1P12				
12	KUKUMA EXCHANGE				
1L	KukumaExch.-Local-800*1P	IV less than 430 V			
2L	Kukuma Exch.-Highway-50*1P				
3L	Kukuma Exch.-Local-10*1p				
13	RATNAL EXCHANGE				
1M	Ratnal Exch.-Local-100x1P	IV less than 430V			
2M	Ratnal Exch.-Local-10x1P				
3M	Ratnal Exch.-Local-20x1P				
4M	Ratnal Exch.-Local-50x1P				
5M	Ratnal Exch.-Local-20x1P				
14	LAKHAPAR EXCHANGE				
1N	Lakhapar Exch.-Local-100*1+50*1P	IV less than 430V			
2N	Lakhapar Exch.-Ambapar-50*1P				
3N	Lakhapar Exch.-Local-100*1+50*1P				
15	BHIMASAR EXCHANGE				
1O	Bhimasar Ex.-Local-100x1+50*1P	IV less than 430V			
2O	Bhimasar Ex.-Pasuda-50*2P				
3O	Bhimasar Ex.-Local-10*1P				
4O	Bhimasar Ex.-Local-200*1P				
5O	Bhimasar Ex.-Ajapar-20*1P				
16.	DUDHAI EXCHANGE				
1P	Dudhai Exch.-Local-200*1P	IV less than 430V			
2P	Dudhai Exch.-Local-100*1P				
3P	Dudhai Exch.-Dhanakda -100*1P				
17	WADASAR EXCHANGE				
1Q	Wadasar Exch.-Local-100*1P	IV less than 430V			
2Q	Wadasar Exch.-Local-50*2P				
18	MODSAR EXCHANGE				
1R	Modsar Exch.-Local-100*1P	IV less than 430V			
2R	Modsar Exch.-Local -50*2P				
19	DHANETI EXCHANGE				
1S	Dhaneti Exch.-Local-50*3P				

नरेश भंडारी/NARESH BHANDARI
मुख्य अभियन्ता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

ANNEX-III
G.O.J-722

Tele : 23019746

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

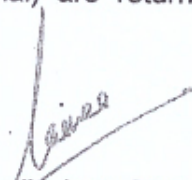
B/46937/Sigs 7(b)/720/

07 Feb 2018

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

**PTCC PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO
FOR 400 KV D/C BHACHUNDA - VARSANA LINE ON D/C TOWER
WITH AL-59 CONDUCTOR**

1. Reference your letter No CE(Project)/EE(Tr-3)/1917/ dt 15 Sep 2017.
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.


(Nainee Sharma)
Lt Col
GSO 1 (Comn)
for SO-in-C

Copy to :-

✓ The Director (PTCC), CEA
NREB Complex,
18-A, Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016.

- For information.