



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डवलपमेंट प्रभाग

Power Communication Development Division

No. CEA/PCD/ PTCC/GUJ-749/728-730

Date: 19.06.2019

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

Subject: Induced Voltage calculation in respect of PTCC proposal of LILO of 220 kV D/C Vapi
-- Khadoli transmission line at Vaghchipa

Ref: (i) BSNL letter no. IC/MBI/PTCC/GUJ-2461 dated 28.03.2018
(ii) Western Railway letter no. SG.158/28/12/ 1029 dated 31.10.2018
(iii) Defense letter no. B/46937/Sigs 7(b)/1060/ dated 23.05.2018

Sir,

The low frequency induction on BSNL Telecommunication circuits as per details furnished vide above cited references (i) have been examined. The Soil Resistivity value has been taken as 15,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL Telecom Cables under single line to ground fault condition are enclosed at Annex-I. The screening factors as applicable have been considered. Western Railway vide above ref (ii) has informed that their lines are out of 8 km area of the proposed power line hence no induced voltage calculations are done. Defense has accorded NOC vide above Ref.(iii) for the above line (a copy enclosed at Annex-II).

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

Encl.: As above

Yours faithfully,


(Naresh Bhandari) 19/6
Chief Engineer

Copy to:

- 1) Office of CSTE, Western Railway, S&T Dept. , 5th Floor, Station Building, Churchgate, Mumbai – 400020 (Only Cover Letter)
- 2) Chief Manager, WRTS-II, PGCIL, Regional Head Quarter, Plot No. 54, Adjacent to Riya – Revati Resort, Opp. Ambe Vidhyalaya, Sama- Savli Road, Vadodara – 390008.

M/C

ANNEX - I

CEA Office Case No.----- GUT-749		Map scale- 1 Cms = 500 Meters			
DET (PTCC) Office Case No. 2461		Route Length- 2.554 KMs			
Railway Office Case No.		Soil Resistivity- 15000 Ohm/CM			
Name of Power Line: lilo OF 220 KV D/C d/c Vapi - Khadoli Transmission line at Vagchipa S/S associated with the UT of Dadra & Nagar Haveli.					
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 SILVASA EXCHANGE					
1A	Silvasa Exch.-local--1200*2 P	} ← IV less than 430V →			
2A	Silvasa Exch.-local--800*2 P				
3A	Silvasa Exch.-local--800*1 + 400*1 P				
4A	Silvasa Exch.-local--400*3 P				
5A	Silvasa Exch.-local--100*5 P				
2 KSL EXCHANGE					
1B	KSL Ex.- Local--400*1+200+200 P		← IV less than 430V →		
3 WELSPUN EXCHANGE					
1C	Welspun Exch.-Local-400*1+200+100+100		← IV less than 430V →		
4 SSR EXCHANGE					
1D	SSR Exch.-Local-400*1+200*1+200*1 P		← IV less than 430V →		
5 JALARAM EXCHANGE					
1E	Jalaram Exch.-Local-800*1+400+200+200 P		← IV less than 430V →		
6 DADRA EXCHANGE					
1F	Dadara Exch.-Local-400*2 P	} ← out of 11km →			
2F	Dadara Exch.-Local-200*4 P				
3F	Dadara Exch.-Local-100*4 P				
4F	Dadara Exch.-Local-100*3 P				
5F	Dadara Exch.-Local-50*1 P				

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-11

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)/1060 /

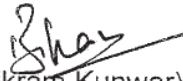
23 May 2018

403-749

Chief Manager (Engg)
Power Grid Corporation of India Ltd
Regional HQ, Plot No 54, Adjacent to Riya Ravati Resort,
Opp Ambe Vidhyalaya, Sama Savli Road,
Vadodara - 390008

**PTCC ROUTE APPROVAL OF LILO OF 220 KV D/C VAAPT - KHADOLI
TRANSMISSION LINE AT VAGCHIPA SUB-STATION "ASSOCIATED WITH THE
UT OF DADAR & NAGAR HAVELI - MARKING OF DEFENCE TELECOM
DETAILS**

1. Reference your letter No. WRTS-II/ENGG/Vadodara/PTCC/2106/220 KV Vapi - Khadoli at Vagchipa SS/09/5620 dt 20 Mar 2018.
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.


(Bikram Kunwar)
Lt Col.
GSO 1 (Comn)
for SO-in-C

Copy to :-

✓ Director, PTCC, CEA,
Load Dispatch & Telecommunication Division,
NREB Complex, 18A, Shaheed Jeet Singh Marg,
Katwaria Saria, New Delhi - 110016

