



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

No. CEA/PCD/ PTCC/GUJ-789/20-22

Date: 08.01.2020

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 220 kV D/C Transmission line from 765/400/220 kV Bhuj Pool S/S (PGCIL) to proposed 220 kV Valka Nana S/S of Alfanar Energy Private Limited.

- Ref:** (i) Alfanar Energy Private Limited letter no. AEPL/19-20/220 kV EHV line/002 dated 03.08.2019
(ii) BSNL letter no. IC/MBI/PTCC/GUJ-2807 dated 16.09.19
(iii) Western Railway letter no. SG.158/28/12/1128 dated 17.09.19
(iv) Defense letter no. B/46937/Sigs 7(b)/1773/ dated 31.10.19

The PTCC case submitted vide reference (i) has been examined. The low frequency induction on BSNL Telecommunication circuits as per details furnished vide above references (ii) has 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 (iii) informed that Railway lines are out of 8 km area of the proposed power line, hence no need to calculate induced voltages. Defense has accorded NOC vide above Ref.(iii) for the line (a copy enclosed at Annex-II).

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

Encl.: As above

Copy to:

1. Office of CSTE, Western Railway, S&T Dept. , 5th Floor, Station Building, Churchgate, Mumbai - 400020 (Only For info)
2. Alfanar Energy Private Limited, 4th Floor 419-424 LMD MEGAPOLIS, Sector 48, Sohna Road, Gurugram, Haryana - 122002, Haryana.

Upendra Kumar
08.01.2020

(Upendra Kumar)
Chief Engineer

मुख्य अभियंता / Chief Engineer
केन्द्रीय विद्युत प्राधिकरण / C.E.A.
विद्युत मंत्रालय / Ministry of Power
भारत सरकार / Government of India
नई दिल्ली / New Delhi

M/C

CEA Office Case No.-----GUT-789		Map scale- 1 Cms = 500 Meters						
DET (PTCC) Office Case No. 2807		Route Length- 65.01 KMs						
Railway Office Case No.		Soil Resistivity- 15000 Ohm.Cm						
Name of Power Line : 220 KV D/C Transmission line from 220 KV (Nana Valka) PSS END of M/s Alfanar Energy Private Limited to 765/400/220 KV Bhuj Pool (PGCIL) S/S on D/C Tower with AI-59 Zebra Conductor.								
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 NIRONA EXCHANGE								
1A	Nirona Ex-. Local 100x1+20x2P	}	-	1V less than 430V	-			
2A	Nirona Ex-. Local 50x1P							
3A	Nirona Ex-. Local 20x3P							
2 UGEDI EXCHANGE								
1B	Ugedi Exch.- Pillar- 400*1 P							
2B	Ugedi Exch. - Ratadiya - 50 *1 P							
3 RAWAPAR EXCHANGE								
1C	Rawapar Exch.- Local- 800*1 P							
2C	Rawapar Exch.- GEB- 100*1 P							
3C	Rawapar Exch.- Vigodi- 100*1+20*1 P							
4C	Rawapar Exch.- Local- 20*1 P							
4 WALKA NANA EXCHANGE								
1D	Walka nana Exch. - Local- 100*1 P							

Signature & Seal of Concern SDE/DET

Upendrakumar
08.01.2020

मुख्य अभियंता/Chief Engineer
केन्द्रीय विद्युत निगम/एन.ए.ए./C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi

Tele : 23019746

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


B/46937/Sigs 7(b)/1773/

31 Oct 2019

Alfanar Energy Private Limited
4th Floor 419-424 JMD Megapolis,
Sector-48, Sohana Road,
Gurgaon-122 002, Haryana

**SUBMISSION OF PROPOSAL FOR PTCC APPROVAL OF PROP. 220KV D/C TRANSMISSION
LINE FROM 765/400/220KV BHUJ POOL SS (PGCIL) TO PROP 220KV VALKA NANA SS OF
ALFANAR ENERGY PRIVATE LIMITED DIST KUTCH GUJARAT**

1. Ref your letter No AEPL/19-20/220KV EHV Line/002 dt 03 Aug 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

Divisional Engineer Telegraph (PTCC)
O/o GM (North); BSNL, QA & Inspection Circle,
CTS Compound, Africa Avenue Road,
Netaji Nagar, New Delhi-110023

} for information