



सत्यमेव जयते



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

CEA Case No. : GUJ-845		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV D/C Vapi (Balitha) – Vapi (Pariya) (5.514 km (OH) + 4.25 km (UG) = 9.77km)- regd.		
S. No	Reference No.	Dated
(i)	GETCO: CE(Project)/SE(Planning)/6334	12.11.2022
(ii)	Email: GETCO	06.12.2025
(iii)	BSNL: IC/MBI/PTCC/GUJ/2025-26	07.04.2025
(iv)	Western Railway: SG.158/28/12/1246	25.01.2023
(v)	Defense: B/46937/Sigs 7(b)/3129	12.05.2023

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on communication circuits of Western Railway with respect to details furnished vide above reference (iv) have been computed. The voltage likely to be induced on paralleling communication cables of Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET (PTCC), WZ has issued NOC vide reference (iii) above.

DG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (v). (Enclosed as Annexure II)

EPR details for the proposed substation is given below.

Name of the SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220 kV Vapi (Pariya) TSS	90.14	6.435	0.0311	NA	NA	NA	NA

As per the details submitted by BSNL vide reference (iii) above, no telephone exchange is falling in the EPR zone of the proposed substation.

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Admin Bldg., Juhu Tara Road, Santacruz (West), Mumbai-400054	
2.	GM (S&T)	Western Railway, O/o PCSTE, S&T Dept., 5 th Floor, Station Building, Church gate, Mumbai - 400020	
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara - 390007	Copy for information

ANNEXURE-I

CEA Case No.: GUJ-845 Name of the Power line: 220 kV D/C Vapi (Balitha) – Vapi (Pariya) TSS line			Map Scale : 1 cm= 500 m Total Length : 9.77 km S.R. Value : 2500 Ohm-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 Letter No.SG.158/28/12/1246 Date: 25.01.2023					
1.	Bhilad - Karambeli	Out of Parallelism			
2.	Karambeli – Vapi	0.268	0.000075	27232	2
3.	Vapi- Udvarda	3.22	0.0009	15559	14
4.	Udvarda - Pardi	Out of Parallelism			

Tele : 23019746

403 - 843

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

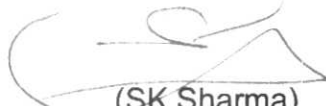
B/46937/Sigs 7(b)/3129/

12 May 2023

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

**PROPOSAL FOR HV/EHV TRANSMISSION LINES OF GETCO FOR PTCC
APPROVAL OF 220KV D/C VAPI (BALITHA)-VAPI (PARIYA) TSS (NHSRCL)
LINE WITH ACSR ZEBRA CONDUCTOR WITH OPGW CABLE & PARTLY U/G
CABLE LINE**

1. Refer your letter No CE(Project)/SE(Planning)/6334 dt 12 Nov 2022 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(SK Sharma)
Lt Col
GSO 1 (Comn)
for ADG T

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

The DET(PTCC), Northern Zone
Bharat Sanchar Nigam Limited
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

Central Electricity Authority
PCD Division
No. 434
19.05.2023

ps m
RC/S