



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**

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<b>CEA Case No. : GUJ-850</b>		
<b>Induced Voltage (IV) calculation for PTCC proposal of 400kV Shapar- Pachchham D/C line (98.25 km)- regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	GETCO: CE(C.S)/SE(Planning)/62	07.02.2023
(ii)	GETCO: Email	05.07.2024
(iii)	BSNL: IC/MBI/PTCC/GUJ-2953&2954	27.05.2024
(iv)	Western Railway: SG.158/28/12/1276	21.02.2023
(v)	Defense: B/46937/Sigs 7(b)/3247	31.05.2023

The PTCC proposal submitted vide above 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 BSNL (Mumbai) has mentioned that no telecom exchange is available under Limbdi-Sayla-Chotila SDCA in 8km corridor vide above reference (iii).

Vide reference (v) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed as Annexure-II).

As both substations are existing therefore, EPR calculations are not warranted.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

**Chief Engineer**

**To,**

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

**ANNEXURE-I**

<b>CEA Case No.:</b> GUJ-850 <b>Name of the Power line:</b> 400 kV D/C Shapar- Pachchham line			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 98.25 km <b>S.R. Value</b> : 5000 Ohm-cm		
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>
<b>WESTERN RAILWAY Letter No.- SG.158/28/12/1276 Date: 21.02.2023</b>					
1	Dhandhuka-Rayaka	3.811	0.0003	23116	7
2	Rayaka-Dholi Bhal	2.406	0.0009	14959	13
3	Dholi Bhal – Hadala Bhal	2.512	0.0002	20069	4
4	Ranpur – Vejalka	0.8	0.00007	18602	1
5	Vejalka – Chuda	3.312	0.0025	17764	44
6	Chuda - Limbdi	3.23	0.0003	17665	5

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)/3247/

31 May 2023

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

**PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO FOR PTCC**  
**APPROVAL OF 400KV SHAPAR PACHCHHAM TOWER STRUCTURE LINE**  
**WITH TWIN AL-59 CONDUCTOR**

1. Refer your letter No CE(C.S)/SE(Planning)/62 dt 07 Feb 2023 (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

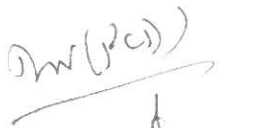
**Enclosures** : As above**Copy to :-**

✓ 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  
Diary No. 506  
Date 14.06.2023

  
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