

I/26526/2023



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

CEA Case No. : GUJ-750		
PTCC approval for LILO of 220 kV S/C Lalpar – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers - regd.		
S. No	Reference No.	Dated
(i)	GETCO: CE(Project)/EE (Tr.-3)/3237	26.03.2018
(ii)	GETCO: Email	24.02.2023
(iii)	BSNL: IC/MBI/PTCC/GUJ-2543	12.02.2019
(iv)	Western Railway: SG/158/28/12/1014 received via GETCO email dated 13.02.2023	13.08.2019
(v)	Defense: B/46937/Sigs 7(b)/1081	30.07.2018

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on communication circuits of BSNL and Western Railway with respect to details furnished vide above reference (iii) and (iv) respectively has been computed. The voltage likely to be induced on paralleling communication circuits of BSNL and Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I & II respectively. The screening factors as applicable have been considered. DG Signals, MoD have issued No Objection Certificate (NOC) vide above reference (v) (copy enclosed as Annexure-III).

EPR Zones for proposed substations are mentioned below.

Name of the proposed 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 Wankaner S/S	80.43	30	0.548	2994.7	1953.9	108.5	51.8

As per the details submitted by BSNL vide reference (iii) above, no telephone exchanges are falling in the EPR zone of the proposed 220 kV Wankaner S/S.

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 st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
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2.	GM (S&T)	Western Railway, O/o CSTE, S&T Dept., 5 th Floor, Station Building, Churchgate, Mumbai – 400020	With a request to send telecom details/NOC to CEA for PTCC proposals of 220 kV and above transmission lines
3.	Chief Engineer (Project)	GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara – 390007	For kind information

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ANNEXURE-I

CEA Case No.: GUJ-750		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of 220 kV S/C Lalpar – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers		Total Length : 18.50 km			
		S.R. Value : 7500 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL Letter No: IC/MBI/PTCC/GUJ-2543 Date: 12.02.2019					
1	WANKANER EXCHANGE				
1A	Wankaner Exch. – Local – 1200*1 P	Out of parallelism			
2A	Wankaner Exch. – Local – 800*1 P				
3A	Wankaner Exch. – Local – 800*1 P				
4A	Wankaner Exch. – Local – 400*3+50*2 P				
5A	Wankaner Exch. – Local – 200*2+100*1 P				
6A	Wankaner Exch. – Local – 100*2 P	0.1	0.0001	19106	2
7A	Wankaner Exch. – Local – 200*2 P	Out of parallelism			
2	PANCHASIA EXCHANGE				
1B	Panchasia Exch. – Local – 100*1 P	IV less than 430 V			
2B	Panchasia Exch. – Local – 100*1 P				
3	DHUVA EXCHANGE				
1C	Dhuva Exch. – Pillar 1 – 400*1 P	IV less than 430 V			
2C	Dhuva Exch. – Pillar 2 – 200*1 P				
3C	Dhuva Exch. – Ganpati – 100*1+50*1 P	2.1	0.0483	11863	573
4C	Dhuva Pillar 1 –Matel Road–100*1+50*1+20*1 P	0.7	0.0126	13537	171
5C	Dhuva Pillar 2 – Sartanpar Road - 100*1+50*1 P	1.7	0.0465	11870	552

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4	MAKANSAR EXCHANGE				
1D	Makansar Exch. – Highway – 200*1 P	IV less than 430 V			
2D	Makansar Exch. – Local – 100*1 P				
3D	Makansar Exch. – Local – 50*1 P				

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ANNEXURE-II

CEA Case No.: GUJ-750 Name of the Power line: LILO of 220 kV S/C Lalpar – Sartanpar line at proposed 220 kV Wankaner substation on M/C towers			Map Scale : 1 cm= 500 m Total Length : 18.50 km S.R. Value : 7500 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/158/28/12/1014 Date: 13.08.2019

Affected Block & telecom circuits

1	Daladi - Lunsariya	Outside IV consideration zone			
2	Lunsariya – Wankaner Jn	Out of parallelism			0
3	Wankaner Jn - Amarsar	0.75	0.0011	28181	31
4	Amarsar – Sindhavadar	Outside IV consideration zone			
5	Wankaner Jn - Makansar	15.8	0.0513	13464	691
6	Makansar - Morbi	2.2	0.0038	15432	59

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Annexure-III

405-750

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)/1081 /

30 Jul 2018

Gujarat Energy Transmission Corporation Ltd.
Chief Engineer (Project)
Sardar Patel Vidyut Bhavan,
Race Course, Vadodara-390 007

**SUBMISSION OF PROPOSALS FOR HV/EHV TRANSMISSION LINES OF GETCO
FOR PTCC APPROVAL FOR 220 KV LILO AT 220KV WANKANER S/S FROM 220
KV S/C LALPAR – SARTANPAR LINE**

1. Reference your letter No CE(Project)/EE (Tr-3)/ 3237 dt 26 Mar 2018 (copy att).
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.



(A Rawat)
Maj
GSO 1 (Comn)
for SO-in-C

Copy to :-

Director(PTCC)
Central Electricity Authority
Power Communication Development Division
NRPC Complex, 18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi – 110016

- For information.




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31/7/18