

I/27386/2023



सत्यमेव जयते

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-838		
PTCC approval for 220 kV D/C OH line and part UG cable from 400 kV Vav S/s to proposed M/s Garden Silk Mills Ltd switchyard - regd.		
S. No	Reference No.	Dated
(i)	GETCO: CE(Project)/SE(Planning)/5294	20.09.2022
(ii)	GETCO: CE(C.S.)/SE(Planning)/166	23.03.2023
(iii)	BSNL: IC/MBI/PTCC/WGJ300320223904_WGJ120120234633_WGJ120120234632	04.02.2023
(iv)	Western Railway: SG/158/28/12/1208 (E-226530) received via GETCO letter 14.02.2022	21.12.2022
(v)	Defense: B/46937/Sigs 7(b)/3049	23.11.2022

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 switchyard of M/s Garden Silk Mills Ltd	45.07	27.69	0.051	102.9	52.8	NIL	NIL

As per the details submitted by BSNL vide reference (iv) above, no telephone exchange of BSNL is falling in the EPR zone of the proposed 220 kV switchyard of M/s Garden Silk Mills Ltd.

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

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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	
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-838		Map Scale : 1 cm= 500 m			
Name of the Power line: 220 kV D/C OH line and part UG cable from 400 kV Vav S/s to proposed M/s Garden Silk Mills Ltd switchyard		Total Length : OH-9.93 km UG-0.15 km			
		S.R. Value : 2000 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/WGJ300320223904_WGJ120120234633_WGJ120120234632 Date: 04.02.2023					
1	KATHOR EXCHANGE				
1A	Kathor Exch. – Local – 800*1 P	Out of parallelism			
2A	Kathor Exch. – Amboli Road – 200*1 P				
3A	Kathor Exch. – Local – 200*1 P				
4A	Kathor Exch. – Local – 100*1 P				
2	KAMREJ EXCHANGE				
1B	Kamrej Exch. – Kamrej Chokdi – 400*2 P	Out of parallelism			
2B	Kamrej Exch. – Mamlatdar Office – 100*1 P				
3B	Kamrej Exch. – Collage – 100*1 P				
3	DHATWA EXCHANGE				
1C	Dhatwa Exch. – Local – 50*2 P	Outside IV consideration zone			0
2C	Dhatwa Exch. – Dungara – 100*2 P				0
4	MORTHANA EXCHANGE				
1D	Morthana Ex – Local 100*1 P	0.3	0.0002	17796	4
2D	Morthana Ex – Local 50*2 P	0.2	0.0003	17462	5
5	SHEVNI EXCHANGE				

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1E	Shevni Ex - local - 100*1 P	Out of parallelism			
	MOBILE BTS TOWER				
T1	LAKSANA MOBILE TOWER BTS	IV calculation not required			
T2	VAV MOBILE TOWER BTS				
T3	DIGAS MOBILE TOWER BTS				
6	KATDODARA EXCHANGE				
1F	Kadodara Exch. – Local-400*1 P	IV less than 430 V			
2F	Kadodara Exch. – Local-400*1 P				
3F	Kadodara Exch. – Local-400*1 P				
7	CHALTHANA EXCHANGE				
2G	Chalthana Exch. – Local – 100*1 P	IV less than 430 V			
2G	Chalthana Exch. – Local – 200*1 P				
8	GANGADHARA EXCHANGE				
1H	Gangadhara Exch. – Rly Fatak – 800+400*1 P	Outside IV consideration zone			
2H	Rly Fatak – Ganga Village – 100*1 P				
3H	Rly Fatak – Police Station – 100*1 P				
4H	Rly Fatak – Dastan Village – 400+100*1 P				
	MOBILE BTS TOWER				
T4	Haldharau Mobile Tower BTS	IV calculation not required			

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ANNEXURE-II

CEA Case No.: GUJ-838 Name of the Power line: 220 kV D/C OH line and part UG cable from 400 kV Vav S/s to proposed M/s Garden Silk Mills Ltd switchyard			Map Scale : 1 cm= 500 m Total Length : OH-9.93 km UG-0.15 km S.R. Value : 2000 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/158/28/12/1208 (E-226530) Date: 21.12.2022					
Affected Block & telecom circuits					
1	Udhna – Chalthan	Outside IV consideration zone			0
2	Chalthan – Gangadhara	0.4	0.00003	27700	1
3	Gangadhara - Bardoli	Outside IV consideration zone			0

I/27386/2023 Tele : 23019746

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

GUS-8

B/46937/Sigs 7(b)/3049/

23 Nov 2022

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

**SUBMISSION OF PROPOSAL FOR HV/EHV TRANSMISSION LINE OF GETCO FOR
 PTCC APPROVAL OF 220KV D/C TOWER LINE WITH ACSR ZEBRA CONDUCTOR
 AND PARTLY UG CABLE FROM 400KV VAV S/S TO PROPOSED M/S GARDEN
 SILL MILLS LTD**

1. Refer your letter No CE(Project)/SE (Planning)/5294 dt 20 Sep 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 Offg 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

Ad-PPU
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