



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 Division

CEA Case No. : GUJ-879		
Induced Voltage (IV) Calculation for PTCC proposal of 400 kV S/C line from 400 kV Zerda SS (GETCO) to 400/33 kV Solar PSS of of M/s SGPPL at Village Ramsan, Banaskantha (Length: 14.2 km)		
S. No	Reference No.	Dated
(i)	2024-25/400kV/PTCC/001	24.04.2024
(ii)	BSNL: IC/MBI/PTCC/GUJ-2969	03.09.2024
(iii)	North Western Railway: SG/158/NWR/PTCC/1001	30.10.2024
(iv)	Western Railway: SG.158/28/12/1388	27.05.2024
(v)	Defense: B/46937/Sigs7(b)/3889	09.08.2024

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

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
400/33 kV Solar PSS of of M/s SGPPL at Village Ramsan, Banaskantha	136.35	28	0.17	1373	862	NA	NA

As per the details submitted by BSNL, No Telephone exchange is falling within the EPR zone of 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, 1st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054
2.	Dy. CSTE, North Western Railway	Headquarter office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur - 302 017
3.	M/s Sprng Green Power Private Limited	Unit No. FF-48A, First Floor, Omaxe Square, Plot No. 14, Jasola District Centre, New Delhi – 110 025

ANNEXURE-I

CEA Case No.: GUJ-879			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV S/C line from 400 kV Zerda SS (GETCO) to 400/33 kV Solar PSS of of M/s SGPPL at Village Ramsan, Banaskantha			Total Length : 14.2 km		
			S.R. Value : 10000 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-2969 Date: 03.09.2024					
	Zerda Exchange				
1	Cable 1A	IV less than 430 V			
2	Cable 2A				
3	Cable 3A				
4	Cable 4A				

ANNEXURE-II

CEA Case No.: GUJ-879		Map Scale : 1 cm= 500 m			
Name of the Power line: 400 kV S/C line from 400 kV Zerda SS (GETCO) to 400/33 kV Solar PSS of of M/s SGPPL at Village Ramsan, Banaskantha		Total Length : 14.2 km		S.R. Value : 10000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
North Western Railway: SG/158/NWR/PTCC/1001 Date: 30.10.2024					
1	Dhanerra to Ramsan	Out of parallelism			
2	Ramsan to Jenal	6.1	0.001547	16807	26
3	Ramsan to Bhildi	6.1	0.001547	16807	26

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

B/46937/Sigs 7(b)/3889

09 Aug 2024

General Manager,
A-001, Upper Ground, P-5 Pentagon Tower,
Magarpatta City, Hadapsar, Pune-411013

**SUBMISSION OF PROPOSAL FOR PTCC ROUTE APPROVAL OF PROPOSED
400KV S/C OVERHEAD TRANSMISSION LINE WITH AL-59 MOOSE
CONDUCTOR IN D/C TOWER FROM PROPOSED M/S SGPPL'S SOLAR
POOLING SUBSTATION AT VILLAGE RAMSAN, TA. DESSA, BANASKANTHA
TO EXISTING 40 KV ZERDA SUB STATION OF GETCO(LENGTH-14.2KM)**

1. Ref your letter SGPPL/2024-25/400KV/PTCC/001 dt 24 May 2024.
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.

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(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade 1 (Communication)
for Additional Director General (Telecommunication)

Copy to :-

The Divisional Engineer (PTCC)
'D' Wing, 3rd Floor, Admn Bdg
Telecom Complex,
Juhu Tara Road,
Santracruz West, Mumbai – 400054

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

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

for information