



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. : MRA-1239		
Induced Voltage (IV) calculation for PTCC proposal for 400kV D/C line from RGSPL PSS-1,Osmanabad to RGSPL PSS-4,Solapur[Length – 45.45 km] – Regd.		
S. No	Reference No.	Dated
(i)	RGSPL: RGSPL/PTCC/PSS4-PSS1/2024/72	03.02.2023
(ii)	BSNL: IC/MBI/PTCC/MRA-2621/03	05.04.2024
(iii)	Central Railway: N.153/PTCC/400kV/MAH-869	13.02.2024
(iv)	Defense: B/46937/Sigs7(b)/3714	01.04.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of BSNL with respect to details furnished vide above reference (ii) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. Central Railways have issued NOC vide above reference (iii) subject to the condition that any adverse effect observed on Signal & Telecom Circuits of Central Railway after charging the proposed power line & substation, the power authority will bear the cost of damages to Central Railway assets.

DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv) (attached as Annexure –II).

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
400/33kV SS, Osmanabad ,(PSS1)	135.5	35	0.289	3052	1973	60	2
400/33kV SS, Solapur,(PSS4)	127	35	0.583	5900	3860	243	132

As per the details submitted by BSNL vide reference (ii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

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, Ground floor, A- wing, BSNL Admin Bldg., Juhu Tara Road, Santacruz (West), Mumbai-400054	
2.	DGM, M/s ReNew Green Energy Solution Pvt. Ltd	Flat No. 303, Shree Bhagwati Tower Apartment, Jule Solapur, Solapur, Maharashtra-413004	Copy for Information

ANNEXURE-I

CEA Case No.: MRA-1239			Map Scale : 1 cm= 500 m		
Name of the Power line: 400kV D/C line from RGESPL PSS-1,Osmanabad to RGESPL PSS-4,Solapur			Total Length: 45.45 km		
			S.R. Value : 20000 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/MRA-2621/03			Dated 05.04.2024		
1	TE to Shivaji Nagar 20pr 1km				IV less than 430V
2	Akk road to Highway 100pr 500m				
3	Akk road to swami Samarth temple 100pr				
4	Zilaparishad to Rajwada 100pr 500,				
5	ZP to Karanje chowk 100pr 200mtr				
6	TE to ZP 100 pr 200m				
7	TE to AKK road 200pr 500m				
8	TE to ZP 200pr 200				
9	TE to Cpl rd 200pr 500m				
10	TE to Hasapaur rd 200pr 500m				
11	TE to Basavnagar 200pr 400m				
12	Valsang TE to Valsang Bus stand 100pr U/G				
13	Valsang TE to Valsang Bus stand 50 Pr U/G				
14	Valsang TE to T joint 200pr U/G cable				
15	Valsang TE to Achegaon road 20 Pr U/G				
16	TE to Basavnagar 400pr 300m				
17	Hasapur road to Village 100pr 200m				
18	Hasapur to village 100pr 200m				
19	Hasapur to village 50pr 100m				
20	Hasapur to village 50pr 150m				
21	Akkalkot local 200pr 200m				

E-mail: webstar@nic.in

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

B/46937/Sigs 7(b)/3714

01 Apr 2024

ReNew Green Energy Solutions Pvt Ltd
Site Off Address: Flat No. 102, 1st Floor, Shree Bhagwati Tower Apartment
Jule Solapur, Solapur, Maharashtra-413004

**PTCC PROPOSAL FOR LINEAR PROJECT FOR LAYING OF RGESPL PSS-1
(VILLAGE-GHANDORA, TALUK-TULJAPUR, DIST-OSMANABAD) TO RGESPL
PSS-4 (VILLAGE-KONHALL, TALUK-AKALKOT, DISTRICT-SOLAPUR)
400KV D/C TRANSMISSION LINE**

1. Refer your letter No RGESPL/PTCC/PSS4-PSS1/2024/73 dt 03 Feb 2024 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

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

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