



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**  
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<b>CEA Case No. : MRA-1303</b>		
<b>Induced Voltage (IV) Calculation for PTCC proposal of 400 kV S/C line on D/C towers from 400/33 kV RGESL PSS-4 at Konhali to 400/33 kV PSS-5 at Dahitnewadi (Length: 5.185 km)</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	SOLAPUR/RGMSPL/PSS-5/PTCC/400 kV line/24-25/E/137	25.10.2024
(ii)	RGESPL/Solapur/CEA/PSS-5/Undertaking/208	14.05.2025
(iii)	BSNL: No. IC/MBI/PTCC/MRA-2709	14.05.2025
(iv)	Central Railway: N.705/T/PTCC/400kV/MAH-951	05.05.2025

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above references (iii) has been computed. The voltage likely to be induced on paralleling communication cables of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. GM (S&T), Central railway vide reference (iv) has given their NOC for charging 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 RGESL PSS-4 at Konhali	127	37.8	0.58383	6382	4179	273	153
400/33 kV PSS-5 at Dahitnewadi	170	37.8	0.383	5554	3616	182	76

As per the details submitted by BSNL, No exchanges of BSNL are falling in the EPR zone of proposed substation.

Telecommunication details from DG Signals, MoD are awaited however, vide reference (ii) above, M/s RGESPL has informed that the work has completed and the plant is in ready-to-charge state.. M/s RGESPL has requested for issuance of provisional PTCC clearance and has given an undertaking that *“In the event that the charging of the said transmission line leads to any impact on telecom assets or personnel of the Defense authorities, we hereby undertake to take all necessary remedial actions to address the issue. No other utility or organization shall be held responsible for such remediation”*.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office. LF induction on telecommunication circuits of Defense, will be communicated after the receipt of details from DG Signals, MoD.

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.	Director General of Signals	General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ, PO, New Delhi- 110 105	With a request to submit the Telecom Details/ NOC so that final RAC could be processed.
3.	M/s ReNew Green Energy Solutions Private Limited	ReNew Hub, Commercial Block-1, Zone-6, Golf Course Road, DLF City, Phase-V, Gurugram – 122 009	Copy for information

**ANNEXURE-I**

<b>CEA Case No.: MRA-1303</b> <b>Name of the Power line:</b> 400 kV S/C line on D/C towers from 400/33 kV RGESL PSS-4 at Konhali to 400/33 kV PSS-5 at Dahitnewadi			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 5.185 km <b>S.R. Value</b> : 30000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>BSNL: No. IC/MBI/PTCC/MRA-2709 Date: 14.05.2025</b>					
1.	TE to Pramila park 600 pr Cu cable		Out of parallelism		
2.	TE to Market Yard 400 pr Cu cable		IV less than 430 V		
3.	TE to MSEB 400 pr Cu cable		Out of parallelism		
4.	TE to Vijay Chowk 400 pr Cu cable		Out of parallelism		
5.	TE to ST Bus Stand 400 pr Cu cable		Out of parallelism		
6.	ST Bus Stand to Vijay Chowk 400 pr Cu cable		Out of parallelism		
7.	TE to Khasbag 100 pr Cu cable		Out of parallelism		
8.	Pramila Chowk to Tahsil Office 100 pr Cu cable		Out of parallelism		