



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-1305		
Induced Voltage (IV) Calculation for PTCC proposal of 220 kV D/C line from existing 220/132 kV Hingoli MIDC Substation to proposed 220/33 kV Power plant Raholi PSS Hingoli (Length: 2.706 km)		
S. No	Reference No.	Dated
(i)	TPREL/PH IX-200MW/PTCC/04	18.04.2025
(ii)	BSNL: IC/MBI/PTCC/MRA-2713/03	03.06.2025
(iii)	South Central Railway: SG.85/4/3/PTCC/2025-26/SCRMH 01 RTD	16.05.2025
(iv)	Defense: B/46937/Sigs 7(b)/4705	03.06.2025

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of South Central Railway with respect to details furnished vide above reference (iii) has been computed. The voltage likely to be induced on paralleling communication circuits of South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered.

DET, PTCC (WZ), BSNL vide reference (ii) and ADG (Telecom), MoD vide reference (iv) has given their NOC for charging the line.

EPR zone for the proposed substation is mentioned below:

Name of the proposed Substation	Half diagonal distance, D/2 (mts)	Fault Current I (KA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220/33 kV Power plant Raholi PSS Hingoli	95.25	30.269	0.2974	1899	1224	27	NA

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

**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.	GM (S&T), South Central Railway	7 <sup>th</sup> Floor, Rail Nilayam, Secuderabad – 500 003	
3.	M/s Energevo Saurya LLP	47-1/1, 1 <sup>st</sup> Floor, Mukti Nagar, W. T. Patil Marg, Near Neeldurg Hotel, Ghatla, Chembur, Mumbai – 400 071	For information

**ANNEXURE-I**

<b>CEA Case No.:</b> MRA-1305  <b>Name of the Power line:</b> 220 kV D/C line from existing 220/132 kV Hingoli MIDC Substation to proposed 220 kV Power plant Raholi PSS Hingoli (Length: 2.706 km)		<b>Map Scale</b> : 1 cm= 500 m  <b>Total Length</b> : 2.706 kms  <b>S.R. Value</b> : 25000 Ohm-cm			
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>
<b>South Central Railway: SG.85/4/3/PTCC/2025-26/SCRMH 01 RTD</b>					
<b>Dated</b> 16.05.2025					
1	Nandapur (NDPR) to Hingoli (HNL)	Out of parallelism			
2	Hingoli (HNL) to Navalgaon (NVLN)	0.5	0.00049	24444	12