



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. : AND-779		
Induced Voltage (IV) calculation for PTCC proposal of 220 kV S/C line from 220/33 kV 300 MW Solar PSS of M/s SAEL Industries Limited at Sirigepalle to 765/400/220 kV Kurnool-III S/s of PGCIL (Length: 14.172 km)		
S. No	Reference No.	Dated
(i)	SAEL/MHP-1/SOLAR/300MW/03/25	15.02.2025
(ii)	BSNL: SR-PTCC/AND-779/2025-26/1	24.06.2025
(iii)	South Central Railway: SG.85/4/3/PTCC/2025-26 SCRAP 11 RC	16.05.2025
(iv)	Defense: B/46937/Sigs-7(b)/4616	10.06.2025

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 references (iii) has been computed. The voltage likely to be induced on paralleling communication cables of South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered

Divisional Engineer (QA&I), BSNL vide reference (ii), and ADG (Telecommunication), Ministry of Defense vide reference (iv) has submitted their NOC for charging of 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 7kV	d (mts) at 10kV
220/33 kV 300 MW Solar PSS of M/s SAEL Industries Limited at Sirigepalle	63.74	40	0.26	1478	956	31	3

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.

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Southern Zone	O/o CGM, QA&I circle, 2 nd floor, Sanchar Complex, WMS Compound, Jayanagar, 5 th block, 9 th main, 47 th cross, Bengaluru- 560 041
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2.	GM (S&T), South Central Railway	Zonal Headquarter Office, Secunderabad – 500 003
3.	M/s SAEL Industries Limited	3 rd Floor, Worldmark-1, Aerocity, New Delhi – 110 037

ANNEXURE-I

CEA Case No.: AND-779 Name of the Power line: 220 kV S/C line from 220/33 kV 300 MW Solar PSS of M/s SAEL Industries Limited at Sirigepalle to 765/400/220 kV Kurnool-III S/s of PGCIL			Map Scale : 1 cm= 500 m Total Length : 14.172 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.
South Central Railway: SG.85/4/3/PTCC/2025-26 SCRAP 11 RC Date: 16.05.2025					
1	Regadipalli (RLL) to Vanganur (VRN)		Out of parallelism		
2	Vanganur (VRN) to Challavaripalli (CLPE)		Out of parallelism		