



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



CEA Case No.: AND-810		
Induced Voltage (IV) calculation for PTCC proposal of 400 kV S/c Transmission Line on D/c Tower from PSS2 of Renew Vikram Shakti Private Limited (RVSP) at Peddapodilla to PSS1 of RVSP. (16.529 km)- regd.		
S.No.	Reference	Dated
(i)	ReNew: RVSP/CEA/PTCC-02	24.11.2025
(ii)	BSNL : SR-PTCC/AND200220260018/2025-26	24.02.2026
(iii)	South Central Railway: SG.85/4/3/PTCC/2025-26/SCRAP 47 RTD	26.12.2025
(iv)	Defense: B/46937/Sigs -7(b)/5401	09.03.2026

The PTCC proposal submitted vide above reference (i) has been examined. The LF induction on Block and Telecom 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 Block and Telecom circuits of South Central Railway under Single Line to Ground fault condition are enclosed at **Annexure**. The screening factors as applicable have been considered. DGM Telecom, PTCC SZ, BSNL and DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (ii) and (iv) respectively.

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 kV PSS-2	128.91	37.8	0.3	5965	3902	245	133

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 (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

Digitally signed by
 Suman Kumar Maharana
 Date: 27-03-2026
 12:59
 Chief Engineer

To,

1.	DET (PTCC), Southern Zone	QA & INSPECTION CIRCLE, Vijayawada Unit, O/o Divisional Engineer (QA & 1), 2nd floor, CTX building, Kaleswara Rao Market Road, Vijayawada - 1	
2.	GM (S&T) (South Central Railway)	O/o Principal Chief Signal & Telecom Engineer ,7th Floor, Rail Nilayam, Secunderabad-500025	ANNEXURE-I
3.	M/s Renew Vikram Shakti Private Limited	ReNew. Hub, Commercial Block-1, Zone-6, Golf Course Road, DLF City Phase-V, Gurugram-122009	Copy for information

ANNEXURE

CEA Case No.: AND-810 Name of the Power line: Induced Voltage (IV) calculation for PTCC proposal of 400 kV S/c Transmission Line on D/c Tower from PSS2 of Renew Vikram Shakti Private Limited (RVSPL) at Peddapodilla to PSS1 of RVSPL.			Map Scale : 1 cm= 500 m Total Length : 16.529 km S.R. Value : 15000 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 Letter No: SG.85/4/3/PTCC/2025-26/SCRAP 47 RTD Dated 26.12.2025					
1.	Patakotha cheruvu (PLU) - Gooty Jn (GY)	IV less than 1 V			
2.	Gooty Jn (GY) - Jakkalacheruvu (JKO)	Outside IV consideration zone			
3.	Gooty Jn (GY) - Pagadirai (PGRI)	3.7	0.00052	34800	18
4.	Pagadirai (PGRI) - Ramalingayapalli	Outside IV consideration zone			
5.	Ramalingayapalli -Pendekallu (PDL)	Outside IV consideration zone			
6.	Gooty Jn (GY) - Turkapalli (TKPY)	Outside IV consideration zone			