



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-804		
Induced Voltage (IV) calculation for PTCC proposal for 220 kV DC line from 220/33 kV PNRPPL's switchyard in Johrapuram village, Aspari Tehsil, Kurnool to 400/220 kV Ananthpuram PS (ISTS) (35.935 km)- regd.		
S.No.	Reference	Dated
i.	PNRPPL: PNRPPL/PTCC/220kV/AP/01	24.07.2025
ii.	PNRPP: Email for BSNL and Defense NOC	25.02.2026
iii.	BSNL: SR-PTCC/AND141120250007(AND-804)/01	15.11.2025
iv.	South Central Railway: SG.85/4/3/PTCC/2025-26/SCRAP 33 RTD	19.09.2025
v.	Defense: B/46937/Sigs 7(b)/5011	12.02.2026

The PTCC proposal submitted vide above reference(s) (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of South Central Railway with respect to details furnished vide above reference (iv) 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-I. The screening factors as applicable have been considered. DET (PTCC), Southern Zone has given NOC vide reference (iii) above.

ADG (Telecommunications) has issued No Objection Certificate (NOC) vide reference (v) above (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
220/33 kV Wind PSS of PNRPPL	153.7	43.261	0.067	882	532	NA	NA
400/220 kV Ananthpuram PS (ISTS)	227.7	33.39	0.14	2248	1410	NA	NA

As per the details submitted by BSNL vide reference (iii) 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

Chief Engineer

To,

1.	DET (PTCC), Southern Zone	BSNL, Inspection Circle, 2nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5th Block, 9th Main, 47th Cross, Bangalore-560043	
2.	GM (S&T) (South Central Railway)	O/o Principal Chief Signal & Telecom Engineer ,7th Floor, Rail Nilayam, Secunderabad-500025	
3.	M/s Project Nine Renewable Power Pvt Ltd	S 2904, 29th Floor, World Trade Center, Brigade Gateway Campus, 26/1, Dr. Rajkumar Road, Malleswaram- Rajajinagar, Bangalore -560055	Copy for information

ANNEXURE-I

CEA Case No.: AND-804 Name of the Power line: 220 kV DC line from 220/33 kV PNRPPL's switchyard in Johrapuram village, Aspari Tehsil, Kurnool to 400/220 kV Ananthpuram PS (ISTS)		Map Scale : 1 cm= 500 m Total Length: 35.935 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.
South Central Railway Letter No: SG.85/4/3/PTCC/2025-26/SCRAP 33 RTD Dated 19.09.2025					
1.	GTL-NLA	5.074	0.0016	14799	24
2.	NLA-NMLU	6.45	0.0081	14131	114
3.	NMLU-MGV	6.36	0.029	17212	499
4.	MGV-ASP	6.19	0.012	22640	272
5.	ASP-NRR	0.69	0.00014	27464	4
6.	GTL-TIM	3.6	0.0048	22210	97
7.	TIM-NKDO	6.6	0.012	22941	275
8.	NKDO-PLU	Out of Parallelism			
9.	GTL-GPU	8.77	0.00086	20320	17
10.	GPU-VPL	Out of Parallelism			
11.	GTL-MKR	2.75	0.0088	14920	131
12.	MKR-TGL	3.96	0.0011	7294	8
13.	GTL-GTL W	Out of Parallelism			
14.	GTL W - BLL				

Directorate General of Signals (Signals-7)
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi -11

AND - 804

B/46937/Sigs-7(b)/5011 dt 2 Feb 2026

Project Nine Renewable Power Private Ltd
S 2904, 29th Floor, World Trade Center
Brigade Gateway Campus, 26/1, Dr. Rajkumar Road
Malleswaram-Rajajinagar, Bangalore-560 055

**APPLICATION FOR SUBMISSION OF PTCC PROPOSAL FOR PROPOSED
220 KV, D/C OVERHEAD LINE ON DC TOWER FROM PROJECT NINE
RENEWABLE POWER PVT LTD (SWITCHYARD IN JOHARAPURAM
VILLAGE ASPARI TEHSIL, KURNOOL, ANDHRA PRADESH) TO
ANANTHPURAM PS (ISTS S/S)**

1. Ref your letter No PNRPPL/PTCC/220KV/AP/04 dt 24 Jul 2025.
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)



Copy to:-

HQ Southern Comd (Sigs)
PIN -908541
C/o 56 APO

Chief Engineer, Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, RK Puram, Sector-1
New Delhi-110 066

For info pl.

Sh. Srikanth (DD)
28/02

Central Electricity Authority
PSCD Division
Diary No. 588
Date 24-2-2026