



**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**

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<b>CEA Case No. : AND-772</b>		
<b>Induced Voltage (IV) calculation in respect of PTCC proposal for 400 kV D/C line from 400/220 kV Ananthpuram PS to 765/400/220 kV Kurnool III PS (85.652 km)- regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	PGCIL: PAKTL/GOOTY CAO/TL-01/PTCC	06.02.2025
(ii)	PGCIL : Email	12.08.2025
(iii)	BSNL: SR-PTCC/ANP-772/2025-26/7	04.08.2025
(iv)	South Central Railway:SG.85/4/3/PTCC/2025-26/SCRAP 21 RTD	10.07.2025
(v)	Defense: B/46937/Sigs 7(b)/4516	05.05.2025

The PTCC proposal submitted vide above reference (i) & (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), SZ, BSNL has issued 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 substation 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
400/220 kV Ananthpuram	265	33.39	0.14	2616	1641	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.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 2 <sup>nd</sup> Floor, Sanchar Complex, WMS Compound, Jayanagar 5 <sup>th</sup> Block, 9 <sup>th</sup> Main, 47 <sup>th</sup> Cross, Bangalore-560041	
2.	PCSTE/SCR	O/o Principal Chief Signal & Telecom Engineer 7th Floor, Rail Nilayam, Secunderabad-500025	
3.	General Manager (Gooty CAO – PGCIL)	Construction Area Office, 400 kV Gooty SS, Kurnool Road, Gooty, Anantapur, Andhra Pradesh - 515402	Copy for information

**ANNEXURE-I**

<b>CEA Case No.:</b> AND-772 <b>Name of the Power line:</b> 400 kV D/C line from 400/220 kV Ananthpuram PS to 765/400/220 kV Kurnool-III PS			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 85.652 km <b>S.R. Value</b> : 25000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

SCR Letter No: SG.85/4/3/PTCC/2025-26/SCRAP 21 RTD Dated 10.07.2025					
1.	Tadipatri (TU) – Komali (KMQA)	Outside IV consideration zone			
2.	Komali (KMQA) – Jutur (JUR)	1.964	0.00028	17507	5
3.	Jutur (JUR) – Vemulapadu (VML)	6.84	0.0054	9509	51
4.	Vemulapadu (VML) – Rayalacheruvu (RLO)	5.18	0.017	14497	246
5.	Rayalacheruvu (RLO) – Jakkalacheruvu (JKO)	7.336	0.012	14004	168
6.	Jakkalacheruvu (JKO) – Gooty Jn (GY)	3.735	0.00046	16452	8
7.	Gooty Jn (GY) – Patakotha cheruvu (PLU)	5.136	0.00067	21820	15
8.	Patakotha cheruvu (PLU) – Nakkanadoddi (NKDO)	6.684	0.0019	23499	45
9.	Nakkanadoddi (NKDO) – Timmancheruvu (TIM)	6.249	0.0095	25958	247
10.	Timmancheruvu (TIM) – Guntakal Jn (GTL)	Out of Parallelism			
11.	Guntakal Jn (GTL) – Gulapalayam (GPU)				
12.	Gulapalayam (GPU) – Venkatampalle (VPL)				
13.	Venkatampalle (VPL) – Khaderpet (KDT)	Outside IV consideration zone			
14.	Khaderpet (KDT) – Kallur Jn (KLU)				
15.	Kallur Jn (KLU) – Pamidi (PMD)				
16.	Pamidi (PMD) – Turkapalli (TKPY)	1	0.0016	27866	45
17.	Turkapalli (TKPY) – Gooty Jn (GY)	2	0.00068	20017	14

AND-772

Directorate General of Signals  
(Signals 7)  
General Staff Branch  
Integrated HQ of MoD (Army)  
Room No  
DHQ PO, New Delhi - 110011

B/46937/Sigs-7(b)/4516

05 May 2025

Vice President – Projects  
Sael Industries Limited  
Faridkot Road, Guruharsahai,  
Distt Ferozpur Guruharsahai,  
Punjab 152022

**CONSTRUCTION OF TRANSMISSION LINE PACKAGE-TL-01 FOR 400  
KV D/C (QUAD MOOSE) ANANTHPURAM PS-KURNOOL III PS  
TRANSMISSION LINE-PROPOSAL FOR PTCC APPROVAL**

1. Ref your letter No SAEL/MHP-1/SOLAR/ 300MW/03/25 dt 15 Feb 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.



*[Signature]*  
(Puneet Lakhnopal)  
Lieutenant Colonel  
General Staff Officer Grade-1 (Communication)  
for Additional Director General (Telecommunication)

**Enclosures:** As above

**Copy to:-**

HQ Southern Comd (Sigs) - for info pl.

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

for info pl.

*[Signature]*  
Sh. Arshad (DD)  
15/06

Central Electricity Authority

PSCD Division

Diary No. 776

Date