

I/32635/2023



सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

CEA Case No. : AND-731		
Induced Voltage (IV) calculation in respect of PTCC proposal for erection of 220KV DC/SC line from 220KV Switching Station, Inaparajupalli to 220 kV S/s of M/S Shree Cements Limited, Pedagarlapadu, Guntur (2.2 km) - regd.		
S. No	Reference No.	Dated
(i)	APTRANSCO: CE/Projects/SE220&132kV/EE-2/DEE-2/F.1PTCC/D.No.197/23	16.06.2023
(ii)	APTRANSCO: E-mail	19.12.2023
(iii)	BSNL: SR-PTCC/SAP5329/5	23.10.2023
(iv)	Southern Railway:SG.85/4/3/PTCC/SCR/2023-24/AP-10 RTD	21.07.2023
(v)	Defense: B/46937/Sigs 7(b)/3436	06.09.2023

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of Southern 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 Southern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. DEPTCC, BSNL (Bangalore) and DG Signals, MOD have issued No Objection Certificate (NOC) vide reference (iii) and (iv) (enclosed as Annexure II) respectively.

EPR details for the proposed substation is given below.

Name of the 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 kV Switching Station at Inaparajapalli	74.09	20	0.46	1511	975	23	NA
220 kV S/s Shree Cement, Pedagarlapadu	56.35	28	0.16	531	332	NA	NA

As per the details submitted by BSNL, no telecom exchanges are lying in the EPR zone of the proposed substation.

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

Encl.: As above

For Director

I/32635/2023

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 2 nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5 th Block, 9 th Main, 47 th Cross, Bangalore-560041	
2.	Chief Engineer Projects	APTransco, Vidyut Soudha, Gunadala, Vijayawada-520004, Andhra Pradesh	

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ANNEXURE-I

CEA Case No.: AND-731 Name of the Power line: PTCC proposal for erection of 220KV DC/SC line from 220KV Switching Station, Inaparajupalli to M/S Shree Cements Limited, Pedagarlapadu,Guntur (2.2 km) - regd.			Map Scale : 1 cm= 500 m Total Length : 2.2 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.
Southern Railway Letter No. SG.85/4/3/PTCC/SCR/2023-24/AP-10 RTD Date: 21.07.2023					
1	Piduguralla(PGRL)-Tummalacheruvu(TMLU)		Out of parallelism		
2	Tummalacheruvu(TMLU) – Nadikudi Jn(NDKD)		Out of parallelism		
3	Nadikudi Jn(NDKD)-Gurujala-Rentachintala-Macherla(MCLA)		Out of parallelism		

Signals 7

General Staff Branch

Integrated HQ of MoD, (Army)

DHQ PO, New Delhi – 110011

AND - 731

B/46937/Sigs 7(b)/3436

06 Sep 2023

Chief Engineer, Projects
APTransco
Transmission Corporation of Andhra Pradesh Limited
Vidyut Soudha, Gunadala
Vijayawada– 520004, Andhra Pradesh

**APTRANSCO- PROJECTS-ERECTION OF 220KV DC/SC LINE (2.2KM) FROM
220KV SWITCHING STATION, INAPARAJUPALLI TO M/S SHREE CEMENT
LIMITED, PEDAGARLAPADU-PTCC PROPOSAL-FORWARDED**

1. Refer your Lr No. CE/Projects/SE220&132kV/EE-2/DEE-2/F.1 PTCC/D.No. 197/23 dt 16 Jun 2023 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(SP Choyal)

Lieutenant Colonel

General Staff Officer Grade 1 (Communication)

for Additional Director General (Telecommunication)

Enclosures : As above**Copy to :-**

The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi – 110016

- for information

The DET(PTCC), Northern Zone
Bharat Sanchar Nigam Limited
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

Central Electricity Authority
PCD Division
Diary No. 286
Date 29/9/23

Sh. Anil Kumar (D1)
29/9

Pls. examine & pu. 31/9/23
05/10/23

Sh. Prateek