

I/27903/2023



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-705		
PTCC approval for 220 kV D/C line from existing 400/220 kV SS Hindupur to proposed 220/132 kV SS Penukonda (Near Gorantla) in Anantapuram District (26.798 km) - regd.		
S. No	Reference No.	Dated
(i)	APTRANSCO: CPT CPT 150/SE/PM/Penukonda/PTCC proposals/D. no. 2548/20	06.11.2020
(ii)	APTRANSCO: CE(Projects)/SE/Proj/EE-1/DEE-2/F.Penukonda/D. no. 118/22	11.11.2022
(iii)	BSNL: SR-PTCC/SAP4369/05	07.02.2023
(iv)	South Western Railway: SG/SWR/PTCC/106276/2457	25.01.2023
(v)	Defense: B/46937/Sigs 7(b)/2215	29.12.2020

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on communication circuits of BSNL and South Western Railway with respect to details furnished vide above references (iii) and (iv) respectively have been computed. The voltages likely to be induced on paralleling communication cables of BSNL and South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I & II respectively. The screening factors as applicable have been considered. Vide reference (v) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed as Annexure-III).

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
220/132 kV SS Penukonda	73.9	30	0.6	3019.6	1972.6	116.1	59.1

As per the details submitted by BSNL, there are no telecom exchanges falling within 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

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	
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2.	PCSTE	South Western Railway, O/o PCSTE, Rail Soudha, Gadag Road, Hubballi – 20	
3.	Chief Engineer, Projects	APTRANSCO, Vidyut Soudha, Vijayawada - 520004	Copy for information

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ANNEXURE-I

CEA Case No.: AND-705 Name of the Power line: 220 kV D/C line from existing 400/220 kV SS Hindupur to proposed 220/132 kV SS Penukonda (Near Gorantla) in Anantapuram District			Map Scale : 1 cm= 500 m Total Length : 26.798 km S.R. Value : 50000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL Letter No: SR-PTCC/SAP4369/05 Date: 07.02.2023					
PATNAM TELEPHONE EXCHANGE					
1	Gorantla Telephone Exchange – P04 – DP0406	1.5	0.0097	27938	271

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ANNEXURE-II

CEA Case No.: AND-705			Map Scale : 1 cm= 500 m		
Name of the Power line: 220 kV D/C line from existing 400/220 kV SS Hindupur to proposed 220/132 kV SS Penukonda (Near Gorantla) in Anantapuram District			Total Length : 26.798 km		
			S.R. Value : 50000 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 WESTERN RAILWAY Letter No: SG/SWR/PTCC/106276/2457 Date: 25.01.2023					
1	Hindupur - Malugur	Out of parallelism			0
2	Malugur - Chakarapalli	3.3	0.0092	24348	224
3	Chakarapalli - Rangepalli	Out of parallelism			0
4	Rangepalli - Penukonda				0

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Annexure-III

Tele : 23019746

AND-705

Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi – 110011


B/46937/Sigs 7(b)/2215/

29 Dec 2020

Chief Engineer, Construction
Transmission Corporation of Andhra Pradesh Ltd
Vidyut Soudha
Vijayawada - 520004

**ERECTION OF 220KV LINE FROM 400KV HINDUPUR SS TO PROPOSED 220KV SS AT
PENUKONDA IN ANANTAPUR DISTRICT-PTCC PROPOSALS-FORWARDED-
REGARDING**

1. Ref your letter No Lr: No. CPT CPT 150/SE/PM/Penukonda/PTCC proposals/D.No. 2548/20 dt 06 Nov 2020 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(Rakesh Kumar)
Lt Col
GSO 1 (Comn)
for SO-in-C

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
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Janpath
New Delhi-110001

Sh. Tamsi
RPS
08-01-21

