



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**  
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CEA Case No. : TNG-140		
<b>Induced Voltage (IV) calculation for PTCC proposal of 400 kV D/C line from existing 400/220/33 kV Maheshwaram SS to proposed 400/11 kV Uddandapur LISS (60.499 km) - regd.</b>		
S. No	Reference No.	Dated
(i)	TSTRANSCO: CE/PRLIS/D1-A3/F.MHWR-UDDPR Line/D. No. 535/2022	27.10.2022
(ii)	BSNL: SR-PTCC/STS 4310/05	13.06.2023
(iii)	South Central Railway: SG.85/4/3/PTCC/SCR/2022-23/TS-30RTD	29.11.2022
(iv)	Defense: B/46937/Sigs 7(b)/3117	20.01.2023

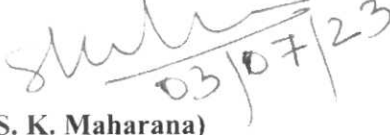
The PTCC proposal submitted vide reference (i) has been examined. Vide reference (ii) above, BSNL has intimated that there are no telecom lines/cables or assets in the vicinity of the proposed power line. The LF induction on communication circuits of South Central Railway with respect to details furnished vide above reference (iii) have been computed. The voltage likely to be induced on paralleling communication cables of South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. Vide reference (iv) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed 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
400/11 kV Uddandapur SS	235.8	63	0.201	6708.23	4357.94	190.76	62.79

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

Encl.: As above

  
 03/07/23  
**(S. K. Maharana)**  
**Chief Engineer**

I/28691/2023

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	
2.	General Manager (Tele)	South Central Railway, O/o PCSTE, 7 <sup>th</sup> Floor, Rail Nilayam, Secunderabad – 500025	
3.	Chief Engineer, PRLIS	TSTRANSCO, Vidyut Soudha, Hyderabad – 500082	Copy for information

I/28691/2023

ANNEXURE-I

<b>CEA Case No.:</b> TNG-140 <b>Name of the Power line:</b> 400 kV D/C line from existing 400/220/33 kV Maheshwaram SS to proposed 400/11 kV Uddandapur LISS			<b>Map Scale</b> : 1 cm= 500 m <b>Total Length</b> : 60.499 km <b>S.R. Value</b> : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>SOUTH CENTRAL RAILWAY Letter No: SG.85/4/3/PTCC/SCR/2022-23/TS-30RTD Date: 29.11.2022</b>					
1	Balanagar (BABR) – Gollapalli (GLY)	10.1	0.0031	25806	80
2	Gollapalli (GLY) – Jadcherla (JCL)	3.1	0.0044	31364	138
3	Jadcherla (JCL) – Divitipalli (DTP)	6.6	0.0006	25610	15
4	Divitipalli (DTP) – Mahbubnagar (MBNR)	0.1	0.00003	33400	1

I/28691/2023 Tele : 23019746

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

B/46937/Sigs 7(b)/3117/

20 Jan 2023

Chief Engineer,  
 PRLIS, TSTRANSCO  
 Transmission Corporation of Telangana State Limited  
 Vidyut Soudha,  
 Hyderabad – 500 082

**ERECTION OF 400KV QUAD MOOSE DC LINE FROM 400/220/33KV  
 MAHESWARAM SS TO PROPOSED 400/11KV UDDANDAPUR LISS-60.499KM-  
 PTCC PROPOSAL-REG**

1. Refer your letter No CE/PRLIS/D1-A3/F.MHWR-UDDPR Line/D.No. 535/2022 dt 27 Oct 2022 (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.

(SK Sharma)  
 Lt Col  
 GSO 1 (Comn)  
 for Offg ADG T

**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

D.V

118  
 10-02-23

