



सत्यमेव जयते

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

| | | |
|--|---|--------------|
| CEA Case No. : AND-712 | | |
| Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220kV Ongole - Racheralapadu D/C line at 220kV Kandukur SS (3.5 km)- regd. | | |
| S. No | Reference No. | Dated |
| (i) | TCAPL: CE/Zone/VJA/EE/Const/DEE-2/AEE/F.220kV Ongole-R, padu/D.No.147 | 22.05.2021 |
| (ii) | BSNL: SR-PTCC/SAP5864/7 | 30.05.2024 |
| (iii) | South Central Railway: SG.85/4/3/PTCC/SCRAP202123 RTD | 24.03.2022 |
| (iv) | Defense: B/46937/Sigs 7(b)/2457 | 04.08.2021 |

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of South Central Railway with respect to details furnished vide above reference (iii) 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 (Bangalore) has issued NOC vide reference (ii) above.

DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv) (attached as Annexure –II).

All substations are existing therefore, EPR calculations is not warranted.

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, 2 nd Floor, Sanchar Complex, WMS Compound, Jayanagar 5 th Block, 9 th Main, 47 th Cross, Bangalore-560041 | |
| 2. | GM S&T | Office of Principal Chief Signal & Telecom Engineer, 7 th Floor, Rail Nilayam, Secunderabad-500025 | |
| 3. | Chief Engineer (Zone) | APTransco, Vidyut Soudha, Gunadala, Vijayawada-520004, Andhra Pradesh | For Information |

ANNEXURE-I

| CEA Case No.: AND-712 Name of the Power line: LILO of 220kV Ongole - Racheralapadu D/C line at 220kV Kandukur SS | | | Map Scale : 1 cm= 500 m Total Length : 3.5 km S.R. Value : 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/SCRAP202123 RTD | | | Dated 24.03.2022 | | |
| 1. | Tettu (TTU) – Ulavapadu (UPD) | Out of Parallelism | | | |
| 2. | Ulavapadu (UPD) – Singarayakonda (SKM) | Outside IV consideration zone | | | |
| 3. | Singarayakonda (SKM) – Tanguturu (TNR) | Outside IV consideration zone | | | |

Annexure II

Tele : 23019746

AND-712

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

B/46937/Sigs 7(b)/2457

09 Aug 2021

Chief Engineer, Zone
 Transmission Corporation of Andhra Pradesh Limited
 APTRANSCO
 Gunadala, Vijayawada-520004

**ERECTION OF 220KV DC LINE (3.500KM) FOR MAKING LILO OF 220KV
 ONGOLE-RACHERLAPADU LINE TO THE 220/132KV KANDUKUR SS IN
 PRAKASAM DISTRICT-PTCC PROPOSAL- FORWARDED**

1. Refer your Ltr letter No Lr. No. CE/Zone/VJA/EE/Const/DEE-2/AEE/F.220KV Ongole-R.padu/D.No.147/21 dt 22 May 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(A Rawat)
 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 Shaned 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, Eastern Court, Janpath
 New Delhi-110001

