





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.: TNG-126 PTCC approval for 400 kV QMDC line from proposed Yadadri Thermal Power Plant switchyard to proposed 400/220/132 kV SS Choutuppal (92.379 km) - regd. | | | | | |
|---|--|------------|--|--|--|
| | | | | | |
| (i) | TSTRANSCO: CE/400kV/SE-II/400kV/D1-A1/F.Chotuppal-YTPP/D.no.866/21 | 28.09.2021 | | | |
| (ii) | TSTRANSCO: Email | 17.05.2023 | | | |
| (iii) | BSNL: SR-PTCC/STS 3653/06 | 25.03.2023 | | | |
| (iv) | South Central Railway: SG.85/4/3/PTCC/SCRTS202145 RTD | 24.01.2022 | | | |
| (v) | Defense: B/46937/Sigs 7(b)/2645 | 24.12.2021 | | | |

The PTCC proposal submitted vide reference (i) & (ii) has been examined. Vide reference (iii) above, BSNL has informed that there are no telecom lines/cables or assets existing within the vicinity of the proposed transmission line. The LF induction on communication circuits of South Central Railway with respect to details furnished vide above reference (iv) 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 (v) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed as Annexure-II).

EPR Zones for proposed substations are mentioned below.

| Elit Zones for proposed substations are mentioned colow. | | | | | | | |
|--|-----------|------------|--------------|----------|---------|---------|---------|
| Name of the | Half | Fault | Resistance | d (mts) | d (mts) | d (mts) | d (mts) |
| proposed SS | Diagonal | Current, I | of earthmat, | at 430 V | at 650 | at 7 kV | at 10 |
| | Distance, | (kA) | R (Ohms) | | V | | kV |
| | D/2 (mts) | | | | | | |
| 400 kV | 604.4 | 36600 | 0.166 | 7935 | 5045 | NA | NA |
| Yadadri | | | | | | | |
| Thermal | | | | | | | |
| Power Plant | | | | | | | |
| Switchyard | | | | | | | |
| 400/220/132 | 479.86 | 20380 | 0.131 | 2499 | 1491 | NA | NA |
| kV | | | | | | | |
| Choutuppal | | | | | | | |
| 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

I/27902/2023_{To,}

| 1. | Divisional | BSNL, Inspection Circle,1st Floor, Raj Bhavan | |
|----|------------------|---|----------------------|
| | Engineer (PTCC), | Exchange No. 26, Sardar Patel Road, Guindy, | |
| | Southern Zone | Chennai-600032 | |
| 2. | General Manager | South Central Railway, O/o PCSTE, 7th floor, | |
| | (S&T) | Rail Nilayam, Secunderabad - 500025 | |
| 2 | Chief Engineer, | TSTRANSCO, Vidyut Soudha, Hyderabad – | Convertaginformation |
| ٥. | 400 kV | 500082 | Copy for information |

ANNEXURE-I

| Name o | ase No.: TNG-126 of the Power line: 400 kV QMDC line from proposed Power Plant switchyard to proposed 400/220/ppal | | Total Length | : 1 cm= 500 r : 92.379 km 15000 Ohm-cr | | | |
|--|---|-------------------------------|--------------------------------|--|---------------------|--|--|
| S.No. | Telecom. Details | Length of Parallelis m in Km. | Mutual Coupling in Ohms. | Effective Fault current in Amps. | I.V in Volts. | | |
| SOUTH CENTRAL RAILWAY Letter No: SG.85/4/3/PTCC/SCRTS202145 RTD Date: 24.01.2022 | | | | | | | |
| 1 | Kondrapol (KDGL) – Vishnupuram (VNUP) | Out of parallelism 0 | | | 0 | | |
| 2 | Vishnupuram (VNUP) – Pondugala (PDGL) | 0.25 | 0.00002 | 37698 | 1 | | |

TNG-126

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)/2645

JU Dec 2021

Chief Engineer/400KV
TSTRANSCO
Transmission Corporation of Telangana State Limited
Vieyut Soudha, Hyderabad-500 082

YADADRI THERMAL POWER EVACUATION SCHEME (5X800MW)-ERECTION OF 400KV QMDC LINE FROM YADADRI TPP, SWITCHYARD, TSGENCO TO 400/220/132KV CHOUTUPPAL SS (92.379KMS APPROX)-PTCC PROPOSAL

- 1. Refer your letter No Lr. No. CE/400kV/SE-II/400kV/D/1-A1/F.Choutuppal-YTPP/D.No.866/21 dt 28 Sep 2021 (copy att).
- 2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your above mentioned letter.

3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action. \mathcal{A}

(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

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

for information



of sector