



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-767 | | |
|--|---|------------|
| Induced Voltage (IV) calculation in respect of PTCC proposal for 765KV D/C line from 765/400/33KV Kurnool – III PS to 765/400/33kV Maheswaram PS(252.22 km)- regd. | | |
| S. No | Reference No. | Dated |
| (i) | PGCIL: SR-I/NDL/KK/F-18/PTCC/01 (TW-02) | 11.09.2024 |
| (ii) | PGCIL: SR-I/NGKL/ F-18C/PTCC/01 (TW-03) | 30.09.2024 |
| (iii) | BSNL: SR-PTCC/SAP6446/9 (TW-02) | 17.02.2025 |
| (iv) | BSNL: SR-PTCC/STS6364/13(TW-03) | 15.02.2025 |
| (v) | South Central Railway:SG.85/4/3/PTCC/2024-25/SCRAP 25 RTD(TW-02) | 29.10.2024 |
| (vi) | South Central Railway:SG.85/4/3/PTCC/2024-25/SCRTS 09 RC(TW-03) | 29.10.2024 |
| (vii) | Defense: B/46937/Sigs 7(b)/4175(TW-02) | 06.11.2024 |
| (viii) | Defense: B/46937/Sigs 7(b)/4213(TW-03) | 12.12.2024 |

The PTCC proposal submitted vide above reference (i) & (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL and South Central Railway with respect to details furnished for Andhra Pradesh region vide above reference (iii) and (v) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL and South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure –II respectively. The screening factors as applicable have been considered. DET (PTCC), SZ, BSNL has issued NOC for Telangana portion (TW-03) vide reference (iv) above. SCR has issued NOC for Telangana portion (TW-03) vide reference (vi) above.

ADG (Telecommunications) has issued No Objection Certificate (NOC) for Andhra Pradesh and Telangana region vide reference (vii) and (viii) above (attached as Annexure –III).

Both substations are existing therefore EPR calculations are not warranted.

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC.

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. | PCSTE/SWR | Principal Chief Signal & Telecom Engineer, Rail Soudha, Gadag Road, Hubballi-580020 | |
| 3. | Chief Engineer Projects | APTransco, Vidyut Soudha, Gunadala, Vijayawada-520004, Andhra Pradesh | For Information |

ANNEXURE-I

| CEA Case No.: AND-767 Name of the Power line: 765KV D/C line from 765/400/33KV Kurnool – III PS to 765/400/33kV Maheswaram (TW-02) | | | Map Scale : 1 cm= 500 m Total Length : 252.22 km S.R. Value : 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. |

BSNL Letter No: SR-PTCC/SAP6446/9 (TW-02)

Dated 17.02.2025

Koilkuntla Telephone Exchange

| | | | | | |
|----|--|--------------------|--------|-------|----|
| 1 | Koilkuntla Exchange to Ankamma Temple | Out Of Parallelism | | | |
| 2 | Koilkuntla Exchange to Market Pillar | | | | |
| 3 | Koilkuntla Exchange to Gandhi Nagar Pillar | 0.3 | 0.0009 | 11864 | 11 |
| 4 | Koilkuntla Exchange to Inspector Pillar | Out Of Parallelism | | | |
| 5 | Koilkuntla Exchange to Ankamma Temple to MDO office | | | | |
| 6 | Koilkuntla Exchange to Ankamma Temple to JMD turning | IV less than 430V | | | |
| 7 | Koilkuntla Exchange to Market to Panduranga Swamy Temple | | | | |
| 8 | Koilkuntla Exchange to Chowdamma Temple | Out Of Parallelism | | | |
| 9 | Koilkuntla Exchange to Ramalayam Temple | | | | |
| 10 | Koilkuntla Exchange to Bus stand Pillar | IV less than 430V | | | |

Sanjamala Telephone Exchange

| | | | | | |
|---|--|-------------------|--------|-------|---|
| 1 | Sanjamala Exchange to Police station | 0.6 | 0.0007 | 13364 | 9 |
| 2 | Sanjamala Exchange to Police station to Primary School | IV less than 430V | | | |
| 3 | Sanjamala Exchange to Police station to Giddular Road | | | | |

Panyam Telephone Exchange

| | | | | | |
|---|------------------------------------|-------------------|--------|------|---|
| 1 | Panyam Exchange to Panyam Village | 0.291 | 0.0001 | 8190 | 1 |
| 2 | Panyam Exchange to Railway Station | IV less than 430V | | | |
| 3 | Panyam Exchange to Chandamma Hotel | | | | |

Nerawada Telephone Exchange

| | | | | | |
|---|------------------------------|-------------------|--|--|--|
| 1 | Nerawada Exchange to College | IV less than 430V | | | |
|---|------------------------------|-------------------|--|--|--|

Gudivemula Telephone Exchange

| | | | | | |
|-----------------------------------|---|-------------------|--------|------|---|
| 1 | Gudivemula Exchange to Nandyal Road | IV less than 430V | | | |
| 2 | Gudivemula Exchange to Rnandikotkur Road | | | | |
| MSNR Telephone Exchange | | | | | |
| 1 | MSNR Exchange to Bommalasatram | 1.336 | 0.0006 | 8343 | 5 |
| 2 | MSNR Exchange to Bommalasatram | IV less than 430V | | | |
| 3 | MSNR Exchange to Pillar No 23 to Pillar 93 | | | | |
| 4 | MSNR Exchange to Pillar No 93 to Pillar 94 | | | | |
| 5 | MSNR Exchange to Pillar No 16 | | | | |
| 6 | MSNR Exchange to Pillar No 16 to Pillar No 17 | | | | |
| 7 | MSNR Exchange to Pillar No 12 to Pillar No 13 | | | | |
| 8 | MSNR Exchange to LIC office | | | | |
| 9 | MSNR Exchange to Pillar No 12 | | | | |
| 10 | MNSR Exchange to Pillar No 14 to Pillar No 29 | | | | |
| 11 | MSNR Exchange to LIC office | | | | |
| 12 | MNSR Exchange to Pillar No 10 to P91 | | | | |
| 13 | MNSR Exchange to Pillar No 10 to Pillar no 20 | | | | |
| 14 | MNSR Exchange to Pillar No 12 to P 13 | | | | |
| Nandyal Telephone Exchange | | | | | |
| 1 | Nandyal Exchange to Sunkulamma Temple Pillar | 1 | 0.0004 | 7605 | 3 |
| 2 | Nandyal Exchange to Ammavarisala Pillar | IV less than 430V | | | |
| 3 | Nandyal Exchange to MDL Hospital | | | | |
| 4 | Nandyal Exchange to Tourist Pillar | | | | |
| 5 | Nandyal Exchange to Chandana Brothers Arch | | | | |
| 6 | Nandyal Exchange to Vijaya Hospital | | | | |
| 7 | Nandyal Exchange to Ramalayam Junction | | | | |
| 8 | Nandyal Exchange to Ramalayam Backside | | | | |
| 9 | Nandyal Exchange to Income Tax Office | | | | |
| 10 | Nandyal Exchange to Medicare Pillar | | | | |
| 11 | Nandyal Exchange to Alisons Pillar | | | | |
| 12 | Nandyal Exchange to Municipal Office Pillar | | | | |

ANNEXURE-II

| CEA Case No.: AND-767 Name of the Power line: 765KV D/C line from 765/400/33KV Kurnool – III PS to 765/400/33kV Maheswaram (TW-02) | | | Map Scale : 1 cm= 500 m Total Length : 252.22 km S.R. Value : 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. |

SCR Letter No:SG.85/4/3/PTCC/2024-25/SCRAP 25 RTD Dated 29.10.2024

DOMMASANDRA EXCH(DMS)

| | | | | | |
|----|-------------------------------------|-------------------------------|--------|-------|----|
| 1. | Nandyal (NDL) – Panyam (PNM) | 1.368 | 0.0025 | 8119 | 20 |
| 2. | Panyam (PNM) – Krishnammakona (KEF) | Outside IV consideration zone | | | |
| 3. | Krishnammakona (KEF) - Bugganipalli | Outside IV consideration zone | | | |
| 4. | Nandyal (NDL) – Madduru | 3.52 | 0.0087 | 8717 | 76 |
| 5. | Madduru – Banaganapalli | 6.789 | 0.0015 | 7664 | 11 |
| 6. | Banaganapalli – Koilakuntla | 2.942 | 0.0017 | 11480 | 20 |
| 7. | Koilakuntla - Sanjamala | 9.386 | 0.0016 | 14361 | 23 |

Annexure III

Directorate General of Signals
(Signals 7)
General Staff Branch
Integrated HQ of MoD (Army)
Room No
DHQ PO, New Delhi - 110011

B/46937/Sigs-7(b)/4175

06 Nov 2024

Dy General Manager
Power Grid Corporation of India Limited
Site Off: Plot No 103, Nandi Paradise
Kranthi Nagar, Nandyal (Mandal & District)-518501
Andhra Pradesh

CONSTRUCTION OF 765 KV D/C KURNOOL III PS- MAHESWARAM
TRANSMISSION LINE (TW02)

1. Refer your letter No No SR-I/NDL/KK/F-18/PTCC/01 dt 11 September 2024.
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-I
for ADG (Telecom)

Enclosures: As above

Internal: -

HQ Southern Comd (Sigs)

- For info pl.

Directorate General of Signals
(Signals-7)
General Staff Branch
Integrated HQ of MoD (Army)
Room No
DHQ PO, New Delhi - 110011

B/46937/Sigs-7(b)/4213

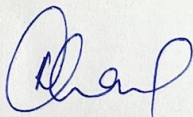
12 Dec 2024

M/s Powergrid Corporation of India Ltd
House No-13-119/K/10, Om Nagar Colony
Nagar-Kurnool (Mandal & District-509209 Telengana)

**PTCC APPROVAL FOR CONSTRUCTION OF 765KV D/C KURNOOL
III PS- MAHESWARAM TRANSMISSION LINE (TW03 PKG.)**

1. Ref your letter No SR-I/NGKL/F-18C/PTCC/01 dt 30 Sep 2024.
2. No Objection Certificate (NOC) is **accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.




(Karan Dhawan)
Colonel
Colonel Signals-7
for Additional Director General
(Telecommunication)

Internal:-

HQ Southern Comd (Sigs) - for info pl.