



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 Division

| CEA Case No.: JHR-66 | | |
|---|---|------------|
| Induced Voltage calculation for PTCC proposal of 400 kV D/C Transmission Line from Latehar (Essar) to Chandwa S/s. (Length – 1.77 km) | | |
| S. No | Reference No. | Dated |
| (i) | PGCIL: ER-I/PTI/PTCC/824 | 13.12.2024 |
| (ii) | PGCIL: e-mail | 08.04.2026 |
| (iii) | PGCIL: Undertaking received via e-mail | 08.04.2026 |
| (iv) | BSNL : DE/ER/PTCC/EJH/400kV/Latehar- Chandwa/02 | 11.12.2025 |
| (v) | ECR: ECR-HQ0SnT (CPTC)/1/2023-O/o Dy. CSTE/H/ECR/267. | 24.01.2025 |

The PTCC proposal submitted vide references (i) and (ii) has been examined. DET-PTCC (ER), BSNL has issued their No Objection Certificate (NOC) vide references (iv). The LF induction on Block and Telecom circuits of East Central Railway with respect to details furnished vide above reference (v) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of East Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered.

As all stations are existing, the EPR zone verification is not warranted.

Telecommunication details from Defense are still pending and vide above reference (iii) transmission utility has shown urgency for charging of line and has requested for provisional PTCC approval. Taking above into consideration, necessary action for issuance of provisional 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 provisional RAC.

Digitally signed by
 Suman Kumar Maharana
 Date: 10-04-2026
 17:15:20
Chief Engineer

To,

| | | | |
|----|--------------------------------------|---|---|
| 1. | Divisional Engineer (Eastern Region) | "BSNL QA & Inspection Circle, QA Bhawan, EP-GP Block, Sector-V, Kolkata" | |
| 2. | Chief Signal & Telecom Engineer, | East Central Railway, Hajipur, Dist. Vaishali (Bihar) | ANNEXURE-I |
| 3. | Director General of Signals | General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ, PO, New Delhi- 110 105 | With a request to provide details of Telecom assets/ NOC at the earliest for issuance of final RAC. |
| 4. | PGCIL | B-9, Qutub Institutional Area, Katwaria Sarai, New – Delhi - 110016 | Copy for information |

ANNEXURE-I

| CEA Case No.: JHR-66 Name of the Power line: Induced Voltage calculation for PTCC proposal of 400 kV D/C Transmission Line from Latehar (Essar) to Chandwa S/s. | | | Map Scale : 1 cm= 500 m Total Length : 1.77 km S.R. Value : 20000 Ohm-cm | | |
|--|---------------------------|------------------------------|---|----------------------------------|---------------|
| S.No. | Telecom. Details | Length of Parallelism in Km. | Mutual Coupling In Ohms. | Effective Fault current In Amps. | I.V in Volts. |
| East Central Railway No: ECR-HQ0SnT (CPTC)/1/2023-O/o Dy. CSTE/H/ECR/267 Dated 24.01.2025 | | | | | |
| 1. | Tori - Mahuamilan | 0.8 | 0.00026 | 12900 | 3.35 |
| 2. | Mahuamilan –Mc Cluskiganj | Out of parallelism | | | |
| 3. | Tori-Barkakana-Richugudda | 0.8 | 0.00026 | 12900 | 3.35 |