

I/30663/2023



सत्यमेव जयते

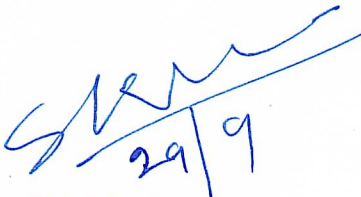
भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत संचार विकास प्रभाग
Power Communication Development Division

| CEA Case No. : UP-600 | | |
|---|--|--------------|
| Induced Voltage (IV) calculation for PTCC proposal of 220 kV D/C Shajahanpur (400) (PG)-Gola(220) Transmission Line [Length-57.57km]-Regd. | | |
| S. No | Reference No. | Dated |
| (i) | UPPTCL: 668/ETD(LMP)/SPN(400PG)-Gola Line | 24.05.2022 |
| (ii) | UPPTCL: 892/वि०पारे०ख०(लखी०) | 23.09.2023 |
| (iii) | BSNL: DET/PTCC/ND/DV-10120/UP-1082/2023-24 | 17.07.2023 |
| (iv) | Northern Railway: 342-SIG/1/PTCC/2023-24/09/02 | 25.09.2023 |
| (v) | North Eastern Railway: NER-HQ0SndT(TELE)/31/2020-O/O PCSTE/HQ/NER | 13.01.2023 |
| (vi) | Defense: B/4693/Sigs7(b)/2968 | 20.02.2023 |

The PTCC proposal submitted vide reference (i) & (ii) has been examined. The LF induction on Block and Telecom circuits of Northern Railway has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of Northern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET (PTCC), NZ, BSNL, Dy.CSTE North Eastern Railway and DG Signals, MoD have issued No Objection Certificate (NOC) vide reference (iii), (v) & (vi) respectively.

Taking above into consideration, necessary action regarding issuance of PTCC approval for the subject cited transmission line might be taken under intimation to this office.

Encl.: As above


 29/9
Chief Engineer

I/30663/2023

To,

| | | | |
|----|---|--|-----------------------|
| 1. | Divisional Engineer (PTCC), Northern Zone | BSNL, O/o PGM(North), QA & Inspection Circle D-Tax Building, Eastern Court, Janpath New Delhi-110001 | |
| 2. | GM (S&T) | Northern Railway, Baroda House New Delhi | Annexure-I |
| 4. | Ex. Engineer UPPTCL | Electricity Transmission Division-I Lakhimpur-Kheri, U.P | Copy for information. |

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ANNEXURE-I

| CEA Case No.: UP-600 | | | Map Scale : 1 cm= 500 m | | |
|--|---|------------------------------|---------------------------|----------------------------------|---------------|
| Name of the Power line: 220 kV D/C Shajahanpur (400) (PG)-Gola(220) Transmission Line. | | | Total Length : 57.57km | | |
| | | | S.R. Value : 15000 Ohm-cm | | |
| S.No. | Telecom. Details | Length of Parallelism in Km. | Mutual Coupling in Ohms. | Effective Fault current in Amps. | I.V in Volts. |
| Northern Railway Letter No.: 342-SIG/1/PTCC/2023-24/09/02 Dated 25.09.2023 | | | | | |
| <u>Affected Blocks & Telecom Circuits Details</u> | | | | | |
| <u>Unnao-Lucknow Section</u> | | | | | |
| 1 | Roza R/s to Pandit Ram Prasad Bsimil R/s | -Out of Parallelism- | | | |
| 2 | Pandit Ram Prasad Bsimil R/s to Kahilia R/s | -Out of Parallelism- | | | |
| 3 | Kahilia R/s to Aigawan R/s | -Out of Parallelism- | | | |
| 4 | Banthra R/s to Shajahanpur R/s | -Out of Parallelism- | | | |
| 5 | Shajahanpur R/s to Roza R/s | -Out of Parallelism- | | | |
| 6 | Roza R/s to Bartara R/s | 3.5 | 0.0023 | 24800 | 57 |
| 7 | Bartara R/s to Unchaulia R/s | 3.5 | 0.0008 | 15700 | 13 |
| 8 | Unchaulia R/s to Jang Bahadur Ganj R/s | -Out of Parallelism- | | | |