

भारत सरकार

Government of India विद्युत मंत्रालय

Ministry of Power केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority विद्युत संचार विकास प्रभाग

Power Communication Development Division

No.: CEA/PCD/ PTCC/UP-515/664-67

Date: 06.11.2020

Subject: PTCC proposal for 765 kV S/C Thusi to Unnao transmission line - regd

 Ref:
 (i)
 UPPTCL Ref. No. ETDA-I/
 Dated: 18.12.2019

 (ii)
 BSNL Ref. No. DET/PTCC/ND/DV-9726/UP-870/2020-21
 Dated: 24.08.2020

 (iii)
 Northern Railway Ref. No. 342-SIG/1/PTCC/2019-20/02/04
 Dated: 13.02.2020

 (iv)
 North Eastern Railway Ref No N/242/1(Tele)PTCC Part-I/97
 Dated: 13.02.2020

The PTCC proposal submitted vide above ref. (i) has been examined. The low frequency induction on Block & Telecom circuits of Northern Railway and North Eastern Railway as per details, furnished vide ref. (iii) and (iv) respectively, has been examined. The Soil Resistivity value has been taken as 20,000 Ohms-cm. Voltages likely to be induced on paralleling Block & Telecom circuits of Northern Railway and North Eastern under single line to ground fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered. BSNL vide ref. (ii) above, has issued No Objection Certificate (NOC).

Telecommunication details from Defense are pending and the power authority has shown urgency for charging of the line. In view of this, kindly take necessary action regarding issuance of Provisional PTCC route approval for 765 kV S/C Jhusi to Unnao transmission line.

Encl.: As above.

(Upendra Kumar) Chief Engineer

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

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Copy to:

- 1. AESTE (UTS), Northern Railway, Headquarter Office, Baroda House, New Delhi 110001 (with Annex-I)
- 2. DRM (S&T), Office of the Divisional Railway Manager (S&T), North Eastern Railway, Varanasi (with Annex-II)
- 3. Executive Engineer, Electricity Transmission Division I, UPPTCL, 57-George Town, Prayagraj, Uttar Pradesh 211002

एन आर पी सी परिसर, कटवारिया सराय, नई दिल्ली-110016 टेलीफैक्स: 011-26565214 ईमेल: celdntcea@gmail.com वेबसाइट www.cea.nic.in NRPC Complex, Katwaria Sarai, New Delhi-110016 Telefax: 011-26565214 Email: celdntcea @gmail.com Website: <u>www.cea.nic.in</u>

1 cm = 500 mtsMap Scale Total Length: 238.833 Km. Case No.: UP-515 : 20,000 Ohms-cm S.R. Value Name of the Power line: 765 kV S/C Jhusi to Unnao transmission line Effective $\mathbb{I}.\mathbb{V}$ Fault Mutual Length of in current Coupling Parallelism Volts. in Amps. in Ohms. in Km. Telecom. Details S.No.

| | 342-SIG/1/PTCC/2019-20/02/04 Dated: 13.02.2 | | | | <u> </u> |
|--|--|-------------------------------|--------|-------|----------|
| fected | Blocks & Telcom Circuits Details | | | | 0 |
| 1 | Magarwara R/S to Unnao R/S | Outside IV consideration zone | | | |
| 2 | Unnao R/S to Sonik R/S | 1.5 | 0.0020 | 20000 | 40 |
| 3 | Sonik R/S to Ajgan R/S | 2.1 | 0.0008 | 20000 | 16 |
| 4 | Unnao R/S to Bighapur R/S | 15.5 | 0.0018 | 17600 | 32 |
| 5. | Bighapur R/S to Takia R/S | 9.5 | 0.0021 | 17000 | 36 |
| 6 | Takia R/S to Raghuraj Singh R/S | 12.3 | 0.0023 | 16900 | 39 |
| - | Raghuraj Singh R/S to Lalganj R/S | 12.1 | 0.0028 | 15400 | 43 |
| 8 | Lalganj R/S to Dalmau R/S | 10.6 | 0.0025 | 14500 | 36 |
| -9 - | Dalmau R/S to Jalalpur Dhai R/S | 9.1 | 0.0017 | 13100 | 22 |
| 10 | Jalalpur Dhai R/S to Unchahar R/S | 5.5 | 0.0010 | 12700 | 13 |
| 11 | Dalmau R/S to Radhabalmpur R/S | 2.45 | 0.0009 | 13300 | 12 |
| 12 | Radhabalmpur R/S to Ubrani R/S | 2.4 | 0.0017 | 12900 | 22 |
| <u>, </u> | Ubrani R/S to Daryapur R/S | 0.9 | 0.0002 | 12900 | 3 |
| $\frac{13}{\frac{1}{4}}$ | Daryapur R/S to Lachmanpur R/S | 0.5 | 0.0005 | 11500 | 6 |
| 14 | Lachmanpur R/S to Ramchandrapur R/S | 2.2 | 0.0030 | 11500 | 35 |
| 15 | Ramchandrapur R/S to Unchahar R/S | 4.75 | 0.0006 | 11500 | 7 |
| $\frac{16}{17}$ | Dhirganj R/S to Mauaimma R/S | Outside IV consideration zone | | | 0 |
| $\frac{17}{10}$ | Mauaimma R/S to Siwaith R/S | 4.35 | 0.0012 | 15400 | 18 |
| 18 | | 2.2 | 0.0002 | 16200 | 3 |
| $\frac{19}{20}$ | Siwaith R/S to Phaphamau R/S Discharge R/S to Tharwai R/S | 0.75 | 0.0001 | 16200 | 2 |
| 20 | Phaphamau R/S to Tharwai R/S | 4.95 | 0.0014 | 16500 | 2: |
| 21 | Tharwai R/S to Sarai Chandi R/S | 3.8 | 0.0009 | 17100 | 1 |
| 22 | Sarai Chandi R/S to Phulpur R/S Phulpur R/S to Ugrasenpur R/S | Outside IV consideration zone | | | |

ANNEXURE - II

Case No.: UP-515 Name of the Power line: 765 kV S/C Jhusi to Unnao transmission line

Map Scale : 1 cm = 500 mtsTotal Length: 238.833 Km.

S.R. Value: 20,000 Ohms-cm

|] | | | 1 | | | |
|---|-------|------------------|------------------------------|--------------------------------|----------------------------------|--------------------|
| | S.No. | Telecom. Details | Length of Parallelism in Km. | Mutual Coupling in Ohms. | Effective Fault current in Amps. | LV in Volts. |

| ffect | ed Blocks & Telcom Circuits Details | <u> </u> | <u></u> | | |
|-------|-------------------------------------|----------|---------|-------|---------------|
| 1 | Handia Khas to Saidabad | 6.75 | 0.0044 | 15400 | |
| 2 | Saidabad to Ramnathpur | 7.75 | 0.0010 | 15600 | 16 |
| 3 | Ramnathpur to Bhiti | 0.5 | 0.0001 | 18000 | 2 |
| | - | | | | · |