

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.: MRA-1164 / 510 - 5/2

PTCC proposal for 220 kV D/C Umred to Nagbhid transmission line: 51.255 km

| Reference: | | |
|------------|--|------------|
| S. No. | Reference No. | TD-4-T |
| (i) | MSETCL: MSETCL/CO/PS/PTCC/220kV/LD/B-570/No.2356 | Dated |
| (ii) | DENT 102 102 103 103 103 103 103 103 103 103 103 103 | 01.07.2020 |
| | BSNL: IC/MBI/PTCC/MRA-2464 | 13.08.2021 |
| (iii) | South East Central Railway: SECR/S&T/PTCC/TD/1022 | |
| (iv) | Defence D/46027/G: TG: SECK/S&1/P1CC/1D/1022 | 04.01.2021 |
| (1V) | Defense: B/46937/Sigs 7(b)/2153 | 21.10.2020 |

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of South East Central Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of South East 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. The Defense Authority have accorded NOC vide above reference (iv) for the proposed power line. (a copy enclosed at Annexure-III)

Taking above into consideration, necessary action regarding issuance of PTCC route approval may be taken.

Encl.: As above.

To,

Signature Not Verified
Digitally signed by RAGNVENDRA PRATAP
SINGH
Date: 2021.10.25 12:00:16 IST

Director

| 1. | Divisional Engineer (PTCC), Western Zone | BSNL; Inspection Circle, 3 rd Floor, D-Wing, BSNL Admin Building, Juhu Tara Road, Santacruz (West), Mumbai-400054. | Annexure-I & Annexure-III only |
|----|--|--|---|
| 2. | Dy.CSTE/Telecom | South East Central Railway; O/o Principal Chief Signal & Telecom Engineer, 2 nd floor, SECR Zonal Hq Building, Bilaspur-495004. | Annexure-II only |
| 3. | Chief Engineer (Projects Schemes) | MSETCL; O/o Chief Engineer, Projects Schemes Department, "Prakashganga", Plot No. C-19, E Block, Bandra-Kurla Complex, Bandra (East), Mumbai-400051. | Copy for information |

MIC

| Map scale: 1:50000 Route length: 51.25kms Soil resistivity: 7,500 Cm 220 KV Umred-Naghbid D/C line, length=51.25 kms |
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|------------|----------------------------------|-------------------------------------|----------------|-----------------------|--------------------------|
| Sr. No. | Name of the Telecom Line / cable | Length of Parallelism in Kms. | Mutual Couplin | Fault Current in Amps | Induced Voltage in Volts |
| 2 | 24 Pr of C Ug WTR HW | Point of | | | |
| 3 | Umare of Talani | Coossing | IV de | ess than 4 | 30 V |
| 5 | Nagbhid OFC cable - | 4.37 KMs | 1 | a | |
| 6 | Nagbhid Tel. exchar- | 3.0 kms | | and t | |
| 7 | | | 1 | A LOS | g No en en est |
| 8 | | west direction |) F | 3 × 4× 5 / 400 dev c | |
| 9 | | | | THE PERMANENT CONTROL | n-GO |
| 10 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 5 | | | | | |
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ANNEXURE-II

Case No.: MRA - 1164

Name of the Power line: 220 kV D/C Umred to Nagbhid

Map Scale Total Length: 51.255 km

: 1 cm=500 m

S.R. Value

: 7,500 ohm-cm

| | | ·em |
|--|----------------------------------|---------------------|
| S.No. Telecom. Details Length of Parallelism Coupling in Km. South Fast Control D. II | Effective Fault current in Amps. | I.V in Volts. |

| 1 | outh East Central Railway Ref. No: SF Affected Blocks | & Telecom Circ | TD/1022 Date | d: 04.01.2021 | |
|-------------------------|--|--------------------|--------------|---------------|------------|
| 1 | Kuhi to Umrer | | TALS DETAILS | | |
| 2 | Umrer to Bhiwapur | 1.1 | 0.0014 | 9803 | 14 |
| 3 | Bhiwapur to Nagbhir | 11.8 | 0.0021 | 8039 | 17 |
| 4 | | 18.8 | 0.0067 | 8822 | ļ <u> </u> |
| 5 | Brahmapuri to Nagbhir | Out of Parallelism | | | 59 |
| Nagbhir to Talodhi Road | | Out of Parallelism | | 00 | |

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To favor New Defrit-66

Tele: 23019746

MRA-1164

Directorate General of Signals Signals 7

General Staff Branch Integrated HQ of MoD (Army) DHQ PO, New Delhi - 110011

B/46937/Sigs 7(b)/2153/

Office of the Superintending Engineer, Projects Schemes Department Maharashtra State Electricity Transmission Company Ltd "Prakashganga", Plot No C-19, 'E' Block, Bandra - Kurla Complex, Bandra (East), Mumbai-400051

Oct 2020

PTCC PROPOSAL FOR 220KV UMRED-NAGBHID DC LINE, LENGTH=51.25KMS

- Ref your letter No MSETCL/CO/PS/PTCC/220kV/LD/B-570/No 2356 dt 01 Jul 2020 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
- Documents alongwith map sheets (in original) are forwarded herewith for your further 3. action.

(A-Rawat)

Mai

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, Janpath New Delhi-110001

for information