### File No.CEA-PS-17-11(12)/19/2022-PCD Division / 28/- 283





#### 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.: GUJ-799: PTCC proposal of 220 kV D/C transmission Line on D/C tower from 400 kV Bhogat S/S to 220 kV Bhatiya S/S: 12.84 km

| Reference:           |                                      |            |
|----------------------|--------------------------------------|------------|
| S. No. Reference No. |                                      | Dated      |
| (i)                  | GETCO:CE(Project)/SE(planning)/914   | 29.07.2020 |
| (ii)                 | BSNL: IC/MBI/PTCC/GUJ-2834           | 17.10.2020 |
| (iii)                | Western Railway: SG. 158/28/12(1169) | 27.09.2021 |
| (iv)                 | Defense: B/46937/ Sigs 7(b)/2133     | 07.12.2020 |

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of Western 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 Western 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. Vide reference (iv) above, The Defence Authority have issued No Objection Certificate (NOC). (a copy enclosed as Annexure-III).

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

Encl.: As above.

To.

| 1. | Divisional Engineer<br>(PTCC), Western<br>Zone | Road, Santacruz (West), Mumbai-400054.  | Annexure-I & Annexure-III only |
|----|--|---|--------------------------------|
| 2. | Dy. CSTE/Tele/CCG.                             | Western Railway; O/o CSTE, S&T Dept., 5 <sup>th</sup> floor, Station Building, Churchgate, Mumbai-400020. | Annexure-II only               |
| 3. | Chief Engineer<br>( Project)                   | GETCO; Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390007.  | Copy for information           |

File No.CEA-PS-17-11(12)/19/2022-PCD Division / 281 - 283





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

### Power Communication Development Division

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के.वि.प्रा. केस सं. : GUJ-799:

पी.टी.सी.सी. प्रस्ताव 220 kV D/C transmission Line on D/C tower from 400 kV Bhogat S/S to 220 kV Bhatiya S/S: 12,84 km

| ान्दर्भः |  | दिलांक     |
|----------|--|------------|
| क्रमांक  | सन्दर्भ सं.  |            |
| /:>      | GETCO:CE(Project)/SE(planning)/914                     | 29.07.2020 |
| (1)      | BSNL: IC/MBI/PTCC/GUJ-2834                             | 17.10.2020 |
| (ii)     | DSIVE. 1C/10/DIJ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 27.09.2021 |
| (iii)    | Western Railway: SG. 158/28/12(1169)                   | 07.12.2020 |
| (iv)     | Defense: B/46937/ Sigs 7(b)/2133                       |            |

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। उपर्युक्त संदर्भों (ii) और (iii) में दिए गए विवरणों के संबंध में बीएसएनएल के दूरसंचार केबलों और पश्चिम रेलवे के ब्लॉक और दूरसंचार सर्किटों पर क्रमशः कम आवृत्ति प्रेरण की गणना की गई है। सिंगल लाइन टू ग्राउंड फॉल्ट की स्थिति के तहत बीएसएनएल और पश्चिम रेलवे के ब्लॉक और टेलीकॉम सर्किट के समानांतर दूरसंचार केबलों पर प्रेरित होने की संभावना वाले वोल्टेज क्रमशः अनुलग्नक-I और अनुलग्नक-II में संलग्न हैं। स्क्रीनिंग कारकों पर विचार कर लिया गया है। उपरोक्त संदर्भ (iv) द्वारा, रक्षा प्राधिकरण ने अनापति प्रमाण पत्र (एनओसी) जारी किया है। (एक प्रति अनुलग्नक-III के रूप में संलग्न हैं)

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के लिए आवश्यक कार्रवाई

की जाए। संलग्न: ऊपरोक्त अनुसार

त्राध्येन्ड प्राप् पिर्हे २२ १०३. २२

| To, |                           | DCALL DCALL   |              |
|-----|---------------------------|---|--------------|
| T   | Divisional Engineer       | BSNL; Inspection Circle, 3rd Floor, D-Wing, BSNL  | अनुलग्नक-1 & |
| 1.  | (PTCC), Western           | Admin Building, Juhu Tara Road, Santacruz (West),   | अनुलग्नक-III |
|     | Zone                      | Mumbai-400054.  |              |
| 2.  | Dy. CSTE/Tele/CCG.        | Western Railway; O/o CSTE, S&T Dept., 5 <sup>th</sup> floor, Station Building, Churchgate, Mumbai-400020. | अनुलग्नक- II |
| -   |                           | GETCO; Sardar Patel Vidyut Bhavan, Race Course,   | जानकारी हेत् |
| 3.  | Chief Engineer ( Project) | Vadodara-390007.  | Ollerance 60 |

| -           | (A)   | nnezure-I)   | CEH.                  |
|-------------|---|--|-----------------------|
|             | CUT 799   | Map Scale: 1 Cm=500                                | ) Meters ·            |
| CEA o       | ffice case No: GUJ-799                                | Route Length: \2                                   | .84 Kms               |
|             | PTCC) Office Case No: 2834                            | Soil Resistivity:                                  | 0/8 Ohm-Cm            |
|             | y Office Case No:                                     | , , , , , , ,                                      |                       |
| Name        | of Power Line:  |  |                       |
| 22          | OKV DIC Bhogat-Bhatiya line Telecom Details from BSNL | Details from Power (                               | Company/Authority     |
| ,-          | Telecom Details from BSNL                             | Length of Mutual                                   | Fault Induced         |
| SI          | At Talanan Cablellino                                 |  | current in Voltage in |
| No.         | Name of the Telecom Cable/Line                        | r in Km in Ohms                                    | Amp Volts             |
| <del></del> |   |  |                       |
| 1.          | Bhatiya Book  |  |                       |
| AI          | Rhatiya Exch to local 1200px1, 50 PX4                 | 1) IV less #                                       | an 430V               |
| 2A          | 11 to local 800px1,400px1, 100px1                     |  |                       |
|             | 11 to local 400Px1, COPX1, 50PX2                      |  |                       |
| AE          | 1 to 10001 700120, 100120, 101 A                      |  |                       |
|             |   | To James   |                       |
| ,           |   |  |                       |
|             |   | 7  |                       |
|             |   | तनुजा/TANU<br>महायक निदेशक-II/Asstt.               | J<br>Diractor-II      |
|             |   | कन्द्रीय विद्यत प्राधिकरण                          | /C.E.A.               |
|             | ,   | विद्युतः मंत्रातिय / Ministry<br>आरल साकार / Govt. | of Power              |
|             |   | मार्थ म कार/Govi.<br>नरं तित्रज्ञी/New De          | ihi-66                |
| -           |   |  |                       |
|             |   |  |                       |
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|             |   |  |                       |
| -           |   |  |                       |
| ļ           |   |  |                       |
| 1           |   |  | <del> </del>          |

ANNEXURE - II

| Name o | se No.: GUJ- 799  f the Power line: 220 kV D/C transmission f from 400 kV Bhogat S/S to 220 kV Bhati | n Line on                          | Map Scale Total Length S.R. Value |   | <u>1</u>            |  |
|--------|--|------------------------------------|-----------------------------------|---|---------------------|--|
| S.No.  | Telecom. Details   | Length of<br>Parallelism<br>in Km. | Mutual<br>Coupling<br>in Ohms.    | Effective<br>Fault<br>current<br>in Amps. | I.V<br>in<br>Volts. |  |

| Western Railway: SG. 158/28/12(1169) |                      | Dated:27.09.2021 |               |      |    |
|--------------------------------------|----------------------|------------------|---------------|------|----|
|                                      | Affected Blocks      | & Telcom Circ    | cuits Details |      |    |
| 1                                    | Okhamadhi to Bhatiya | 3.9              | 0.0014        | 6876 | 10 |
| 2                                    | Bhatiya to Bhopalka  | 1.3              | 0.0002        | 7266 | 02 |

Jamy

तनुजा/PANUJ सहायक निवेशक-II/Asstt. Director-II केन्द्रीय विद्युत प्राधिकरण/C.E.A. विद्युत मंत्रालय/Ministry of Power भारत सरकार/Govt. of India नई दिल्ली/New Delhi-66 Tele: 23019746

GUJ-7.99

Directorate General of Signals Signals 7 General Staff Branch Integrated HQ of MoD, (Army) DHQ PO, New Delhi – 110011

B/46937/Sigs 7(b)/2133/

07 Dec 2020

Ghief Engineer (Project) Gujarat Energy Transmission Corporation Ltd Sardar Patel Vidyut Bhawan Race Course, Vadodara – 390 007

## SUBMISSION OF PROPOSALS FOR HVIEHV TRANSMISSION LINES OF GETCO FOR PTCC APPROVAL OF 220KV D/C BHOGAT-BHATIYA LINE WITH AL-59 CONDUCTOR

- 1. Ref your letter No CE(Project)/SE(Planning)/914 dt 29 Jul 2020 (copy att).
- 2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
- 3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

(A Rawat) Maj

GSO 1 (Comn) for SO-in-C

Enclosures : As above

Copy to:-

Prie 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