



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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| CEA Case No. : HRA-238 / 307 - 309 |
| PTCC proposal of LILO of both ckt. of 220 kV D/C DCRTTP – Salempur line at 220 kV Substation Bakana, Yamunanagar (15.326 km) |

| Reference: | | |
|------------|--|------------|
| S. No. | Reference No. | Dated |
| (i) | HPPTCL: Memo No. 293/DB-5 | 19.01.2021 |
| (ii) | BSNL: DET/PTCC/ND/DV-9864/HR-865/2021-2022/ | 07.03.2022 |
| (iii) | Northern Railway: 342-SIG/1/PTCC/2020-21/02/04 | 19.02.2021 |
| (iv) | Defense: B/46947/Sigs 7(b)/2315 | 01.03.2021 |

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and block & telecom circuits of West Central Railway with respect to details furnished vide above reference (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and block & telecom circuits of West Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I & II respectively. The screening factors, as applicable, have been considered. The Defence Authority, vide above reference (iv) have issued No Objection Certificate (NOC). (a copy enclosed as Annex-III).

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

Encl.: As above.

24/04/22
28.04.22
Director

To,

| | | | |
|----|---|---|---------------|
| 1. | Divisional Engineer (PTCC), Northern Zone | BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi 110001. | |
| 2. | AESTE (UTS) | Northern Railway, Headquarter Office, Baroda House, New Delhi | Only Annex-II |
| 3. | Executive Engineer | HVPNL, O/o Xen TS Division, Yamuna Nagar, Haryana | For info. |



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Power Communication Development Division

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| के.वि.प्रा. केस सं. : HRA-238 / 307-309 |
| पी.टी.सी.सी. प्रस्ताव LILO of both ckt. of 220 kV D/C DCRTTP – Salempur line at 220 kV Substation Bakana, Yamunanagar (15.326 km) |

| क्रमांक | सन्दर्भ सं. | दिनांक |
|---------|--|------------|
| (i) | HPPTCL: Memo No. 293/DB-5 | 19.01.2021 |
| (ii) | BSNL: DET/PTCC/ND/DV-9864/HR-865/2021-2022/ | 07.03.2022 |
| (iii) | Northern Railway: 342-SIG/1/PTCC/2020-21/02/04 | 19.02.2021 |
| (iv) | Defense: B/46947/Sigs 7(b)/2315 | 01.03.2021 |

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। बीएसएनएल के टेलिकॉम केबलों एवं पश्चिम मध्य रेल के ब्लॉक एवं टेलिकॉम सर्किटों पर निम्न आवृत्ति प्रेरण गणना क्रमशः उपरोक्त संदर्भ (ii) एवं (iii) में दिए गए विवरणों के संबंध में की गई है। सिंगल लाइन टू ग्राउंड फाल्ट अवस्था में समानांतर बीएसएनएल के टेलिकॉम केबलों एवं पश्चिम मध्य रेल के ब्लॉक एवं टेलिकॉम सर्किटों पर प्रेरित वोल्टेज क्रमशः अनुलग्नक -I एवं II में संलग्न है। स्क्रीनिंग कारक का मान यथानुरूप लिया गया है। रक्षा प्राधिकरण ने उपरोक्त संदर्भ (iv) के द्वारा अनापत्ति प्रमाण पत्र जारी किया है। (अनुलग्नक- III में संलग्न)।

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के संबंध में आवश्यक कार्रवाई की जाए।

संलग्न: उपरोक्त अनुसार

राजेश्वर प्रताप सिंह
28.04.22
निदेशक

To,

| | | | |
|----|---|---|---------------|
| 1. | Divisional Engineer (PTCC), Northern Zone | BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi 110001. | |
| 2. | AESTE (UTS) | Northern Railway, Headquarter Office, Baroda House, New Delhi | Only Annex-II |
| 3. | Executive Engineer | HVPNL, O/o Xen TS Division, Yamuna Nagar, Haryana | For info. |

Case No. : HRA - 238

Name of the Power Line: LILO of 220 KV D/C DCRTTPP- Salempur
Line at 220 KV S/Stn, Bakana,
Yamunanagar, Haryana

Annexure I

Toposheet Scale : 1cm=500mts
Total Length : 15.326 Kms
S.R Value : 20000 Ohm-cm

| Sl. No. | Name of Telecom Line | LOP in Kms | MC in Ohms | Fault Current (Amps) | IV in Volts |
|---------|----------------------|------------|------------|----------------------|-------------|
|---------|----------------------|------------|------------|----------------------|-------------|

| BSNL | | | | | |
|--------------|---|---|-------------------|--|--|
| BSNL Details | | | | | |
| 1 | Aohar to Jaipur 200 Pair, 2.5 KM U/G Copper cable | } | IV less than 430V | | |
| 2 | Ratangarh to Jobal 50 pair, 3 KM U/G Copper cable | | | | |
| | | | | | |

Prateek

प्रतीक श्रीवास्तव
सहायक निदेशक (संचालन) Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय Ministry of Power
भारत भारत New Delhi
नई दिल्ली/New Delhi

ANNEXURE - II

| CEA Case No.: HRA-238 Name of the Power line: LILO of both ckt. of 220 kV D/C DCRTTPP – Salempur line at 220 kV Substation Bakana, Yamunanagar | | Map Scale : 1 cm=500 m Total Length : 15.326 km S.R. Value : 20,000 Ω-cm | | | |
|---|------------------|---|--------------------------|----------------------------------|---------------|
| S.No. | Telecom. Details | Length of Parallelism in Km. | Mutual Coupling in Ohms. | Effective Fault current in Amps. | I.V in Volts. |

| | | | | | |
|---|---|-------------------------------|--|--|---|
| NORTHERN RAIWAY Ref. No: 342-SIG/1/PTCC/2020-21/02/04 Dated: 19.02.2021 | | | | | |
| <u>Affected Blocks & Telecom Circuits Details</u> | | | | | |
| 1 | Barara R/S – Mustafabad R/S | Outside IV consideration zone | | | 0 |
| 2 | Mustafabad R/S – Darazpur R/S | | | | 0 |
| 3 | Darazpur R/S – Jagadhri Workshop R/S | | | | 0 |
| 4 | Jagadhri Workshop R/S – Yamuna Nagar Jagadhri R/S | | | | 0 |

Prateek

प्रतीक सिंह
 सहायक नि. नि. प्र. अधिकारी
 केन्द्रीय वि. नि. प्र. अधिकारी
 विद्युत मंत्रालय, भारत सरकार
 नई दिल्ली-110001 (CSIR)

WASTON
 Director-II
 C.E.A.
 Ministry of Power
 Government of India
 New Delhi-110001 (CSIR)

Tele : 23019746

Annex - 1a

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


B/46937/Sigs 7(b)/2315/

01 Mar 2021

Haryana Vidyut Prasaran Nigam Limited
O/o Xera TS Division HVPNL
Yamuna Nagar, PIN-135001

PTCC APPROVAL FOR LILO OF 220KV D/C DCRTTP-SALEMPUR LINE AT 220KV
S/STN BAKANA, UNDER DISTRICT YAMUNA NAGAR, HARYANA

1. Refer your Memo No 293/DB-5 dt 19 Jan 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet 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 :-

The Director (PTCO), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Kasturba Sarai, New Delhi - 110016

- for information

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