



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/HRA-234/595-597

Date: 30/9/2020

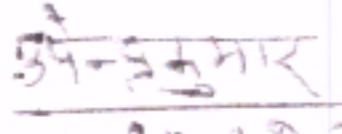
**Subject: PTCC proposal for 220 kV D/C line from 400 kV S/S Nawada to 220 kV S/S TSS  
DFCIL, Tigaon-regd.**

**Ref.:** (i) HVPNL Ref. No. Ch-17/TS-241.REC-245/V6I-II Dated: 08.06.2020  
(ii) BSNL Ref. No. DET/PTCC/ND/DV-9714/HR-853/2020-21 Dated: 22.09.2020  
(iii) Northern Railway Ref. No.342-SIG/1/PTCC/2020-21/06/05 Dated: 29.06.2020  
(iv) Defense Ref. No. B/46937 Sigs 7(h)/2057 Dated: 14.08.2020

The PTCC proposal submitted vide ref. (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of Northern Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The Soil Resistivity (SR) value has been taken as 10,000 Ohm-cm. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of Northern Railway under Single Line to Ground fault condition are enclosed at Annex-I and Annex-II respectively. The screening factors, as applicable, have been considered. Vide ref. (iv) above, Defence Authority have issued No Objection Certificate (NOC) (a copy enclosed as Annex-III).

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval.

Encl: As above.

  
30.09.2020  
(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.

MLC

Copy to:-

1. General Manager (S&T), Northern Railway, Office Headquarters, Baroda House, New Delhi-110001 (Annex-II only)
2. Executive Engineer, Transmission System Division, Haryana Vidhyut Prasaran Nigam Ltd., Quarter No. 303-204 Thermal Station, Sector-23, Faridabad-121001.

Line from 400 KV S/Scn T...  
 10,000

Dated: 11/09/2020

ESR Detail

|    |  |
|----|--|
| 1  | Tigaon to Nawada (50 Pr) (2 KM)                    |
| 2  | Tigaon to Mandholi (200 Pr) (2.5 KM)               |
| 3  | Tigaon to Gharora (100 Pr) (2 KM)                  |
| 4  | Tigaon to Sadpura (100 Pr) (2.5 KM)                |
| 5  | Tigaon to NTPC (200 Pr) (1 KM)                     |
| 6  | Tigaon to Bhojpur (100 Pr) (2.5 KM)                |
| 7  | Tigaon to Jaisal (200 Pr) (200 Pr) (100 Pr) (1 KM) |
| 8  | Tigaon to Bhansrawali (100 Pr) (3 KM)              |
| 9  | Tigaon to Badrola (200 Pr) (2 KM)                  |
| 10 | Dayalpur to Satal (200 Pr) (0.2 KM)                |
| 11 | Dayalpur to Machgar Mori (100 Pr) (3 KM)           |
| 12 | Dayalpur to Garkhara (5 Pr) (3 KM)                 |
| 13 | Dayalpur to Jhunera Mori (200 Pr) (0.5 KM)         |
| 14 | Dayalpur to Atali (100 Pr) (4 KM)                  |
| 15 | Dayalpur to Machgar (50 Pr) (3 KM)                 |


IV less than  
 430 V

J. Singh  
 असिस्टेंट डायरेक्टर / TANDJ  
 सहायक निदेशक-II / Assn. Director-II  
 विद्युत विभाग / विद्युत प्राधिकरण / C.E.A.  
 भारत सरकार / Ministry of Power  
 नया दिल्ली / New Delhi

## ANNEXURE -II

| Case No.: HRA-234   |                  | Map Scale : 1 cm=500 mts     |                                  |                                  |               |
|---|------------------|------------------------------|----------------------------------|----------------------------------|---------------|
| Name of the Power line 220 kV D/C line from 400 kV S/S Nawada to 220 kV S/S TSS DFCIL, Tigaon |                  | Total Length : 3.42 km       | Soil Resistivity : 10,000 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/2020-21/06/05 dated 29.06.2020 |                                       |                               |  |  |   |
| <u>Affected Blocks &amp; Telecom Circuits Details</u>                      |                                       |                               |  |  |   |
| 1  | Faridabad R/S to Faridabad Town R/S   | Outside IV consideration zone |  |  | 0 |
| 2  | Faridabad Town R/S to Ballab Garh R/S | Outside IV consideration zone |  |  | 0 |
| 3  | Ballab Garh R/S to Piyata R/S         | Outside IV consideration zone |  |  | 0 |

  
 तनुज/TANUJ  
 सहायक निदेशक-II/Asst. Director-II  
 केंद्रीय विद्युत प्राधिकरण/C.E.A.  
 विद्युत विभाग/Ministry of Power  
 नया दिल्ली/New Delhi-60

Tele 23019743

(Annexure III)

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

3/46937/Sigs 7(b)/20577

1M Aug 2020

O/o Executive Engineer,  
Transmission System Division  
Haryana Vidyut Prasaran Nigam Limited  
HVPNL, Quarter No. 262/264, Thermal Colony,  
Sector-23, Faridabad-121001

PTCC APPROVAL FOR CONSTRUCTION OF 220KV D/C LINE FROM 400KV S/STN  
NAWADA TO 220KV S/STN TSS DFCCIL, TIGAON

1. Ref your Memo No. CH-17/TS-241.REC-245/ Vol-II dt 08 Jun 2020 (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 (PTCC), CEA  
Power Communication Development Division  
NRPC Complex, 18-A Shaheed Jeet Singh Marg  
Katwaria Sarai, New Delhi - 110016

Divisional Engineer Telegraph (PTCC)  
O/o GM (North), BSNL, QA & Inspection Circle,  
CTS Compound, Africa Avenue Road,  
Netaji Nagar, New Delhi-110023

for information