



सत्यमेव जयते

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

Date: 07.09.2020

No.: CEA/PCD/ PTCC/UP-506/503-506

Subject: - Induced voltage calculation in respect of 765 kV D/C (Hexa) Vindhyachal pooling station to Varanasi transmission line. (U.P. portion)-Reg.

Reference: -

- | | |
|--|-------------------|
| (i) PGVTSL Ref.No.NR-III/PVTSL/VIND-VNSTL/PTCC/128 | Dated: 28.07.2020 |
| (ii) BSNL Ref. No. DET/PTCC/ND/DV-9558/UP-771/2019-2020 | Dated: 02.09.2019 |
| (iii) North Central Railway Ref. No. ALD-Sig/PTCC/JHG-PRE/19-20/01 | Dated: 09.08.2019 |
| (iv) North Eastern Railway Ref. No. N/242/1(Tele) PTCC Part-I | Dated: 17.07.2019 |
| (v) Defense Ref. No. B/46937/Sigs 7(b)/1513 | Dated: 17.05.2019 |

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL Telecom Lines and Block and Communication circuits of North Central Railway and North Eastern Railway as per details furnished vide above cited references (ii),(iii) and (iv) respectively has been examined. BSNL has conveyed NOC as there are no primary U/G cable and no armoured OFC within 08 km of power line. The Soil Resistivity values have been taken as 20,000-50,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling Block and Communication circuits of North Central Railway and North Eastern 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. In addition, Defense has accorded NOC vide above ref. (v) for this line (a copy enclosed at Annex-III).

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

Encl.: As above.

Upendra Kumar
07.09.2020

(Upendra Kumar)
Chief Engineer

To,
The Divisional Engineer (Telecom), BSNL
PTCC O/o GM (North), Inspection Circle (T & D),
CTS Compound, Netaji Nagar, Africa Avenue, New Delhi – 110023.

M/C Contd.

ANNEXURE - I

Case No.: UP-506
Name of the Power line: 765 kV D/C (Hexa) Vindhyachal pooling station to Varanasi transmission line. (U.P. portion).

Map Scale : 1cm=500mts
Total Length : 97.559 Km.
S.R. Value : 20,000-50,000 Ohms-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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NORTH CENTRAL RAILWAY
 Ref. No: ALD-Sig/PTCC/JHG-PRE/19-20/01 DATED: 09-08-2019

Affected Blocks & Telecom Circuits Details

1	DAP (711/29) to PRE (720/3)	0.5	0.0004	16086	06
2	PRE (720/3) to JHG (727/15)	2.2	0.0040	16926	68
3	JHG (727/15) to MZP (735/82)	6.8	0.0032	19794	63

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सिग्नल / TAMILUJ
 सहायक सिग्नल-11 / Asst. Director-II
 केन्द्रीय सिग्नल विभाग / C. E. A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi

ANNEXURE - II

Case No.: UP-506
Name of the Power line: 765 kV D/C (Hexa) Vindhyachal pooling station to Varanasi transmission line (U.P. portion).

Map Scale : 1cm=500mts
Total Length : 97.559 Km.
S.R. Value : 20,000-50,000 Ohms-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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NORTH EASTERN RAILWAY

Ref. No: N/242/1(Tele) PTCC Part-I DATED: 17-07-2019

Affected Blocks & Telecom Circuits Details

1	Madhosingh to Kataka	1.7	0.0009	18769	17
2	Kataka to Kachhawa Road	1.9	0.0039	18045	70
3	Kachhawa Road to Nigatpur	0.7	0.0002	17589	04
4	Nigatpur to Rajatalab	0.3	0.0001	19794	03

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तनुज / TANUJ
सहायक निदेशक-II / Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण / C.E.A.
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भारत सरकार / Govt. of India
नई दिल्ली / New Delhi-110002

Tele : 23019746

UP-506

(Annexure-III)

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

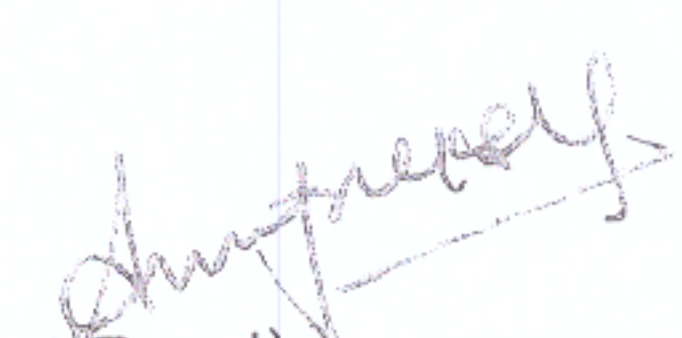
17 May 2019

B/46937/Sigs 7(b)/1513/

C.E.O.
Power Grid Varanasi Transmission System Limited
C-27/210, Kailgarh House, Hindustan Times Office,
Jagatganj Varanasi (UP)-221002

**PTCC CLEARANCE FOR 765KV D/C (HEXA) VINDHYACHAL POOLING STATION TO
VARANASI TRANSMISSION LINE (U.P. PORTION) FOR TRANSMISSION ASSOCIATED WITH
TRANSMISSION SYSTEM EVACUATION OF POWER FROM VINDHYACHAL POOLING
STATION,REG.**

1. Ref your letter No NR-III/PVTSL/VIND-VNS TL/PTCC/1448 dt 02 Mar 2019. (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

for information.