



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युतसंचारविकासप्रभाग

Power Communication Development Division

No.: CEA/PCD/PTCC/DL-23 / 229-31

Date: 30.03.2020

**Subject:- Induced voltage calculation in respect of 220 kV D/C 1 x 1200 sq.mm U/G XLPE cable from proposed 400/220 kV S/S at Dwarka Sector-5 to proposed 220/66 kV GIS Budella Substation.**

**Reference :-**

- (i) DTL Ref. No. F.DTL/210/DGM(P-II)A/2019-20/Opr.(Proj)/F-26/95 dated 08.11.2019
- (ii) BSNL Ref. No. DET/PTCC/ND/DV-96697/ND-226/2019-20 dated 17.03.2020
- (iii) Northern Railway Ref. No. 342-SIG/1/PTCC/2019-20/11/9 dated 21.11.2019
- (iv) Defence Ref. No. B/46937/Sigs 7(b)/1912 dated 04.02.2020

The PTCC proposal submitted vide ref. (i) has been examined. BSNL vide ref. (ii) intimated that there are no U/G copper cable and no armoured OFC within 8 kms of proposed power line as submitted by MTNL. Hence, NOC is conveyed for this line. The LF induction on the Block and communication circuits of Northern Railway as per details furnished vide ref.(iii) has been examined. The average soil resistivity value has been taken as 2,000 ohms-cm. Voltages likely to be induced on paralleling Block and communication circuits of Northern Railway under single line to ground fault condition are enclosed at Annex-I. The screening factors as applicable have been considered. NOC accorded by the Defence vide ref. (iv) above for this line, is enclosed at Annex-II.

Taking above into consideration, kindly take necessary action regarding issuance of PTCC route approval for this line.

Encl.: As above.

राजेश्वर उपाय सिंह

R. P. Singh  
Director

To,  
DET (telecom), BSNL  
PTCC O/o GM (North), Inspection Circle (T&D),  
CTS Compound, Netaji Nagar,  
Africa Avenue, New Delhi-110023

pl/fe

**Copy to:-**

1. General Manager/S&T, Northern Railway, Office Headquarters, Baroda House, New Delhi-110001.(only Annex-I)
2. DGM (T), Proj.-IIA, DTL, Shakti Sadan, Kotla Road, New Delhi-110002.

<b>Case No.: DL-23</b>					
<b>Name of the Power line:</b> 220 kV D/C 1 x 1200 sq.mm U/G XLPE cable from proposed 400/220 kV S/S at Dwarka Sector-5 to proposed 220/66 kV GIS Budella Substation.		<b>Map Scale</b> : 1cm=500mts <b>Total Length:</b> 8.875 km <b>Soil Resistivity:</b> 2,000 ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

<u>Northern Railway letter no:-342-SIG/1/PTCC/2019-20/11/9 dated 21.11.2019</u>					
<b><u>Affected Blocks &amp; Telecom Circuits Details</u></b>					
<b><u>Delhi- Rewari section</u></b>					
1	Patel Nagar R/S to Delhi Cantt. R/S	} Outside IV consideration zone			0
2	Delhi Cantt. R/S to Palam R/S				0
3	Palam R/S to Shahabad Mohammadpur R/S				0
<b><u>Delhi- Bathinda section</u></b>					
4	DayaBasti R/S to Shakurbasti R/S	} Outside IV consideration zone			0
5	Shakurbasti R/S to Nangloi R/S				0
6	Nangloi R/S to Gheora R/S				0

राज्यपाल-3 उत्तर प्रदेश

राज्यपाल-3 उत्तर प्रदेश  
**RAJNIVAS SINGH**  
 Director  
 केन्द्रीय विद्युत प्रणाली/ C.E.A.  
 विद्युत मंत्रालय/ Ministry of Power  
 भारत सरकार/ Govt of India  
 नई दिल्ली

Tele : 23019746

DL-23  
(Annex-II)

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

B/46937/Sigs 7(b)/1912/

04 Feb 2020

DGM (T) Proj-IIA  
Delhi Transco Limited  
R-12, A Block, Shakti Deep Building,  
Jhandewalan Extn., New Delhi-110055

**PTCC APPROVAL OF DESIGN, ENGINEERING, SUPPLY, LAYING, JOINTING, TESTING AND COMMISSIONING OF 220KV, D/C 1X1200SQ.MM U/G XLPE CABLE FROM PROPOSED 400/220KV S/STN AT DWARKA TO PROPOSED 220/66KV GIS BUDELLA SUBSTATION ON TURNKEY BASIS**

1. Ref your letter No. F.DTL/210/DGM(P-II)/A/2019-20/Opr.(Proj)/F-26/93 dt 08 Nov 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

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

for information

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