



भारत सरकार

Government of India

विद्युत मंत्रालय

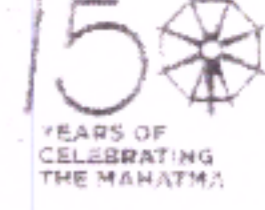
Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत संचार विकास प्रभाग

Power Communication Development Division



No. CEA/PCD/PTCC/MP-433/589-591

Date: 23.09.2020

Subject: Induced Voltage calculation in respect of PTCC proposal for 400 kV DCDS line from 400 kV S/S Ashta to 400 kV S/S Ujjain.

- Ref:** (i) MPPTCL letter no. 04-01/PTCC/2482/TR-I/177 dated 05.04.2018
(ii) BSNL letter no. IC/MBI/PTCC/MP-542 dated 30.01.2019
(iii) Western Railway letter no. SG. 158/28/10 (L-182) dated 23.12.2019
(iv) Defense letter no. B/46937/Sigs 7(b)/1107 dated 30.07.2018

MPPTCL submitted the subject proposal vide above cited reference (i). The low frequency induction on Railway Telecommunication circuits as per details furnished vide above cited reference (iii) respectively has been examined. The Soil Resistivity value has been taken as 7,500 Ohms-cm, as per data submitted by the Power Authority. Voltages likely to be induced on paralleling Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I. The screening factors as applicable have been considered. BSNL has furnished certificate certifying that 'no overhead telecom lines and underground cables including co-axial cables exist within 8 km corridor on either side of the proposed power line' vide above Ref. (ii). Further, Defense has accorded NOC vide above Ref.(iv) for the above line (a copy enclosed at Annex-II).

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

Enclosures.: As above.

(Upendra Kumar)
Chief Engineer

To,
Divisional Engineer (PTCC), Inspection Circle,
Bharat Sanchar Nigam Limited (BSNL),
3rd Floor, D-Wing, BSNL Admin Building
Juhu Tara Road, Santacruz (West), Mumbai-400054

Copy to:

1. GM(S&T), Western Railway, S&T Deptt., 5th Floor, Station Building, Churchgate, Mumbai - 400020 (with Annexure-II).
2. Chief Engineer (Procurement), MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur (M.P.) - 482008

ANNEXURE - I

Case No.: MP-433 Name of the Power line: 400 kV DCDS line from 400 kV S/S Ashta to 400 kV S/S Ujjain			Map Scale : 1cm=500mts Total Length : 89.737 km S.R. Value : 7,500 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effecttive Fault current in Amps.	I.V in Volts.

WESTERN RAILWAY					
letter no. SG.158/28/10 (L-182) dated 23.12.2019					
<u>Affected Blocks & Telcom Circuits Details</u>					
1.	Ujjain 'C' Cabin – Pingleshwar	Outside IV Consideration Zone			0
2.	Pingleshwar – Tajpur				0
3.	Tajpur - Tarana Road	1.25	0.00017	13000	3
4.	Tarana Road - Maksi	Outside IV Consideration Zone			0

TNUJ / TANUJ
 Asst. Director-II
 C.E.A.
 Ministry of Power
 Govt. of India
 New Delhi-66

(Annex-D)

MP-433

Tele : 23019746

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

B/46937/Sigs 7(b)/1107 /

30 Jul 2018

Madhya Pradesh Power Transmission Co. Ltd.
Chief Engineer (Procurement)
Block No. 3, Shakti Bhawan, Rampur,
Jabalpur(M.P.)482008

**CONSTRUCTION OF 400KV DCDS LINE FROM 400KV S/S ASHTA TO
400KV S/S UJJAIN - PTCC ROUTE APPROVAL**

1. Reference your letter No 04-01/ PTCC/2482/TR-I/177 dt 05 Apr 2018 (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

Copy to :-

Director(PTCC)
Central Electricity Authority
Power Communication Development Division
NRPC Complex, 18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi - 110016

- For information.

