



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पावर कम्युनिकेशन डवलपमेंट प्रभाग
Power Communication Development Division

No.: CEA/PCD/ PTCC/MP-456/159-161

Date: 25.02.2020

The Divisional Engineer (PTCC), Western Zone,
Bharat Sanchar Nigam Limited (BSNL),
O/o DET (PTCC), QA & Inspection Circle,
3rd Floor, D-Wing, BSNL Admin Building,
Juhu Tara Road, Santacruz (West),
Mumbai-400054

Subject: Induced voltage calculation in respect of 400 kV DCDS line from 400 kV S/S Nagda to proposed 400 kV S/S Mandsaur (Sitamau) under Phase-I project of Green Energy Corridor Scheme of MNRE, GoI.

Ref. :

(i)	MPPTCL Ref. No. 04-01/PTCC/2472/TR-I/12129	Dated: 13.02.2019
(ii)	BSNL Ref. No. IC/MBI/PTCC/MP-600	Dated: 29.07.2019
(iii)	West Central Railway Ref. No. WCR/N-HQ/120 PTCC-CORR-T-50-Pt-III Caes-255	Dated: 15.03.2019
(iv)	Defense Ref. No. B/46937/Sigs 7(b)/1483	Dated: 27.03.2019

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL cables and block circuits of West Central Railways as per details furnished vide ref. (ii) and ref. (iii) respectively has been examined. The Soil Resistivity value has been taken as 7,500 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL cables and Railway block circuits under single line to ground fault condition are enclosed at Annex-I and Annex- II respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above ref. (iv) 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
25.2.2020
(Upendra Kumar)
Chief Engineer, PCD

Copy to:

- MIC
1. CSTE (Tele), Office of GM (S & T), 1st Floor, Annex II Building, Jabalpur-482001. (Annex-II only)
 2. Chief Engineer (Procurement), MPPTCL, 1st Floor, Block No. 3, Shakti Bhavan, Rampur, Jabalpur, Madhya Pradesh -482008.

CEA Office Case No.: MP-456		Map Scale: 1:50,000			
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-600		Route Length: 68.660 Kms			
Railway Office Case No.:		Average SR Value: 7,500 Ohm cms			
Name of Power Line		400KV DCDS line from 400KV S/s Nagda to proposed 400KV S/s Mandsaur (Sitamau) under Phase-I project of Green Energy Corridor Scheme Of MNRE, GoI.			
S. No.	Name of Telecom Line/ Cable	Length of Parallelism in Kms.	Mutual Coupling in Ohms	Fault Current in Amps	Induce Voltage in Volts
	UJJAIN SSA	}	N/A		
	SDOP Nagda				
	BSNL U/G Cable:- Existing within vicinity of 8.00 Km near to the proposed power line, i.e. 8.00 Km corridor on either side of the proposed power line - NIL.				
	MANDSAUR SSA				
	SDOT Shamgarh				
(1)	Sitamau T/Exchange				
	Sitamau Exchange to Location (A) - 50 Pair				
(2)	Sakhtali T/Exchange				
	Shakhtali Exchange to Location (A) - 100 Pair				
			Out of Parallelism		
			Out of Parallelism		

DK
 25/2/2020
 मुख्य अभियंता/Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi

Case No.: MP-456

ANNEXURE - II

Name of the Power line: 400KV DCDS line from 400KV S/s Nagda to proposed 400KV S/s Mandsaur (Sitamau) under Phase-I project of Green Energy Corridor Scheme Of MNRE, Gol.

Map Scale : 1cm=500mts
Total Length : 68.66Km.
S.R. Value : ₹500 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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WEST CENTRAL RAILWAY

Ref. No: WCR/N-HQ /120 PTCC- CORR-T-50-PT-III Case DATED: 15-03-2019

Affected Blocks & Telcom Circuits Details

1	Nagda - Rohalkhurd	1.1	0.0027	12,520	34
2	Rohalkhurd - Mehidpur Road	4.6	0.0010	11,352	12
3	Mehidpur Road - Lunirichha	Outside IV consideration			0

192
25/4/2019
मुख्य अभियंता/Chief Engineer
केन्द्रीय विद्युत प्रधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi

Tele : 23019746

MP-456

Annexure - III

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

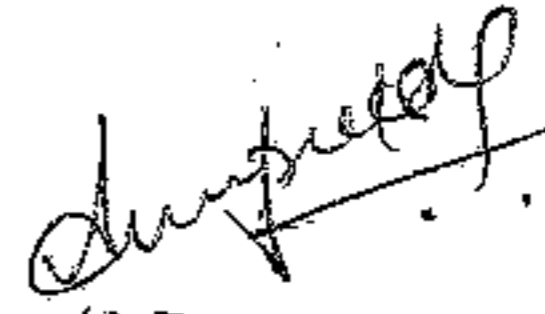
B/46937/Sigs 7(b)/1483/

27 Mar 2019

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

**PTCC ROUTE APPROVAL FOR CONSTRUCTION OF 400KV DCDS LINE FROM NAGDA
(400KV) TO PROPOSED 400KV S/S MANDSAUR (SITAMAU) UNDER PHASE-I PROJECT OF
GREEN ENERGY CORRIDOR SCHEME OF MNRE, GOI**

1. Ref your letter No 04-01/PTCC/2472/TR-I/12129 dt 13 Feb 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.