



सत्यमेव जयते

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-459/162-164

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 220 kV DCDS line from Nipaniya (220 kV) 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/2475/TR-I/12585 Dated: 22.02.2019
(ii) BSNL Ref. No. IC/MBI/PTCC/MP-606 Dated: 13.08.2019
(iii) West Central Railway Ref. No. WCR/N-HQ/120 PTCC-CORR-T-50-Pt-III Caes-257 Dated: 15.03.2019
(iv) Defense Ref. No. B/46937/Sigs 7(b)/1507/ Dated: 11.04.2019

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 10,000 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:

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.

MIC

Annexure - I

CEA Office Case No.: MR-459	Map Scale: 1:50,000
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-606	Route Length: 46.463 Kms
Railway Office Case No.:	Average SR Value: 10,000 Ohm cms
Name of Power Line	220KV DCDS line from Nipaniya (220KV) 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
	MANDSAUR SSA				
	SDOT Shamgarh				
(1)	Sitamau Exch to Laduna -50 Pair	} IV less than 430V			
(3)	Tirod Exch to Surajna -50 Pair				
(4)	Surajna Exch to Belara -20 Pair				
(6)	Khejadiya Exch to Pali -50 Pair				
(8)	Khejadiya Exch to Rahingarh -50 Pair				
(9)	Khejadiya Exch to Basai -50 Pair		Out of Parallelism		
(10)	Ajaypur Exch to Kurawan -50 Pair	} IV less than 430V			
(12)	Sunwasara Exch to Guradiya Pratap -50 Pair				
(15)	Sunwasara Exch to Devariya Bije -20 Pair				
(16)	Shamgarh Exch to Dhamaniya Deewan -20 Pair				
(20)	Melkheda Exch to Jamuniya -20 Pair				

मुख्य अभियंता/Chief Engineer
 केंद्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi

Tele : 23019746

Annexure-III MP-459

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

B/46937/Sigs 7(b)/1507/

11 Apr 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 220KV DCDS LINE FROM NIPANIYA (220KV) 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/2475/TR-I/12585 dt 22 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.

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22/4
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



(A Rawat)
Maj
GSO 1 (Comn)
for SO-in-C

for information.