सत्यमेव जयते

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

No.: CEA/PCD/ PTCC/MP-451/ 1146 - 1148

Date: 29.11.2019

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 LILO of 220 kV Ratlam-Daloda DCDS line at Jaora 132 kV S/S (being upgraded to 220 kV S/S) under Phase-I project of Green Energy scheme of MNRE GoI.**

Ref. :	(i)	MPPTCL Ref. No. 04-01/PTCC/2479/TR-I/9042	Dated: 17.11.2018
	(ii)	BSNL Ref. No. IC/MBI/PTCC/MP-586	Dated: 06.03.2019
	(iii)	Western Railway Ref. No. SG 158/28/10(L-196)	Dated: 19.06.2019
	(iv)	Defense Ref. No. B/46937/Sigs 7(b)/1359/	Dated: 28.12.2018

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL cables and block circuits of Western 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)
Chief Engineer, PCD

m/c

Copy to:

1. CSTE(Tele),Office of CSTE, S&T Dept., 5th Floor, Station Building, Churchgate, Mumbai-400020
2. Chief Engineer (Procurement), MPPTCL, 1st Floor, Block No. 3, Shakti Bhavan, Rampur, Jabalpur, Madhya Pradesh -482008.

एन आर पी सी परिसर, कटवारिया सराय, नई दिल्ली-110016 टेलीफैक्स: 011-26565214 ईमेल: celdntcea@gmail.com वेबसाइट www.cea.nic.in
NRPC Complex, Katwaria Sarai, New Delhi-110016 Telefax: 011-26565214 Email: celdntcea @gmail.com Website: www.cea.nic.in

Annexure-I

CEA Office Case No.: MP-451				Map Scale: 1:50,000	
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-586				Route Length: 3.556 Kms	
Railway Office Case No.:				Average SR Value: 10,000 Ohm cms	
Name of Power Line	**LILO of 220KV Ratlam – Daloda DCDS line at proposed 132KV S/s Jaora (being upgraded to 220KV S/s) under Phase-I Project of Green Energy 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**
	RATLAM SSA				
	SDOT Ratlam				
(I)	**Jaora T/Exchange Shatrinagar**				
A-B	Exchnge to Jaora Choupati Pillar – 800 Pair	} Out of Parallelism			
C-D	Exchnge to Govt. Hospital Pillar – 800 Pair				
E-E	Exchnge to Dhanmandi Pillar – 400 Pair				
G-H	Exchnge to Govt. Hospital Pillar – 200 Pair				

29.11.19

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

ANNEXURE – II

Case No.: MP-451

Name of the Power line: LILO of 220KV Ratlam — Daloda DCDS line at Jaora 132KV S/s (being upgraded to 220KV S/s) under Phase-I Project of Green Energy Scheme of MNRE GoI.

Map Scale : 1cm=500mts
Total Length : 3.556Km.
S.R. Value : 10,000 Ohms-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
WESTERN RAILWAY Ref. No: SG. 158 / 28 / 10 (L – 196) DATED: 19-06-2019					
Affected Blocks & Telcom Circuits Details					
1	Namli – Baryala Chaursi	----------out of //sm----------			0
2	Baryala Chaurasi - Jaora	0.8	0.0005	7900	4
3	Jaora - Dhodhar	0.75	0.0001	5906	1

Upendra Kumar 29.11.19

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

Annexure III

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)/1359/

28 Dec 2018

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

PTCC ROUTE APPROVAL FOR CONSTRUCTION OF LILO OF 220KV RATLAM-DALODA DCDS LINE AT JAORA 132KV S/S (BEING UPGRADED TO 220KV S/S) UNDER PHASE-I PROJECT OF GREEN ENERGY SCHEME OF MNRE GOI

1. Ref your letter No 04-01/ PTCC/2479/TR-I/9042 dt 17 Nov 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

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.