



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-450/ 1143/1145

Date: 28.11.2019

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 220 kV DCDS line from proposed 220 kV S/S Sailana to 220 kV S/S Ratlam (Nagda Switching Station) under Phase-I project of Green Energy Scheme of MNRE, GoI.

Ref. : (i) MPPTCL Ref. No. 04-01/PTCC/2478/TR-I/9125
(ii) BSNL Ref. No. IC/MBI/PTCC/MP-587
(iii) Western Railway Ref. No. SG 158/28/10(L-195)
(iv) Defense Ref. No. B/46937/Sigs 7(b)/1360/

Dated: 20.11.2018

Dated: 05.03.2019

Dated: 19.06.2019

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

(Upendra Kumar)
Chief Engineer, PCD

M/c

Copy to:

1. 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.

CEA Office Case No.: MP-450		Map Scale: 1:50,000			
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-587		Route Length: 33.317 Kms			
Railway Office Case No.: SG 158/28/10 (L-195)		Average SR Value: 10,000 Ohm cms			
Name of Power Line		220KV DCDS line from proposed 220KV S/s Sailana to 220KV S/s Ratlam (Nagda Switching Station) 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)	Ratlam Main T/Exchange Shatri Nagar				
A-B	Exchnge to Fuvara Chouk - 800 Pair				
C-D	Exchnge to Aabkari Chouraha - 400 Pair				
E-F	Exchnge to Katju Nagar - 400 Pair				
G-H	Exchnge to Govt. College - 200 Pair				
(II)	Ratlam Kasturba Nagar RSU T/Exchange				
A-B	Exchnge to Dongare Nagar - 200 Pair				
C-D	Exchnge to Alkapuri - 800 Pair				
(III)	Ratlam Vikram Nagar RSU T/Exchange				
A-B	Exchnge to Pillar - 400 Pair				
(IV)	Ratlam Industrial Area RSU T/Exchange				
A-B	Exchnge to Pillar - 400 Pair				
(V)	Bangrod T/Exchange				
A-B	Exchnge to Bus Stand - 400 Pair				
(VI)	Sailana T/Exchange				
A-B	Exchnge to Mata Mandir - 800 Pair				
C-D	Exchnge to Kirti Stambh Colony - 200 Pair				
(VII)	Namli T/Exchange				
A-B	Exchnge to Palduna Road Pillar - 400 Pair				
C-D	Exchnge to Bus Stand - 400 Pair				

Upendra Kumar

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

Tele : 23019746

Annexure-III
MP-450

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

B/46937/Sigs 7(b)/1360/

Dec 2018

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 PROPOSED
220KV S/S SAILANA TO 220KV S/S RATLAM (NAGRA SWITCHING STATION) UNDER PHAS
PROJECT OF GREEN ENERGY SCHEME OF MNRE GOI**

1. Ref your letter No 04-01/ PTCC/2478/TR-I/9125 dt 20 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.

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.

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