



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-435/ 710 712

Date: 17.06.2019

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

Subject: Induced Voltage calculation in respect of Diversion of 220kV DCDS Ratlam- Daloda line from Tower No.234 to 220kV S/S Daloda

Ref: (i) BSNL letter no. IC/MBI/PTCC/MP-554 dated 18.02.2019
(ii) Western Railway letter no. SG.158/28/10/L176 dated 18.03.2019
(iii) Defense letter no. B/46937/Sigs 7(b)/1186 dated 30.08.2018

Sir,

The instant PTCC proposal has been examined. The low frequency induction on BSNL and Railway Telecommunication circuits as per details furnished vide above cited references (i) and (ii) 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 Telecom Cables and Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above Ref.(iii) for the line (a copy enclosed at Annex-III).

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

Encl.: As above

Yours faithfully,

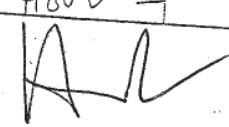
(Naresh Bhandari) 17/6
Chief Engineer

Copy to:

- 1) Office of CSTE, Western Railway, S&T Dept. , 5th Floor, Station Building, Churchgate, Mumbai – 400020 (Only Annex II)
- 2) Chief Engineer(Procurement), MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur (M.P.) - 482008

CEA Office Case No.: MP-435	Map Scale: 1:50,000
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-552	Route Length: 3.928 km.
Railway Office Case No.:	Average SR Value: 10,000 Ohm cms
Name of Power Line: Diversion of 220kV Ratlam-Daloda line from Tower No.234 to 220kV S/S Daloda	

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				
	SDCT Mandasaur				
(1)	Daloda Exch to Pragati Chouraha - 800 Pair				
(2)	Pragati Chouraha to Dhamnod - 50 Pair				
(3)	Pragati Chouraha to Jain Mandir Pillar - 400 Pair				
(4)	Jain Mandir Pillar to MPEB Office - 20 Pair				
(5)	Rly Station Chouraha to Rlt Station - 100 Pair				
(6)	Daloda Exch to Post Office - 200 Pair				- out of 11 sm -
(7)	Post Office Pillar to Mandi - 50 Pair				
(8)	Post Office Pillar to Police Chouki - 20 Pair				
(9)	Daloda Exch to Dall Mills - 20 Pair				
(10)	Dhamnar to Guliyana - 50 Pair				
(11)	Dhamnar to Hatunia - 50 Pair				- Less than 430V -
(12)	Kachnara to Lasudiya - 50 Pair				
(13)	Nimbod to Dehri to Mijora - 50 Pair				- out of 11 sm -
(14)	Nimbod to Khajuriya - 50 Pair				
(15)	Nimbod Exch to Nimbod Local - 50 Pair				- out of 11 sm -
(16)	Semliya Hira to Patera - 50 Pair				
(17)	Semliya Hira to Rakoda - 20 Pair				- Less than 430V -
(18)	Amlabad to Sijpuriya - 50 Pair				
(19)	Amlabad to Rajakhedi - 50 Pair				
(20)	Rajakhedi to Richha Bachha - 20 Pair				- out of IV consideration zone -
(21)	Sirsod Exch to Sirsod Village - 100 Pair				
(22)	Richha Lalmuha to Daloda Sagra - 50 Pair				- out of 11 sm -
(23)	Amlabad to Guridiya Lalmuha - 50 Pair				
(24)	Pandliya to Lalmuha - 20 Pair				- out of IV consideration zone - - Less than 430V -


 नरेश भंडारी/NARESH BHANDARI
 मुख्य अभियंता/Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-66

Case No. : MP 435

ANNEXURE II

Name of the Power line: Diversion of 220kV Ratlam- Daloda
line from Tower No.234 to 220kV S/S Daloda

Map Scale : 1cm=500mts
Total Length : 3.928 Km.
S.R. Value : 10,000 Ohms-cm

S.No.	Details of Telecom circuits	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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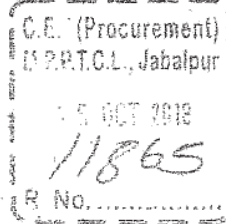
WESTERN RAILWAY					
Ref. no. SG158/28/10/L176 Date:18/03/2019					
Affected Block and Telecom Circuit Details					
1.	MANDSOR - DALAUDA	-----out of parallelism-----			0
2.	DALAUDA - KACHNARA RD	3.9	0.0048	10000	48



नरेश भंडारी/NARESH BHANDARI
मुख्य अभियन्ता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
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MP-435

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)/1186

30 Aug 2018

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

**PTCC ROUTE APPROVAL FOR DIVERSION OF 220 KV DCDS RATLAM-DALODA
LINE FROM TR. NO. 234 TO 220 KV S/S DALODA**

1. Ref your letter No 04-01/PTCC/2423-A/TR-I/2504 dt 31 May 2018 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your above mentioned letter.
3. Documents alongwith Map Sheets in original are returned herewith for your further necessary action.

(Signature)
(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.

MP-435