



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-426/523-25

Date: 25.04.2019

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 PTCC proposal of LILO of 2nd circuit of 220 kV Birsinghpur - Amarkantak at 220 kV S/S Shahdol

- Ref:** (i) BSNL letter no. IC/MBI/PTCC/MP-521 dated 19.01.2019
(ii) South East Central Railway letter no. SERC/S&T/PTCC/MP/796 dated 23.08.2018
(iii) Defense letter no. B/46937/Sigs 7(b)/962 dated 07.03.2018

Sir,

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
(Naresh Bhandari)
Chief Engineer

Copy to:

- 1) Office of CSTE, South East Central Railway, 2nd Floor, SECR Zonal Hq Building, Bilaspur – 495004
(Only Annex II)
- 2) Chief Engineer(Procurement), MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur (M.P.) - 482008

M/C

ANNEX-1

CEA Office Case No.: MP- 426		Map Scale: 1:50,000			
DET (PTCC) Office Case No.: IC/MBI/PTCC/MP-521		Route Length: 5.681 Kms			
Railway Office Case No.:		Average SR Value: 10,000 Ohm cms			
Name of Power Line		LILO of 2 nd Circuit of 220KV Birsinghpur – Amarkantak DCDS line at proposed 220KV S/s Shahdol.			
S. No.	Name of Telecom Line/ Cable	Length of Parallelism in Kms.	Mutual Coupling in Ohms	Fault Current in Amps	Induce Voltage in Volts
	SHAHDOL SSA				
	SDOT Shahdol				
	Singpur T/Exchange				
	U/G Cable towards Location (1) – 100 Pair	}			out side IV consideration zone →
	U/G Cable towards Location (2) – 100 Pair				
	U/G Cable towards Location (3) – 50 Pair				
	U/G Cable towards Location (4) – 50 Pair				
	Shahdol T/Exchange				
	U/G Cable towards Location (A) – 800 Pair	}			
	U/G Cable towards Location (B) – 800 Pair				
	U/G Cable towards Location (C) – 800 Pair				
	U/G Cable towards Location (D) – 800 Pair				
	U/G Cable towards Location (E) – 400 Pair				
	U/G Cable towards Location (F) – 400 Pair				
	U/G Cable towards Location (G) – 400 Pair				
	U/G Cable towards Location (H) – 400 Pair				
	U/G Cable towards Location (I) – 400 Pair				
	U/G Cable towards Location (J) – 400 Pair				
	U/G Cable towards Location (K) – 200 Pair				
	U/G Cable towards Location (L) – 200 Pair				
	U/G Cable towards Location (M) – 200 Pair				
	U/G Cable towards Location (N) – 200 Pair				
	U/G Cable towards Location (O) – 200 Pair				
	U/G Cable towards Location (P) – 200 Pair				
	U/G Cable towards Location (Q) – 200 Pair				
	U/G Cable towards Location (R) – 200 Pair				
	U/G Cable towards Location (S) – 200 Pair				

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

Tele: 23019746

ANNEX - III

MP-426

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

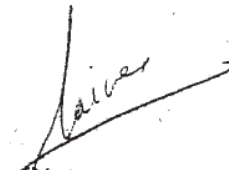
B/46937/Sigs 7(b)/962/

Chief Engineer (Procurement)
Madhya Pradesh Power Transmission Co Ltd
Block No. 3 Shakti Bhawan,
Jabalpur (MP) - 48008

7 Mar 2018
C.E. (Procurement)
M.P.P.T.C.L., Jabalpur
15 MAR 2018
R. No. 4820

**PTCC ROUTE APPROVAL FOR LILO OF SECOND CIRCUIT OF 220KV
BIRSINGHPUR - AMARKANTAK LINE AT 220KV S/S SHAHADOL**

1. Reference your letter No. ___/PTCC/2527-A/TR-I/699 dt 19 Jan 2018.
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(Nainee Sharma)
Lt Col
GSO 1 (Comn)
for SO-in-C