



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युतसंचारविकासप्रभाग

Power Communication Development Division

No.: CEA/PCD/PTCC/BHR-156/677-79

Date: 09.11.2020

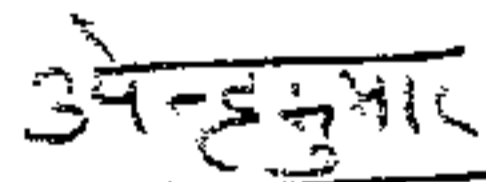
Subject: PTCC proposal for LILO of both circuits of 220 kV D/C Ara - Pusauli transmission line at Dumraon (New) -regd.

Ref: (i) BGCL letter no. BGCL/Patna/PTCC/1681 dated 01.05.2019
(ii) BSNL Ref. No. DE/PTCC/ER/EBR010820192531/02 dated 05.10.20209
(iii) East Central Railway Ref. No. ECR/S&T/PTCC/134, Pt. III/695 dated 01.08.2019

The PTCC proposal submitted vide ref. (i) has been examined. The LF induction on telecom cables of BSNL and block & telecom circuits of East Central Railway, as per details furnished vide ref. (ii) and (iii) respectively, has been examined. The Soil Resistivity value has been taken as 15,000 Ohms-cm. Voltages likely to be induced on paralleling telecom cables of BSNL and block & telecom circuits of East Central Railway under single line to ground fault condition are enclosed at Annex-I & II respectively. The screening factors as applicable have been considered.

Telecommunication details from Defense are pending and the power authority has shown urgency for charging of the line. In view of this, kindly take necessary action regarding issuance of **Provisional PTCC route approval for LILO of both circuits of 220 kV D/C Ara - Pusauli transmission line at Dumraon (New).**

Encl.: As above.


09.11.2020
(Upendra Kumar)
Chief Engineer

To,
DE (PTCC), Eastern Region,
Inspection & QA Circle, BSNL
Q.A. Bhawan, EP-GP Block, Sector-V,
Salt Lake, Kolkata – 700091.

Copy to:

1. General Manager (S&T), East Central Railway, Hajipur, Bihar - 844118 – (with Annex – II)
2. DGM, Bihar Grid Company Ltd, 2nd floor, Alankar Place, Boring Road, Patna - 800001

Particulars details of parallel Telecom alignment Performa

For LIGO of 225 KV D/C Arrah - Pashauli At Dumraon (New) Transmission line

S.No	Telecome Circuits	Marked as	Length of parallel Line in KM	Mutual Coupling in ohms	Effect fault current in amp
1	Jagdishpur Exchange	A			
2	Jagdishpur Exchange to Jagdishpur market Nayaka tola (1x400 Pr UG cable Dist-2.5KM)	1			
3	Jagdishpur Exchange to Thana Road (1x200 Pr UG cable Dist-1.0KM)	2			
4	Jagdishpur Exchange to Haswadi (1x100 Pr UG cable Dist-9.0KM)	3			
5	Sahpur Exchange	B		IV LESS THAN 430V	
6	Sahpur Exchange to Banahi (1x100 pr UG Cable Dist-0.5KM)	4			
7	Sahpur Exchange to Bihiya Chaurasta road (1x50 pr UG Cable Dist-2.0KM)	5			
8	Sahpur Exchange to Ranisagar (1x100 pr UG Cable Dist-2.0KM)	6			
9	Brahmpur Exchange	C			
10	Brahmpur Exchange to Brahmpur Block (1x100 pr UG Cable Dist-2.0 KM)	7			

Computed by

Priteesh

Priteesh Srivastava

27/05/2017

ANNEXURE - II

Case No.: BHR-156 Name of the Power line: LILO of both circuits of 220 kV D/C Ara - Pusauli transmission line at Dumraon (New)	Map Scale : 1cm=500mts Total Length : 40.606 km. S.R. Value : 15,000 Ohms-cm
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S.No	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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East Central Railway					
ECR/S&T/PTCC/134, Pt. III/695 dated 01.08.2019					
1	Twining ganj - Raghunathpur	Out of Parallelism			0
2	Raghunathpur - Banahi	3.9	0.0014	7200	10
3	Banahi - Bihiya	3.5	0.0004	7000	3

Computed by

Prateek

(Prateek Srivastava)
AD, CEA

प्रतिष्ठान प्रमुख, ए. सी. ई. आर.
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