

I/25538/2023



**भारत सरकार**  
**Government of India**  
**विद्युत मंत्रालय**  
**Ministry of Power**  
**केन्द्रीय विद्युत प्राधिकरण**  
**Central Electricity Authority**  
**विद्युत संचार विकास प्रभाग**  
**Power Communication Development Division**

\*\*\*\*\*

CEA Case No. : MP-484		
PTCC approval for LILO of one circuit of 220 kV DCDS line from Ashta 400 kV S/S to Bhopal 400 kV S/S at 220 kV S/S Bairagarh (2.689 km) - regd.		
S. No	Reference No.	Dated
(i)	MPPTCL: 04-01/PTCC/2667/TR-I/7437	27.03.2021
(ii)	BSNL: PTCC/WR/2021-22/MP-709	29.07.2022
(iii)	Western Railway: SG.158/28/10 (L-237)	13.09.2021
(iv)	Defense: B/46937/Sigs 7(b)/2402 received without map	06.09.2021
(v)	Defense: B/46937/Sigs 7(b)/2402 received with map on 20.12.2022	06.09.2021

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of BSNL, Western Railway and Defense with respect to details furnished vide above reference (ii), (iii) & (v) respectively have been computed. The voltages likely to be induced on paralleling communication cables of BSNL, Western Railway and Defense under Single Line to Ground fault conditions are enclosed at Annexure-I, II & III respectively. The screening factors as applicable have been considered.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

**Chief Engineer**

**To,**

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 <sup>st</sup> floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
2.	GM (S&T)	Western Railway, Office of the PCSTE, S&T Dept., 5 <sup>th</sup> Floor, Station Building, Churchgate, Mumbai - 400020	Annex-II
3.	Director General of Signals	General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ, PO, New Delhi-110 105	Annex-III
4.	Chief Engineer (Plg. & Design)	MPPTCL, Block No. 3, Shakti Bhawan, Rampur, Jabalpur – 482008	Copy for information

I/25538/2023

ANNEXURE-I

CEA Case No.: MP-484		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of one circuit of 220 kV DCDS line from Ashta 400 kV S/S to Bhopal 400 kV S/S at 220 kV S/S Bairagarh		Total Length : 2.689 km		S.R. Value : 5000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>BSNL Letter No: PTCC/WR/2021-22/MP-709 Date: 29.07.2022</b>					
<b>I</b>	<b>Bairagarh Exchange</b>				
1	A to B	Out of parallelism			
2	A to C				
3	A to D				
4	A to E				
<b>II</b>	<b>CTO Bairagarh Exchange</b>				
1	F to G	Out of parallelism			
2	G to H				
3	F to I				
<b>III</b>	<b>Gandhi Nagar Exchange</b>				
1	J to K	Out of parallelism			
2	J to L				
3	J to M				
<b>IV</b>	<b>Khajersi Sadak Exchange</b>				
1	N to O	Out of parallelism			
<b>V</b>	<b>Parwalia Sadak Exchange</b>				
1	P to Q	Out of parallelism			
<b>VI</b>	<b>Bhauri Exchange</b>				
1	R to S	Out of parallelism			

I/25538/2023

ANNEXURE-II

CEA Case No.: MP-484		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of one circuit of 220 kV DCDS line from Ashta 400 kV S/S to Bhopal 400 kV S/S at 220 kV S/S Bairagarh		Total Length : 2.689 km		S.R. Value : 5000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>WESTERN RAILWAY Letter No: SG.158/28/10 (L-237) Date: 13.09.2021</b>					
<b>Affected block &amp; telecom circuits</b>					
1	Bakanian Bhaunri - Bairagarh	Outside IV consideration zone			
2	Bairagarh – Nishadpura ‘D’ (Ex)				

I/25538/2023

ANNEXURE-III

CEA Case No.: MP-484		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of one circuit of 220 kV DCDS line from Ashta 400 kV S/S to Bhopal 400 kV S/S at 220 kV S/S Bairagarh		Total Length : 2.689 km		S.R. Value : 5000 Ohm-cm	
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
<b>DEFENSE: B/46937/Sigs 7(b)/2402 Date: 06.09.2021</b>					
<b>Telecom (JFC) Cables</b>					
1	Bairagarh	Out of parallelism			
2	D-Top	Outside IV consideration zone			
3	SI Line				