

I/25742/2023



सत्यमेव जयते



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. : UP-558		
PTCC approval for LILO of Ckt-1 of 220 kV D/C Azamgarh (II) – Bhadohi Line at 400 kV Machhalishahar S/s -Regd.		
S. No	Reference No.	Dated
(i)	UPPTCL: 586/ETD-II(J) (received on 04.01.2023)	10.05.2022
(ii)	UPPTCL: e-mail	16.01.2023
(iii)	BSNL: DET/PTCC/ND/DV-9903/UP-961/2021-22 (received on 04.01.2023)	20.01.2022
(iv)	Northern Railway: 342-SIG/1/PTCC/2021-22/08/03	11.08.2021
(v)	Defense: B/46937/Sigs 7(b)/2241	24.02.2021

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of Northern Railway with respect to details furnished vide above reference (iv) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of Northern Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET (NZ), BSNL and DG Signals, MoD vide reference (iii) and (v) respectively have issued No Objection Certificate (NOC).

EPR zone for the proposed substation is mentioned below:

Name of proposed substation	Half diagonal distance, D/2 (mts)	Fault Current I (kA)	Resistance of earth mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
400 kV Machhalishahar	242	28	0.27	4013	2573	19	NA

As per the Telecom Details submitted by BSNL vide above reference (iv), No Telephone exchange of BSNL is coming in the EPR zone of proposed 400 kV Machhalishahar substation

Taking above into consideration, necessary action regarding issuance of provisional PTCC approval for the subject cited transmission line may be taken under intimation to this office.

Encl.: As above

Chief Engineer

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To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL, O/o PGM(North), QA & Inspection Circle D-Tax Building, Eastern Court, Janpath New Delhi-110001	
2.	GM (S&T)	Northern Railway, Baroda House New Delhi	Annexure-I
3.	Executive Engineer	Electricity Transmission Division –II, UPPTCL, Jaunpur	Copy for information.

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ANNEXURE-I

CEA Case No.: UP-558			Map Scale : 1 cm= 500 m		
Name of the Power line: LILO of Ckt-1 of 220 kV D/C Azamgarh (II) – Bhadohi Line at 400 kV Machhalishahar S/s			Total Length : 38.8 km		
			S.R. Value : 25,000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Northern Railway Letter No.: 342-SIG/1/PTCC/2021-22/08/03 Dated 11.08.2021					
<u>Affected Blocks & Telecom Circuits Details</u>					
1	Zafrabad R/S to Salkhapur R/S	Out of IV consideration zone			
2	Salkhapur R/S to Shudnipur R/S	3.65	0.00121	15702	19
3	Shudnipur R/S to Mariahu R/S	5.44	0.00695	17266	120
4	Mariahu R/S to Bhanaur R/S	Out of IV consideration zone			
5	Bhanaur R/S to Barsathi R/S	Out of IV consideration zone			