





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-621 Induced Voltage (IV) calculation for PTCC approval for Diversion of 220 kV Sarojini Nagar-Gomti Nagar/220 kV PGCIL (Raebareli)- C.G City D/C transmission line [Length of diversion portion – 10.2 km]-Regd.				
S. No	Reference No.	Dated		
(i)	UPPTCL: 524/ETD-II(L)/NHAI	05.04.2023		
(ii)	UPPTCL: 043/ETD-II(L)/NHAI	01.07.2023		
(iii)	BSNL: DET/PTCC/ND/DV-10208/UP-1121/2023-24	08.06.2023		
(iv)	Northern Railway: 342-SIG/1/PTCC/2023-24/04/03	24.04.2023		

The PTCC proposal submitted vide reference (i) 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 due to 220 kV Sarojini Nagar-Gomti Nagar D/C transmission line and 220 kV PGCIL (Raebareli)- C.G City D/C transmission line are enclosed at Annexure-I and Annexure-II respectively. The screening factors as applicable have been considered. BSNL has issued No Objection Certificate (NOC) vide reference (iii).

Telecommunication details from Defense are pending and the power utility has shown urgency for charging of the line and requested for provisional PTCC approval vide above reference (ii). 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

(Suman Kumar Maharana)

Chief Engineer

I/28898/2023^{To,}

1.	Divisional	BSNL, O/o PGM(North), QA & Inspection	
	Engineer (PTCC),	Circle	
	Northern Zone	D-Tax Building, Eastern Court, Janpath	
		New Delhi-110001	20
2.	GM (S&T)	Northern Railway, Baroda House New Delhi	Annexure-I, Annexure-
	Director General of Signals	General Staff Branch, Integrated HQ, MoD (army), Sena Bhawan, DHQ,	With a request to provide details of
3.		PO, New Delhi- 110 105	Telecom assets/ NOC at the earliest for issuance of final RAC.
4.	Executive Engineer	ETD-II, Room No: 211-216	
	UPPTCL	Pareshan Bhawan, Gomti Nagar Lucknow	Copy for information.

ANNEXURE-I

CEA Case No.: UP-621 Name of the Power line: 220 kV Sarojini Nagar-Gomti Nagar D/C			Map Scale : 1 cm= 500 m Total Length : 45.5 km			
transmiss	ion line		S.R. Value : 2	20,000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.	
Norther	n Railway Letter No.: 342-SIG/1/PTCC/2023-2					
	Affected Blocks	& Telecom Circuit	s Details			
1	Utraitia R/s to Bakkas R/s	4.5	0.00096	21600	21	
2	Bakkas R/s to Anupganj R/s	2.5	0.0083	21250	176	
3	Anupganj R/s to Rahmatnagar R/s	-Out of Parallelism-				
4	Rahmatnagar R/s to Chhandrauli R/s	-Out of Parallelism-				
5	Utraita R/s to Mohanlalganj R/s	2	0.00046	17650	8	
6	Mohanlalganj R/s to Kankaha R/s	-Out of Parallelism-				
7	Kankaha R/s to Nigohan R/s	-Out of Parallelism-				

File No.CEA-PS-17-11(11)/54/2023-PCD Division

1/28898/2023

ANNEXURE-II

	No.: UP-621 the Power line: 220 kV PGCIL (Raebare) on line	li)- C.G City D/C	Total Length	: 1 cm= 500 m : 82.07 km 0,000 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/2023-2 Affected Blocks	24/04/03 Dated 24.0 & Telecom Circuits				
1	Utraitia R/s to Bakkas R/s	4.5	0.00096	25800	25	
1						
2	Bakkas R s to Anupganj R/s	2.5	0.0083	26450	220	
3	Anupganj R/s to Rahmatnagar R/s		-Out of Parallelism-			
4	Rahmatnagar R/s to Chhandrauli R/s		-Out of Parallelism-			
5	Utraita R/s to Mohanlalganj R/s	2	0.00046	25650	12	
6	Mohanlalganj R/s to Kankaha R/s	-Out of Parallelism-				
7	Kankaha R/s to Nigohan R/s	-Out of Parallelism-				