

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

CEA Cas	CEA Case No.: HRA-253				
Induced Voltage (IV) calculation for PTCC proposal of LILO of 220 kV D/C PGCIL Sec- 72 to HVPNL Sec-72 Transmission Line on M/C Towers at 220 kV HVPNL Sec-15-II S/s. (Length-5.127 km)- regd.					
U					
(i)	HVPNL: Ch-5718/TSDG70	15.02.2024			
(ii)	HVPNL: Ch118/TSDG70	27.11.2024			
(iii)	BSNL:DET-PTCC/NZ/DV-1031/HR-884/2024-25/	25.11.2024			
(iv)	Northern Railway: 342-SIG/1/PTCC/2024-25/09/01	02.09.2024			

The PTCC proposal submitted vide reference (i), & (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL & Northern Railway with respect to details furnished vide above reference (iii) & (iv) has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL & Northern Railway under Single Line to Ground fault condition are enclosed at Annexure-I & Annexure-II respectively. The screening factors as applicable have been considered.

Telecommunication details from Defense are still pending and vide above reference (ii), transmission utility has shown urgency for charging of line and has requested for provisional PTCC approval. Taking above into consideration, necessary action for issuance of provisional PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for "Deemed Energization approval" shall be specified while issuing RAC.

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Chief Engineer

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1.	Divisional Engineer	BSNL, O/o PGM(North), QA & Inspection	
	(PTCC), Northern	Circle	
	Zone	D-Tax Building, Jan path, New Delhi	
2.	GM (S&T)	O/o GM (S&T), Northern Railways	
		Baroda House, Delhi	
	Director General of	General Staff Branch, Integrated HQ,	With a request to provide details
3.	Signals	MoD (army), Sena Bhawan, DHQ,	of Telecom assets/ NOC at the
		PO, New Delhi- 110 105	earliest for issuance of final RAC.
4.	Executive Engineer	O/o Executive Engineer HVPNL, Gurugram	Copy for information

ANNEXURE-I

	CEA Case No.: HRA-253			Map Scale : 1 cm= 500 m		
Name of the Power line : LILO of 220 kV D/C PGCIL Sec-72 to HVPNL Sec-72 Transmission Line on M/C Towers at 220 kV HVPNL Sec-15-II			Total Length: 5.127 km			
S/s.			S.R. Value	3000 Ohm-cm		
		Length of		Effective		
		Parallelis	Mutual	Fault	I.V	
		m	Coupling	current	in	
S.No.	Telecom. Details	in Km.	in Ohms.	in Amps.	Volts.	

BSNI	L Letter No: DET-PTCC/NZ/DV-1031/HR-884/2024	-25/ Dated 2	5.11.2024		
1.	WLC Xge to Hans Enclave				
2.	WLC Xge 13 Aifrorce		IV less th	an 430 V	
3	WLC Xge -Sec 38				
4	Sec 38 -Subhash Chowk	1.25	0.037	11150	413
5	Sec 38- Medanta				
6	DHBVN Sec38- Petrol pump Sec 38	-			
7	Airforce gate- Islampur				
8	Jblock to J Block Xge	-			
9	J- block Xge- N Block				
10	10JBlock XgeVani Square	-			
11	11 J Block Xge to Nirvana	-			
12	J Block- Deerwood gate				
13	Deerwood- Business Zone		IV less th	an 430 V	
14	Vani Square- M2K	-			
15	Malibu town- Uniworld garden				
16	Malibu town -Vipul green				
17	Malibu town-ABlock S. City				
18	Maibu town- D block S.city	-			
19	Maliubu town I Block S. city	-			
20	Malibu towh Sispal Vihar				
21	Malibu town Allock Scity	1			
22	Malibu town- good earth mall	1			
23	Malibu town -Q1 Block city	1			
24	Orchid petal - Eldeco	1			

25	Orchid petal-yile	
26	Orchid Patelgate Roseyood city	
27	Orchid pass- uppal Southhead	
28	Eldeco Vipull world	
29	Parth viewcity 1- Vatika business	
30	Vatika Xge- Park View city 2	
31	Badshapur Xge- Tikri Mod	
32	Sector 15-Civil Line	
33	Frds colony to sector 15	
34	New coloney -railway road-madanpuri	
35	Chandan Nagar to sector 15, mehroli road	
36	Vikas sadan mini secretariat	
37	DTO-Railway road - patel nagar	
38	Basasi to ravi nagar to civil HS	
39	Sector 18 -sector 17 mehroli road	
40	Hanuman mandir-infospace	
41	Maruti main plant to gate 1,2,3,4	
42	Dundahera to sankar chow- kapashera -idpl	
43	Daulta bad BTS	
44	Bajgera Bts	
45	Dharampur BTS	
46	R.Park Exch- Vishnu garden	
47	Palam Vihar Exch- sector 23- Nobel Enclave	
48	Sai Kunj -40 foota road -sector 110	
49	HECL to Udyog Vihar	
50	Enkay tower to HSIDC	
51	GE Capital to Udyog Vihar	

IV less than 430 V

E.

ANNEXURE-II

CEA Case No.: HRA-253 Name of the Power line : LILO of 220 kV D/C PGCIL Sec-72 to HVPNL Sec-72 Transmission Line on M/C Towers at 220 kV HVPNL Sec-15-II S/s.		Total Length	: 1 cm= 500 n n : 5.127 km : 3000 Ohm-cm	n	
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Northern Railway Letter No342-SIG/1/PTCC/2024-25/09		9/01 Dated 02.09.2024	
1.	Shahbad Mohammadpur R/s to Bijwasan R/s	-Out of Parallelism-	
2.	Bijwasan R/s to Gurgaon R/s	-Out of Parallelism-	
3	Gurgaon R/s to Garhi Harsaru R/s	-Out of Parallelism-	