



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युतसंचारविकासप्रभाग
Power Communication Development Division

CEA Case No. : DL-24:
PTCC proposal for LILO of both circuits of 400 kV D/C Bawana to Mandola transmission line at Maharaniabagh on M/C tower: 29.981 km

Reference:		
S. No.	Reference No.	Dated
(i)	PGCIL :PG/NR-1/Mbgh/TL	21.11.2019
(ii)	BSNL:DET/PTCC/ND/DV-9929/ND-228/2021-2022 (MTNL telecom details)	12.08.2021
(iii)	Northern Railway: 342-SIG/1/PTCC/2019-20/12/01	02.12.2019
(iv)	DMRC : DMRC/O&M/S&T/L1&2/21/36 dated 27.10.2021 & JGM/Sig/HQ(O&M)/30 dated 26.10.2021	
(v)	Defense: B/46937/ Sigs 7(b)/1913	04.02.2020

The PTCC proposal submitted vide reference (i) has been examined. BSNL vide above reference (ii) has intimated that no MTNL lines (copper cable and armored OFC) in the route of the proposed power line. Hence, IV calculation are not required for MTNL telecom lines. The LF induction on telecom cables of Block & Telecom circuits of Northern Railway and telecom cables of DMRC with respect to details furnished vide above reference (iii) and reference (iv) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of Block & Telecom circuits of Northern Railway and telecom cables of DMRC under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure- II respectively. The screening factors, as applicable, have been considered. The Defense Authority have accorded NOC vide above reference (v) for the proposed power line.

Taking above into consideration, necessary action regarding issuance of PTCC route approval may be taken.

Digitally signed by RAGHUVENDRA PRATAP SINGH
Date: 2021.11.02 11:13:00IST

Director

M/C

To,

1.	Divisional Engineer (PTCC), Northern Zone	BSNL O/o PGM (N), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath, New Delhi 110001.	w/o Annexures
2.	AESTE/UTS	Northern Railway, Head Quarter Office, Baroda House, New Delhi-110001.	Annexure-I only
3.	Dy. GM/Telecom	DMRC; 5 th floor, South tower, NBCC Place, Bhismha Pitamah Marg, Pragati Vihar, New Delhi-110003.	Annexure-II only
4.	Sr. DGM, Delhi Project, Maharaniabagh	PGCIL, 400/220 kV GIS Maharani Bagh Substation, Behlolpur Khadar, New Delhi-110013.	Copy for information

ANNEXURE - I


Case No.: DL-24 Name of the Power line: LILO of both circuits of 400 kV D/C Bawana to Mandola transmission line at Maharaniabagh on M/C tower.			Map Scale : 1 cm=500 m Total Length : 29.981 km Soil Resistivity : 10,000 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/2019-20/12/01

Dated: 02.12.2019

Affected Blocks & Telecom Circuits Details

(A)	Sahibabad to Delhi section				
1	Sahibabad R/S to Delhi Sahadara R/S	2.5	0.0063	10887	69
2	Delhi Sahadara R/S to Delhi Junction R/S	0.6	0.0001	10924	01
(B)	Sahibabad to New Delhi section				
1	Sahibabad R/S to Anand Vihar R/S	0.3	0.0001	11689	01
2	Anand Vihar R/S to Tilak Bridge R/S	3.7	0.0008	11750	10
3	Tilak Bridge R/S to New Delhi R/S	1.2	0.0011	11762	13
(C)	Delhi Junction to Ambala section				
1	Delhi Junction R/S to Subzimandi R/S	2.4	0.0013	9253	12
2	Subzimandi R/S to Delhi Azadpur R/S	3	0.0006	9021	06
3	Delhi Azadpur R/S to Adarsh Nagar Delhi R/S	0.3	0.0001	8993	01
4	Adarsh Nagar Delhi R/S to Khera Kalan R/S	Outside IV consideration zone			00
(D)	Tilak Bridge to Okhla section				
1	Tilak Bridge R/S to Hazrat Nizamuddin R/S	2.8	0.0051	13268	68
2	Hazrat Nizamuddin R/S to Okhla R/S	0.6	0.0010	14482	15
(E)	Delhi Shahdara to Khckra section				
1	Delhi Shahdara R/S to Noli R/S	Outside IV consideration zone			00
2	Noli R/S to Khekra R/S	Outside IV consideration zone			00


 नाम / TANUJ
 सहायक निदेशक-II/Asstt. Director-II
 क्षेत्रीय विद्युत प्राधिकरण / C.E.
 बिजली मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi-06

तनुज / TANUJ
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ANNEXURE -II

Case No.: DL-24 Name of the Power line: LILO of both circuits of 400 kV D/C Bawana to Mandola transmission line at Maharanibagh on M/C tower.		Map Scale : 1 cm=500 m Total Length : 29.981 km Soil Resistivity : 10,000 ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in km	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

DMRC letters no.: DMRC/O&M/S&T/L1&2/21/36 dated 27.10.2021 & JGM/Sig/HQ(O&M)/30 dated 26.10.2021

Affected Blocks & Telecom Circuits Details					
1	SHPK to KG	2.3	0.0021	14250	30
2	IP to YB	1.1	0.0032	13000	42
3	NIZM to MVPI	2.6	0.0012	10212	13

Jamuj
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