



सत्यमेव जयते


 एक ही धरती  
 एक ही परिवार  
 एक ही भविष्य  
 ONE EARTH - ONE FAMILY - ONE FUTURE

**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. : MRA-1218		
Induced Voltage (IV) calculation of PTCC proposal for LILO of 220 kV Kalwa- Apta line with UG cable at 220 kV GIS S/s of M/s Print House (India) Pvt. Ltd. (0.3 Kms) – Regd.		
S. No	Reference No.	Dated
(i)	PH/PR/ADMIN/MUM-RABALE/42/2023	12.05.2023
(ii)	BSNL: IC/MBI/PTCC/MRA-2589/03	10.08.2023
(iii)	Central Railway: N.153/PTCC/220kV/MAH-835	16.06.2023
(iv)	Defense: B/46937/Sigs 7(b)/3380	13.09.2023

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

DG Signals, MoD, vide above reference (iv) has issued their No Objection certificate (NOC) for charging of the line.


EPR zone for the proposed substation is mentioned below:

Name of the 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 7kV	d (mts) at 10kV
220/11 kV GIS Substation of Print House India (Pvt.) Ltd.	30	35	0.24	556	358	6	NA

As per the details submitted by BSNL vide reference (ii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

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

Encl.: As above

  
 (3.10.2023)  
 (मन. जे. बि.)  
 Director

I/30953/2023

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)	Central Railway, Office of Principal Chief Signal and Telecom Engineer, 3 <sup>rd</sup> Floor, Annex Building, CSMT Mumbai, 400 001	
2.	M/s Print House (India) Pvt. Ltd.	Plot No. R-847/2, T.T.C Industrial, Rabale, Rabale, Navi Mumbai	Copy for information

I/30953/2023

ANNEXURE-I

CEA Case No.: MRA-1218		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of 220 kV Kalwa- Apta line with UG cable at 220 kV GIS S/s of M/s Print House (India) Pvt. Ltd.		Total Length : 0.3 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.
BSNL: IC/MBI/PTCC/MRA-2589/03 Dated: 10.08.2023					
1	EL Zone RSU				Out of parallelism
2	KKR				Out of parallelism
3	MBP				Out of parallelism
4	Rabale				IV Less than 430 V
5	Airoli				Out of parallelism
6	Vashi				Out of parallelism
7	APMC				Out of parallelism
8	Turbhe				Out of parallelism
9	Kausa				Out of parallelism
10	NMUM				Out of parallelism
11	Riverwood				Out of parallelism
12	Diva Rly Stn				Out of parallelism
13	Kalwa				Out of parallelism
14	Kopri				Out of parallelism
15	PPK				Out of parallelism
16	CHR				Out of parallelism
17	Mulund				Out of parallelism
18	Bhandup BTM				Out of parallelism



I/30953/2023

19	Manisha Tower	Out of parallelism
----	---------------	--------------------

I/30953/2023

ANNEXURE-II

CEA Case No.: MRA-1218		Map Scale : 1 cm= 500 m			
Name of the Power line: LILO of 220 kV Kalwa- Apta line with UG cable at 220 kV GIS S/s of M/s Print House (India) Pvt. Ltd.		Total Length : 0.3 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.
Central Railway: N.153/PTCC/220kV/MAH-835 Dated: 16.06.2023					
1	Bhandup to Dombivli			Out of parallelism	
2	Thane to Jui Nagar			Out of parallelism	
3	Diva to Taloja			Out of parallelism	