सत्यमेव जयते

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
****

CEA Case No.: MRA-1308		
Induced Voltage (IV) calculation in respect of PTCC proposal for LILO of 220 kV D/C Kalwa- Panchanand line at 220 kV GIS of M/s Gramercy Techpark Pvt Ltd (Length: 1.06km) [O/H =0.143km+ U/G=0.922km]- regd.		
S. No	**Reference No.**	**Dated**
(i)	MSETCL**:** MSETCL/CO/PS/PTCC/In/B-617/04859	30.05.2025
(ii)	MSETCL: Email	25.11.2025
(iii)	BSNL**:** IC/MBI/PTCC/MRA-2726/03	10.07.2025
(iv)	Central Railway: N.705/T/PTCC/220kV/MAH-959	23.07.2025
(v)	Defense: B/46937/Sigs-7(b)/4866	29.07.2025

The PTCC proposal submitted vide above references (i) and (ii) has been examined. The LF induction on Block and Telecom circuits of BSNL and Central Railway with respect to details furnished vide above references (iii) and (iv) respectively has been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL 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 has issued No Objection Certificate (NOC) vide reference (v) (attached as Annexure –III).

EPR Zones for proposed substation are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
220 kV GIS of M/s Gramercy Techpark Pvt Ltd	38	30	0.441	1117	726	33	12

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

Taking above into consideration, necessary action for issuance of 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

Encl.**:** As above

Digitally signed by
Suman Kumar Maharana
Date: 03-12-2025
14:55:36

Chief Engineer,

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1st floor, D- wing, BSNL Admin Bldg., Juhu Tara Road, Santacruz (West), Mumbai-400054	
2.	PCSTE (Central Railway)	O/o Principal Chief Signal & Telecom Engineer, S&T Department, 3rd Floor, Annexe Building Chhatrapati Shivaji Maharaj Terminus, Mumbai-400001	
3.	Chief Engineer (Projects Schemes Deptt.)	MahaTransco C.O., 'Prakashganga' Plot No C-19, E- Block, BKC, Bandra(E), Mumbai-400051	Copy for Information

ANNEXURE-I

CEA Case No.: MRA-1308 Name of the Power line: LILO of 220 kV D/C Kalwa- Panchanand line at 220 kV GIS of M/s Gramercy Techpark Pvt Ltd	**Map Scale:** 1 cm= 500 m **Total Length**: 1.063 km **S.R. Value:** 10000 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 Letter No: IC/MBI/PTCC/MRA-2726/03 Dated 10.07.2025					
AM(VANSHI)					
A	Cables of EL Zone RSU	Out of Parallelism			
B	Cables of KKR				
C	Cables of MBP				
D	Cables of Rabale				
E	Cables of Airoli	1.063	0.0092	27461	253
AM(CHARAI)					
F	Cables of KAUSA	IV less than 430V			
G	Cables of NMUM	Out of Parallelism			
H	Cables of Riverwood				
I	Cables of DIVA RLY STN				
J	Cables of Kalwa				
K	Cables of Kopri				
L	Cables of Balkum				
M	Cables of Panch Pakhadi				
N	Cables of VASANT VIHAR				
O	Cables of SAHYOG				
P	Cables of CHARAI				
AM (MULUND)					
Q	Cables of MULUND	IV less than 430V			
R	Cables of GOVIND UDYOG	Out of Parallelism			
S	Cables of WAGLE ESTATE				
T	Cables of LOKMANYA				

U	Cables of BHANDUP BTM	IV less than 430V
V	Cables of MANISHA Tower Mulund East	

ANNEXURE-II

CEA Case No.: MRA-1308 Name of the Power line: LILO of 220 kV D/C Kalwa- Panchanand line at 220 kV GIS of M/s Gramercy Techpark Pvt Ltd	**Map Scale:** 1 cm= 500 m **Total Length**: 1.063 km **S.R. Value:** 10000 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 Letter No: N.705/T/PTCC/220kV/MAH-959 Dated 23.07.2025					
1.	TNA-KPHN	1.06	0.0018	27461	49
2.	BND-AGSN	1.06	0.00002	27461	1

Annexure III

Directorate General of Signals (Signals-7)
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi -11

B/46937/Sigs-7(b)/4866 dt 29 Jul 2025

Chief Engineer (Project Schemes Deptt)
Maharashtra State Electricity Transmission Co. Ltd.
MahaTransco C.O. Prakashganga
Plot No. C-19, E-Block, BKC, Bandra (E),
Mumbai – 400 051

PTCC PROPOSAL FOR 220KV DC LINE, LILO ON EXISTING 220KV KALWA-PANCHANAND LINE AT PROPOSED 220KV GIS OF M/S GRAMERCY TECHPARK PVT. LTD., PLOT 7 &A MIDC INDUSTRIAL ESTATE, AIROLI, NAVI MUMBAI, LENGTH=1.06 KMS (O/H + U/G)

1. Ref your letter No MSETCL/CO/PS/PTCC/In. B-617/04859 dt 30 May 2025.

2. No Objection Certificate (NOC) is **accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.

3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

DTE GEN OF SIGNALS (SIGS-7) INTEGRATED HQ MoD (ARMY)

(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade-1(Communication)
for Additional Director General(Telecommunication)

Encls: As above

Copy to:-

HQ Southern Comd (Sigs)

Chief Engineer, PSCD Division
Central Electricity Authority
Room No 702 (North Wing)
Sewa Bhawan, RK Puram, Sector-1
New Delhi-110 066

for info pl.

EE (PTCC/MERC)

Dy EE (S) 05/08

05/08

SE : (SCH-I)
SE : (SCH-III)
PA :
04.08
C.E. (P.S)