

I/29532/2023



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-1214		
Induced Voltage (IV) Calculation in respect of PTCC proposal for 220 kV D/C Kalwa – Salsette #5 line (4.65 km OH and 5 km UG cable) - regd.		
S. No	Reference No.	Dated
(i)	TATA Power Company Ltd: NIL	09.01.2023
(ii)	TATA Power Company Ltd: Email	04.08.2023
(iii)	BSNL: IC/MBI/PTCC/MRA-2576	31.03.2023
(iv)	Central Railway: N.153/PTCC/220kV/MAH-830	03.03.2023
(v)	Defense: B/46937/Sigs 7(b)/3185	23.03.2023

The PTCC proposal and details submitted vide references (i) & (ii) have been examined. Vide reference (iii) above, BSNL has forwarded telecom details from MTNL. The LF induction on communication circuits of MTNL and Central Railway with respect to details furnished vide above reference (iii) and (iv) respectively has been computed. The voltages 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 & II respectively. The screening factors as applicable have been considered. DG Signals, MoD have issued No Objection Certificate (NOC) vide above reference (v) (copy enclosed as Annexure-III). EPR zone verification is not required as the substations are existing.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Director

To,

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054	
2.	GM (S&T)	Central Railway, O/o PCSTE, S&T Dept., 3 rd Floor, Annexe Building, Chhatrapati Shivaji Maharaj Terminus, Mumbai – 400001	
3.	Zonal Head, Transmission Projects	TATA Power Company Ltd, Dharavi Receiving Station, Near Shalimar Industrial Estate, Matunga, Mumbai - 400019	For kind information

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ANNEXURE-I

CEA Case No.: MRA-1214 Name of the Power line: 220 kV D/C Kalwa – Salsette #5 line		Map Scale : 1 cm= 500 m Total Length : OH-4.65 km UG- 5 km S.R. Value : 15000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
MTNL TD vide BSNL Letter No: IC/MBI/PTCC/MRA-2576 Date: 31.03.2023					
	Z-5				
	AM (VASHI)				
	EL ZONE RSU	IV less than 430 V			
	KKR				
	MBP				
	Rabale				
	AIROLI				
	AM (CHARAI)				
	KAUSA	IV less than 430 V			
	NMUM				
	Riverwood				
	DIVA RLY STN				
	Kalwa				
	Kopri				
	Balkum				
	PPK				
	VAVI				
	CHR				

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AM (MULUND)				
MULUND	IV less than 430 V			
GOVIND UDYOG				
WAGLE ESTATE				
LOKMANYA				
BHANDUP BTM				
MANISHA TOWER				
Z-2				
AM (GKP-PWD)				
GOD Hill RSU	IV less than 430 V			
NNGR				
Powai Main				
Kannamwar RSU				
CETTM RSU (Hirenandani)				
IITC RSU (Powai)				
Z-3				
AM (MRL/SKV)				
Sakivihar	IV less than 430 V			

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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.153/PTCC/220kV/MAH-830 Date: 03.03.2023					
Affected Block & telecom circuits					
1.	Ghatkopar - Vikhroli	Out of parallelism			0
2.	Vikhroli - Kanjurmarg				0
3.	Kanjurmarg – Bhandup	0.4	0.0006	21667	13
4.	Bhandup - Nahur	1.1	0.0005	13877	7
5.	Nahur - Mulund	1.1	0.0012	11667	14
6.	Mulund - Thane	2.2	0.0021	12381	26
7.	Thane - Kalva	1.7	0.0015	23333	35
8.	Kalva - Mumbra	0.4	0.0002	23358	5
9.	Mumbra – Diva Jn	Out of parallelism			0
10.	Diva Jn - Kopar				0
11.	Kopar – Dombivli				0
12.	Thane - Airoli	2.3	0.0032	22813	73
13.	Airoli - Rabale	Out of parallelism			0
14.	Rabale - Ghansoli	1.6	0.0002	13072	3
15.	Ghansoli – Kopar Khairane	Out of parallelism			0
16.	Kopar Khairane – Turbhe				0
17.	Diva – Dativali Cabin				0
18.	Dativali Cabin – Nilje				0

I/29532/2023 Tele : 23019746

Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi - 110011


B/46937/Sigs 7(b)/3185/

23 Mar 2023

Zonal Head, Transmission Projects (Zone 1)
Tata Power Company Limited
Transmission Project Office
Dharavi Receiving Station, Near Shalimar Industrial Estate
Matunga, Mumbai- 400 019

PTCC PROPOSAL FOR 220KV KALWA SALSETTE LINE#5

1. Refer your letter No Nil dt 09 Jan 2023 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(SK Sharma)
Lt Col
GSO 1 (Comn)
for ADG T

Enclosures : As above**Copy to :-**

✓ The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi – 110016

- for information

The DET(PTCC), Northern Zone
Bharat Sanchar Nigam Limited
O/b PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

PP1
V
6/4
AD