



भारत संस्कार

Government of India विद्युत संत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युतसंचारविकासप्रभाग

Power Communication Development Division ******

No. CEA/PCD/PTCC/MRA-1162/749-751

Date: 26.11.2020

Subject: Induced Voltage calculation in respect of PTCC proposal for LILO of 220 kV MSETCL Trombay – Nerul line at Adami Electricity Mumbai Limited (AEML) 220 kV Chembur EHV substation, length – 2.5 kms.

Ref

- (i) AEML letter no. AEML/TCM/Chembur 2nd Feed/19-20/004 dated 11.10.2019
- (ii) BSNL letter no. IC/MBI/PTCC/MRA-2452/06 dated 07.09.2020
- (iii) Central Railway letter no. N.153/PTCC/220kV/MAH-752 dated 09.03.2020
- (iv) Defense letter no. B/46937/Sigs 7(b)/2160 dated 05.11.2020

AEML submitted the subject proposal vide above cited reference (i). The low frequency induction on BSNL (OPGW Fiber Cable) and Railway Telecommunication circuits as per details furnished vide above cited references (ii) and (iii) respectively has been examined. The Soil Resistivity value has been taken as 75,000 Ohms-cm, as per data submitted by the Power Authority. Voltages likely to be induced on paralleling BSNL Telecom Cables are less than 430 Volts. Further, voltages likely to be induced on paralleling Railway Telecommunication circuits under single line to ground fault condition are enclosed at Annex-I. The screening factors as applicable have been considered. Defense has accorded NOC vide above Ref. (iv) for the above line (a copy enclosed at Annex-II).

Taking above into consideration, take necessary action regarding issue of PTCC route approval.

Enclosures.: As above.

26.31.25M

(Upendra Kumar) Chief Engineer

To,
Divisional Engineer (PTCC), Inspection Circle,
Bharat Sanchar Nigam Limited (BSNL),
3rd Floor, D-Wing, BSNL Admin Building
Juhu Tara Road, Santacruz (West), Mumbai-400054

MIC

Copy to:

1. GM(S&T), Central Railway, CSMT Mumbai, Headquarters Office, S&T Branch, 3rd Floor, Annex Bldg, Mumbai CSMT, Mumbai-400001 (with Annexure-I).

2. Shri Sandeep Godbole, Asst. Vice-President, 220 kV Aarey EHV Sub-station, Opp. SEEPZ Gate No. 3, Aarey Colony, Goregaon (E), Mumbai - 400065

Case No.: MRA-1162 Name of the Power line: LILO of 220 kV MSETCL Trombay – Nerul line at Adani Electricity Mumbai Limited (AEML) 220 kV Chembur EHV substation.			Map Scale : 1cm=500mts Total Length : 2.5 km S.R. Value : 75,000 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	l.V in Voits.
	153/PTCC/220kV/MAH-752 da	ated 09.03.2020			
Affected Bloc	ks & Telcom Circuits Details	•			
<u> </u>	Dadar – Vikhroli	1.25	0.0004	9500	04
2	Wadala – Kurla	0.5	0.0001	9000	01
3	Wadala – Mahim		Out of Parallelism		
4	Kurla – Trombay	0.5	0.0003	9000	03
5	Kurla - Vashi	2.2	0.0025	9500	24
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Directorate General of Signals
Signals 7
General Staff Branch
Integrated HQ of MoD (Army)
DHQ PO, New Delhi - 110011

OS NOV 2020

B/46937/Sigs 7(b)/2160/

Adani Electricity Mumbai Ltd.
220kV Aarey EHV Sub-Station
Opp SEEPZ Gate No. 3, Aarey Colony,
Goregaon(E), Mumbai-400 065,
Maharashtra, India

PTCC PROPOSAL FOR LILO OF 220KV MISETCL TROMBAY-NERUL LINE AT ADAM! ELECTRICITY MUMBAI LIMITED (AEML) 220KV CHEMBUR EHV SUBSTATION

- 1. Ref your letter No AEML/TCM/Chembur 2nd Feed/20-21/014 dt 02 Sep 2020 (copy ati).
- 2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your letter mentioned above.
- 3. Documents alongwith map sheets (in original) are forwarded herewith for your further action.

(A Rawat)
(A Rawat)
Maj
GSO 1 (Comn)
for SO-in-C

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

The DET(PTCC), Northern Zone
O/c PGM (North), QA & Inspection Circle,
D-Tax Building, Janpath
New Delhi-110001

for information

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