



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डवलपमेंट प्रभाग

Power Communication Development Division

No./CEA/PCD/PTCC/TN-676 / 959-60

Date : 20.09.2019

The Divisional Engineer Telecom (PTCC),
QA & Inspection (T&D) circle, BSNL,
1st floor, Raj Bhavan Exchange,
No.26, Sardar Patel Road,
Guindy, Chennai-600032

Subject: Induced Voltage Calculation in respect of PTCC proposal for LILO of 400 kV Udumalpet – Salem line – I at Pugalur HVDC Station

Reference: i) BSNL letter no. SR-PTCC/STN-2445/06 dated 19.08.2019
ii) Southern Railway letter no. W.384/3/2/1196 dated 26.04.2019
iii) Defence letter no. B/46937/Sigs 7(b)/1596 dated 13.06.2019

Sir,

The instant PTCC proposal has been examined. The low frequency induction on telecom cables of BSNL with respect to details furnished vide above reference have been computed. The Soil Resistivity (SR) value has been taken as 5,000 Ohm-cm and 25,000 Ohm-cm. The voltages likely to be induced on paralleling telecom cables of BSNL under Single Line to Ground fault condition are enclosed at Annex-I. The screening factors, as applicable, have been considered. Vide ref. (ii) above, Southern Railway have issued No Objection Certificate (NOC). Vide ref. (iii) above, Defence Authority have issued No Objection Certificate (NOC) (a copy enclosed as Annex-II).

Taking above into consideration, kindly take necessary action for PTCC route approval.

Encl.: As above

राष्ट्रीय विद्युत प्राधिकरण (R. P. Singh)
20.09.19
Director, PTCC

Copy to:

DGM, PGCIL, 400/230 kV Arasur Substation, Karumathampatti (PO), Opp. Senniandavar Kovil,
Coimbatore - 641659

MIC

CEA case No. TN-676

Annex-I

Case No. TN 2445		SSA: Erode							
Name of the power line		LILO of 400 KV Udumalpet - Salem Line-I at Pugalur HVDC station.							
Length:	9.842 Kms								
SR value :	5000 Ω -cm, 25000 Ω -cm		Type of BSNL telecom cable : PIJF						
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts				
I	KUNDADAM Exge UG cables								
1	Exge to Pillar 21 to DP 2116	}	IV	LESS	THAN	430V			
2	Exge to Pillar 21 to DP 2125								
3	Exge to Pillar 21 to DP 2134								
4	Exge to Pillar 21 to DP 2143								
5	Exge to Pillar 31 to DP 3103								
6	Exge to Pillar 31 to DP 3104								
7	Exge to Pillar 31 to DP 3115								
8	Exge to Pillar 31 to DP 3121								
9	Exge to Pillar 32 to DP 3251								
10	Exge to Pillar 41 to DP 4109						}	OUT	OF
11	Exge to Pillar 41 to DP 4124 to DP 4103								
12	Exge to Pillar 41 to DP 4136								
13	Exge to Pillar 42 to DP 4221								
14	Exge to Pillar 42 to DP 4253	}	IV	LESS	THAN	430V			
15	Exge to Pillar 43 to DP 4314								
16	Exge to Pillar 43 to DP 4326								
17	Exge to Pillar 43 to DP 4351								
18	Exge to Pillar 43 to DP 4347								
19	Exge to Pillar 44 to DP 4411						3.25	0.0698	8700
20	Exge to Pillar 44 to DP 4432	3.4	0.0736	8700	640				
II	KULLAKALIPALAYAM Exge UG cables								
1	Exge to Pillar 21 to DP 2101	}	IV	LESS	THAN	430V			
2	Exge to Pillar 21 to DP 2163								
3	Exge to Pillar 21 to DP 2184	}	OUT	OF	PARALLELISM				
4	Exge to Pillar 21 to DP 2192								
5	Exge to Pillar 22 to DP 2206								
6	Exge to Pillar 22 to DP 2220	}	IV	LESS	THAN	430V			
7	Exge to Pillar 22 to DP 2265								
8	Exge to INNERZONE pillar								
8	Exge to INNERZONE pillar	}	OUT	OF	PARALLELISM				
IV	NANJIYAMPALYAM Exge UG cables								
1	Exge to Pillar 253 to DP 25303 (TRN Politechnic)					}	IV	LESS	THAN
2	Exge to Pillar 253 to DP 25352A (Maharani Politechnic)								
3	Exge to Pillar 253 to DP 25326A (RTO Office)								
4	Exge to Pillar 253 to DP 25343 (Kuppuchipalayam)								
5	Exge to Pillar 253 to DP 25344 (Kuppuchipalayam)								
6	Exge to Pillar 252 to DP DP 25224 (Venkittipalayam EB Office)								

राघवेंद्र प्रताप सिंह
20.09.19
राघवेंद्र प्रताप सिंह
RAGHVENORA PRATAP SINGH
निदेशक/Director
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India

Annex-II TN-676

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)/1596/

13 Jun 2019

DGM, 400/230K.V. Arasur Substation
Power Grid Corporation of India Limited
Karumathampatti (PO), Opp. Senniandavar Kovil
Coimbatore- 641 659

PTCC APPROVAL FOR LILO OF 400KV UDUMALPET-SALEM LINE-I AT PUGALUR HVDC STATION

1. Ref your letter No SR-II/KAR-CAO/US LILO/PTCC/2019/697 dt 13 Apr 2019 (copy att).
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 returned herewith for your further necessary action.



(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

for information.