



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/AND-684 / 521-22

Date: 22.04.2019

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

Subject: Induced Voltage calculation in respect of PTCC proposal for 400 kV DC LILO from 400 kV QMDC line Jammalamadugu – Uravakonda to proposed 400/220 kV SS at Talaricheruvu

Reference: i) BSNL letter no. SR-PTCC/SAP-2166/07 dated 27.10.2018
ii) South Central Railway letter no. SG.85/4/3/PTCC/SCRAP201834 RC dated 10.09.2018
iii) Defense letter no. B/46937/Sigs 7(b)/1117 dated 19.07.2018

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 has been computed. The Soil Resistivity (SR) value has been taken as 50,000 Ohm-cm. The voltages likely to be induced on paralleling telecom cables of BSNL under Single Line to Ground (SLG) fault condition have been computed and are enclosed at Annex-I. The screening factors, as applicable, have been considered. Vide Ref. (ii) above, South Central Railway have issued No Objection Certificate (NOC). Vide Ref. (iii) above, the Defense authority have issued No Objection Certificate (NOC) (a copy is enclosed at Annex-II).

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

Encl.: As above


(Naresh Bhandari)
Chief Engineer


Copy to:

Chief Engineer, Construction, APTRANSCO, Vidyut Soudha, Gunadala, Vijayawada -520004

MIC

CEA Case No.: AND-684

Case No.SAP-2166		SSA: ANANTHAPUR		SR Value: 50,000 Ω-cm	
Name of the power line		Erection of 400/200 KV SS at Talaricheruvu along with 400 KV QMDC line for LIO of Uravakonda - Jammalamadugu to the proposed 400/220 KV SS at talaricheruvu.			
Length:	0.819 Kms	Map Scale: 1cm = 500 mts			
Average SR value : ohm cms		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 (N) PENNA NAGAR Exge UG cables					
1	Exchange to Talaricheruvu DPs (N-N1)	-	OUT	OF	PARALLELISM
2	Exchange to Penna CCP(N-N2)	}	IV LESS THAN 430 V		
3	Exchange to Penna C-Type Qtrs(N-N3)				
4	Exchange to Penna C-Type Qtrs(N-N4)				
5	Exchange to Penna D-Type Qtrs(N-N4)				
6	Exchange to DP(N-N6)	-	OUT	OF	PARALLELISM
II (A) BUGGA Exge UG cables					
1	Exchange to Interzone-1(A-A1)	-	IV	LESS	THAN 430 V
2	Exchange to Interzone-2(A-A2)	}	OUT OF PARALLELISM		
3	Exchange to Main Gate to Pillar 21(A-A3-A4)				
3A	Exge to P21 to E-type Qtrs to Thummalapenta (A-A4-A5-A6)	-	IV	LESS	THAN 430 V
4	Exchange to Pillar 22 to DP(A - A7- A9)	}	OUT OF PARALLELISM		
5	Exchange to Pillar 22 to DP(A - A7- A10)				
6	Exchange to Pillar 22 to DP(A - A7- A8)				
7	Exchange to Qtrs gate to Interzone DPs(A-A11-A12)				
8	Exge to Pillar 23 to DP(A - A13 - A14)				
9	Exge to Pillar 25 to DP(A - A15 -A16)				
10	Exge to Pillar 25 to DP(A - A15 -A17)				


 नरेश भंडारी / NARESH BHANDARI
 मुख्य अभियन्ता / Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi-66

Tele : 23019746

Annex - II

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

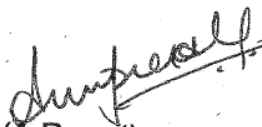
B/46937/Sigs 7(b)/1117 /

19 Jul 2018

The Chief Engineer,
400KV, Construction,
AP TRANSCO, Vidyut Soudha,
Gunadala, Vijayawada (A.P)

**SUPPLY, CIVIL, ERECTION, TESTING AND COMMISSIONING OF 400/220KV
SUBSTATION AT TALARICHERUVU ALONG WITH 400 KV QMDC LINE FOR
LILO OF URAVAKONDA - JAMMALAMADUGU TO THE PROPOSED 400/220
KV SS AT TALARICHERUVU - 2 X 0.5 KMS ON TURNKEY BASIS**

1. Reference your letter Lr.No.CE /400KV /E110/F- Talaricheruvu/D.No.252/2018 dt 25 Apr 2018.
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheet 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

Copy to :-

Central Electricity Authority
Power Communication Development Division
NRPC Complex, 18-A, Shaheed Jeet Singh S Marg
Katwaria Sarai, New Delhi - 110016

- For information.