



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पावर कम्युनिकेशन डेवलपमेंट प्रभाग

Power Communication Development Division

No.: CEA/PCD/PTCC/AND-682 / 499-501

Date: 16.04.2019

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 220 kV DC line from 220 kV SS at Boksampalli to proposed 220/11 kV SS at M/s KIA Motors manufacturing unit at Erramanchi in Anantapur District

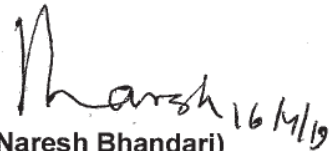
Reference: i) BSNL letter no. SR-PTCC/SAP-2095/03 dated 25.04.2018
ii) South Western Railway letter no. SG/SWR/PTCC/F-2378/1748 dated 24.05.2018
iii) Defense letter no. B/46937/Sigs 7(b)/1043 dated 25.09.2018

Sir,

The instant PTCC proposal has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom Circuits of South Western Railway; with respect to details furnished vide above references 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 and Block & Telecom circuits of South Western Railway circuits under Single Line to Ground (SLG) fault condition have been computed and are enclosed at Annex-I & II respectively. The screening factors, as applicable, have been considered. Vide Ref. (iii) above, the Defense authority have issued No Objection Certificate (NOC) (a copy is enclosed at Annex-III).

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

Encl.: As above


(Naresh Bhandari)
Chief Engineer


Copy to:

- (i) PCSTE, South Western Railway, Office of the Principal Chief Signal & Telecom Engineer, 1st Floor, West Block, Rail Soudha, Gadag Road, Hubli – 580020 (Annex – II only)
- (ii) Chief Engineer, Construction, APTRANSCO, Vidyut Soudha, Gunadala, Vijayawada -520004

ANNEXURE – I

Case No.: AND-682 Name of the Power line: 220 kV DC line from 220 kV SS at Boksampalli to proposed 220/11 kV SS at M/s KIA Motors manufacturing unit at Erramanchi in Anantapur District)			Map Scale : 1cm=500mts Total Length : 16.8 Km. S.R. Value : 50,000 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.


BSNL					
Ref. No. SR-PTCC/SAP-2095/03 dated 25.04.2018					
(i) GUTTUR Exge UG cables					
1	Exchange to Pillar 21	IV LESS THAN 430 V			
2	Exchange to Sankarreddy DP(DP0001)	OUT OF PARALLELISM			
3	Exchange to Medical Shop DP(DP0002)				
4	Exchange to Circle Hotel DP(DP0003)				
5	Exchange to Syamarao DP(DP0004)				


 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

ANNEXURE – II

Case No.: AND-682 Name of the Power line: 220 kV DC line from 220 kV SS at Boksampalli to proposed 220/11 kV SS at M/s KIA Motors manufacturing unit at Erramanchi in Anantapur District)			Map Scale : 1cm=500mts Total Length : 16.8 Km. S.R. Value : 50,000 Ohms-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

South Western Railway Ref. No. SG/SWR/PTCC/F-2378/1748 dated 24.05.2018					
1	Rangepalli (REPI) – Penukonda (PKD)	3.3	0.0050	10000	50
2	Penukonda (PKD) – Makkajipalli (MKJ)	10.7	0.0188	8000	151


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

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

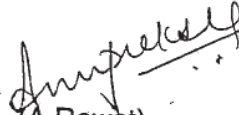
B/46937/Sigs 7(b)/1043

25 Sep 2018

Chief Engineer,
Construction,
Transmission Corporation of Andhra Pradesh Limited
Vidyut Soudha,
Lunadala
Vijayawada-520004

**ERECTION OF 220KV D/C LINE FROM 220KV SS AT BOKSAMPALLI TO
PROPOSED 220/11KV SS AT M/S KIA MOTORS MANUFACTURING UNIT AT
ERRAMACHI IN ANANTAPUR DISTRICT SS**

1. Ref your letter No CPT 150/SE/PM/Boksampali-KIA/PTCC Proposals/D. No 2378/18 dt 02 Feb 2018 (copy att).
2. NOC (No Objection Certificate) is accorded based on inputs provided vide Map sheets received under your above mentioned letter.
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.