



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-677/2494-95

Date: 29.11.2018

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 proposed 220 kV Switching Station, Bavojipeta (Korukonda) to proposed 220/11 kV Lift Irrigation Sub-station, Ramavaram

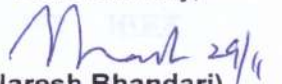
Reference: i) BSNL letter no. SR-PTCC/SAP-1923/05 dated 08.01.2018
ii) South Central Railway letter no. SG.85/4/3/PTCC/SCR AP 2016 80 RC dated 15.12.2017
iii) Defense letter no. B/46937/Sigs 7(b)/704 dated 28.12.2017

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 2,00,000 Ohm-cm, as intimated by the Power Authority (APTRANSCO). 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) (a copy is enclosed at Annex-II). 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

Yours faithfully,


(Naresh Bhandari)
Chief Engineer

Copy to:

Chief Engineer, Lift Irrigation, EA & OPN., APTRANSCO, Vidyut Soudha, Vijayawada -520004



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सं. के.वि.प्रा. /पीसीडी /पीटीसीसी /एएनडी-677/2494-95

दिनांक: 29.11.2018

डिवीजनल इंजीनियर टेलीकॉम (पीटीसीसी),
क्यू ए एंड इंस्पेक्शन (टी एंड डी) सर्कल, बीएसएनएल,
1 तल, राज भवन एक्सचेंज,
नं 26, सरदार पटेल रोड,
गुडुडी, चेन्नई -600032

विषय: प्रस्तावित 220 केवी बावोजिपेटा (कोरुकोंडा) स्विचिंग स्टेशन से प्रस्तावित 220/11 केवी रामावारम उपकेन्द्र तक 220 केवी डी/सी लाइन का पीटीसीसी प्रस्ताव - प्रेरित वोल्टेज गणना

- संदर्भ: i) बीएसएनएल का पत्र संख्या SR-PTCC/SAP-1923/05 दिनांक 08.01.2018
ii) दक्षिण पश्चिम रेलवे पत्र संख्या/SG.85/4/3/PTCC/SCR AP 2016 80 RC दिनांक 15.12.2017
iii) रक्षा पत्र संख्या B/46937/Sigs 7(b)/704 दिनांक 28.12.2017

महोदय,

तत्काल पीटीसीसी प्रस्ताव की जांच की गई है। बीएसएनएल के दूरसंचार केबलों पर कम आवृत्ति प्रेरण; उपरोक्त संदर्भ (i) के अनुसार प्रस्तुत विवरण के संबंध में गणना की गई है। मृदा प्रतिरोधकता (एसआर) 2,00,000 ओम-सेमी लिया गया है, जैसा कि बिजली प्राधिकरण (एपीट्रानस्को) द्वारा सूचित किया गया है। बीएसएनएल के दूरसंचार केबलों पर प्रेरित वोल्टेज की गणना अनुलग्नक- I में संलग्न हैं। संदर्भ (ii) के द्वारा रेलवे ने एनओसी जारी किया है (प्रतिलिपि अनुलग्नक- II में संलग्न है)। संदर्भ (iii) के द्वारा रक्षा प्राधिकरण ने एनओसी जारी किया है (प्रतिलिपि अनुलग्नक- III में संलग्न है)।

यह ध्यान में रखते हुए, पीटीसीसी रूट अनुमोदन के लिए आवश्यक कार्यवाही करें।

संलग्न : उपरोक्त अनुसार

अपिका आभारी,

(नरेश भंडारी)

मुख्य अभियन्ता

काँपी:

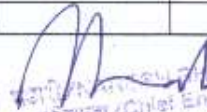
मुख्य अभियन्ता, LIFT IRRIGATION, EA& OPN., एपीट्रानस्को, विद्युत सौधा, विजयवाड़ा -520004

का.प्रि

ANNEXURE - I

Case No.: AND-677 Name of the Power line: 220 kV DC line from proposed 220 kV Switching Station, Bavojipeta (Korukonda) to proposed 220/11 kV Lift Irrigation Sub-station, Ramavaram			Map Scale : 1cm=500mts Total Length : 27.281 Km. S.R. Value : 2,00,000 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-1923/05 dated 08.01.2018					
Affected Telecom Cables Details					
E	Indukuripeta Exchange				
1	Exchange to Kambalapalem DP				IV LESS THAN 430 V
F	Gokavaram Exchange				
1	Exchange to Veeralankappalli DP	0.75	0.0179	10000	179
G	Kamarajupeta Exchange				
1	Exchange to Market Pillar				OUTSIDE IV CALCULATION CONSIDERATION ZONE
H	Gandepalli Exchange				
1	Exchange to Ricemill Pillar				OUT OF PARALLELISM
I	Mallisala Exchange				
1	Exchange to Rajapudi DP	4.8	0.1641	7500	1231
J	Narendrapatnam Exchange				
1	Exchange to DP				OUT OF PARALLELISM
K	Jaggampeta Exchange				
1	Exchange to Market Pillar				IV LESS THAN 430 V
L	Erravaram Exchange				
1	Exchange to Somavaram DP				OUT OF PARALLELISM
M	Katravulapalli Exchange				
1	Exchange to Patanayakampalli DP				IV LESS THAN 430 V


 मुख्य अभियंता / Chief Engineer
 केंद्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi-66



दक्षिण मध्य रेलवे

South Central Railway

मुख्यालय कार्यालय, सिगनल एवं दूरसंचार शाखा, रेल निलयम, सिकंदराबाद - 500025.

Head Quarters Office, Signal & Telecomm Branch, Rail Nilayam, Secunderabad -500025

No. SG.85/4/3/PTCC/SCR AP 2016 80 RC

Date: 15.12.2017

✓ **Divisional Engineer Telecom,**
PTCC, T&D Circle, Southern Region,
Bharat Sanchar Nigam Limited, 1st Floor,
Rajbhavan Telephone Exchange, No.26,
Sardar Patel Road, Guindy,
Chennai- 600 032.

Sub: Erection of 220kV DC line from proposed Bavojipeta (Korukonda) 220kV Switching Station to proposed Ramavaram 220/11kV substation -PTCC Proposal -Railway Clearance- Reg.

Ref: CE/Lift Irrigation/APTRANSCO Ir No: CE/LI/SE(LIS)/PTCC/Ramavaram /D.No.342/2017 dated 16.11.2017.

उक्त संदर्भाधीन पत्र के अनुसार चूँकि, अधीक्षक इंजीनियर, ओ एम सी सर्कल, एपी ट्रांस्को, राजामहेंद्रवरमू ने यह प्रमाणित किया है कि, प्रस्तावित लाइन के 8 किमी के आसपास के क्षेत्र में नहीं है अतः उक्त पीटीसीसी प्रस्ताव को निपटाने में इस रेलवे को कोई आपत्ति नहीं है.

With reference to the above cited letter, since it is certified by Superintending Engineer, OMC circle, APTRANSCO, Rajamahendravaram that the Railway line does not exists within 8 kms vicinity of the proposed power line, this Railway has **NO OBJECTION** in clearing the above said PTCC proposal.

(पी.किशोरकुमार) P.Kishore Kumar

वसिदूइंजी/टेली/प्रका SSTE/TELE/HQ

कृते महाप्रबंधक/सिवदू FOR GENERAL MANAGER / S & T

Copy to:

1. **The Director (PTCC),**
Central Electricity Authority,
Load Despatch & Telecom Division,
NRPC Complex, 18-A
Shaheed jeet singh S.Marg
Katwaria Sarai, **New Delhi- 110016.**
2. **Chief Engineer,**
Lift Irrigation, EA&Opn,
APTRANSCO, Vidyuth Soudha,
Vijayawada - 520 004.

by email
15.12.17

Annexure - III

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)/704/

28 Dec 2017

Chief Engineer,
Lift Irrigation EA & Opn,
APTRANSCO,
Vidyut soudha, Vijayawada - 520004

**ERECTION OF 220KV DC LINE FROM PROPOSED BAVOJIPETA
(KORUKONDA) 220KV SWITCHING STATION TO PROPOSED
RAMAVARAM 220/11KV SUBSTATION**

1. Reference your letter No CE/LIS)/PTCC/Ramavaram/D.No.342/2017, dt 16 Nov 2017.
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.


✓(Nainee Sharma)
Lt Col
GSO 1 (Comn)
for SO-in-C

Copy to :-

✓ Director, PTCC, CEA - For information.
NREB Complex
18A, Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016