



सत्यमेव जयते



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/KNK-918 | 1039-1041

Date :28.10.2019

DET (PTCC),
QA & Inspection (T&D) Circle, BSNL
1 Floor, Raj Bhavan Exchange,
No. 26, Sardar Patel Road,
Guindy, Chennai – 600032

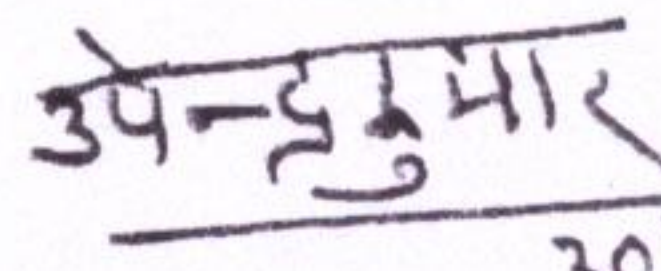
Subject: Induced Voltage Calculation in respect of PTCC proposal for 220 kV DC line on DC towers from existing 220/110/11 kV S/S at Vijayapura to proposed 220/110/11 kV S/S at Sindagi (Aheri)

Reference: (i) BSNL letter no. SR-PTCC/SKT-2423/03 dated 11.07.2019
(ii) South Western Railway letter no. SG/SWR/PTCC/F-2902/1896/02 dated 27.05.2019
(iii) Defense letter no. B/46937/Sigs 7(b)/1581 dated 11.06.2019

Sir,
The instant PTCC proposal has been examined. 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 25,000 Ohm-cm. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of South Western Railway under Single Line to Ground fault condition have been computed and are enclosed as Annex – I & II respectively. The screening factors, as applicable, have been considered. Vide ref. (iii) above, Defense Authority have issued No Objection Certificate (NOC) (enclosed as Annex – III).

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

Encl.: As above


30/10/19
(Upendra Kumar)
Chief Engineer

Copy to:

- 1) PCSTE, South Western Railway, 1st floor, West Block, Rail Soudha, Gadag Road, Hubli, Karnataka – 580020 – (Annex – II only)
- 2) Chief Engineer Electricity, KPTCL, State Load Despatch Centre, No. 28, R.C. Cross Road, Bengaluru - 560009

M/C

Case No: SKT-2423		SSA: Bijapur (Vijayapur)			
Name of the power line		Proposed 220 KV DC line on DC towers from existing 220/110/11 KV SS at Vijayapura (Bijapur) to proposed 220/110/11 KV SS at Sindagi (Aheri) in Sindagi Taluk, Vijayapura District.			
Length:	62.100	Kms			
Soil Resistivity: 25000 Ω -cm		Type of BSNL Cable: PIJF cable			
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I	A) SINDAGI Exge UG cables				
	1 Exge to Moratagi road (A-A1)	}	IV	LESS	THAN 430 V
	2 Exge to Vivekanand Circle (A-A2)				
	3 Exge to Bijapur Road (A-A3)				
II	B) RAMPUR Exge UG Cables				
	1 Exge to Rampur Bus Stand (B-B1)	IV			LESS THAN 430 V
III	C) DEVAR HIPPARAGI Exge UG Cables				
	1 Exge to Ambedkar Circle (C-C1)	}	IV	LESS	THAN 430 V
	2 Exge to Jalwad road (C-C2)				
	3 Exge to Sindagi Road (C-C3)				
IV	D) SHIVANAGI Exge UG Cables				
	1 Exge to Bus stop (D-D1)	}	IV	LESS	THAN 430 V
	2 Exge to Bijapur Road (D-D2)				
	3 Exge to Bazaar Road (D-D3)				
	4 Exge to Matha (D-D4)				
V	E) HONNOTAGI Exge UG cables				
	1 Exge to Sindagi road (E-E1)	}	IV	LESS	THAN 430 V
	2 Exge to Bijapur Road (E-E2)				
	3 Exge to Towards KEB (E-E3)				

30/05/19
 30/05/19
 मुख्य अभियंता / Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi

ANNEXURE – II

Case No.: KNK-918					
Name of the Power line: 220 kV DC line on DC towers from existing 220/110/11 kV S/S at Vijayapura to proposed 220/110/11 kV S/S at Sindagi (Aheri)		Map Scale : 1cm=500mts Total Length : 62.10 kms Soil Resistivity : 25,000 Ohm-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 letter no. SG/SWR/PTCC/F-2902/1896/02 dated 27.05.2019					
1	Vijayapura – Jumnal	2.5	0.0003	10000	3
2	Vijayapura – Minchinal	OUT OF PARALLELISM			0

अभिप्रेत
31/5/19

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

Annexure - III

KNK-918

Tele : 23019746

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

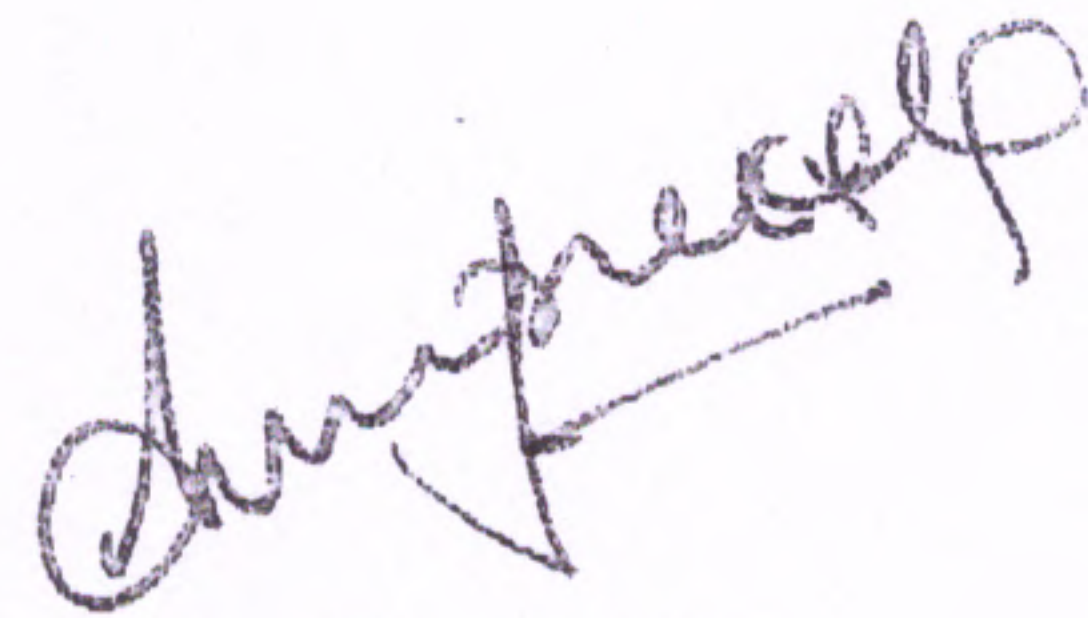
B/46937/Sigs 7(b)/1581

// Jun 2019

Karnataka Power Transmission Corporation Limited
Office of the Chief Engineer Electricity,
State Load Despatch Centre,
28, R.C. Cross Road,
Bengaluru - 560 009

PROPOSED 220KV DC LINE ON DC TOWERS FROM EXISTING 220/110/11KV SS AT VIJAYAPURA (BIJAPUR) TO PROPOSED 220/110/11KV SS AT SINDAGI (AHERI) IN SINDAGI TALUK, VIJAYAPURA DISTRICT

1. Ref your letter No CEE/SLDC/ PTCC/F-2902/-715-23 dt 24 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.