



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-906/579-81

Date: 21.09.2020

Subject: Induced voltage calculation in respect of 220 kV SC line on DC towers from existing 220/110/33/11 kV S/S at Bagalkot to proposed 220/11 kV S/S for KLIS Second stage at Balakundi village in Hungund Taluk, Bagalkot District.-regd.

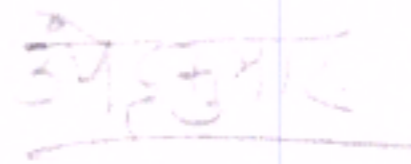
Ref. : (i) KPTCL Ref. No. CEE/SLDC/PTCC/F-2786/9077-85 Dated: 21.08.2018
(ii) BSNL Ref. No. SR-PTCC/SKT-2193/3 Dated: 04.02.2020
(iii) South Western Railway Ref. No. SG/SWR/PTCC/F-2786/1791/06 Dated: 04.10.2018
(iv) Defense Ref. No. B/46937/Sigs 7(b)/1259 Dated: 11.12.2018

The PTCC proposal submitted vide ref. (i) has been examined. The low frequency induction on BSNL cables and block circuits of South Western Railways as per details furnished vide ref. (ii) and ref. (iii) respectively has been examined. The Soil Resistivity value has been taken as 25,000 Ohms-cm, as per data submitted by Power Authority. Voltages likely to be induced on paralleling BSNL cables and Railway block circuits under single line to ground fault condition are enclosed at Annex-I and Annex- II respectively. The screening factors as applicable have been considered. Defense has accorded NOC vide above ref. (iv) for this line (a copy enclosed at Annex-III).

Taking above into consideration, kindly take necessary action regarding issue of PTCC route approval.

Encl.: As above.

The
Divisional Engineer (PTCC, Southern Zone,
BSNL, c/o DET (PTCC)
Inspection Circle, 1st Floor, Raj Bhawan Exchange House
Sardar Patel Road, Guindy, Chennai-600022.


(Upendra Kumar)
Chief Engineer, PCD

Copy to:

1. ASTE/TELE/HQ, O/o Principal Chief Signal & Telecommunication Engineer, South Western Railway, Rail Soudha, Gadag Road, Hubballi-580020. (Annex-II only)
2. Chief Engineer, KPTCL O/o Chief Engineer Electricity, State Load Despatch Centre, #28, Race Course Cross Road, Bengaluru-560009.

Case No.F-2786/SKT-2193

ISSA: Vijayapur (Bijapur)

Name of the power line: Proposed 220KV SC line on DC towers from existing 220/110/33/11KV SS at Bagalkot to proposed 220/11KV SS for KUIS second stage at Bajajundi village in Hungund taluk, Bagalkot district.

Length: 68.116 Kms

Average SR value : ohm cms

Type of BSNL cable: PIJF

Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I	CC Vidhyagiri Exge UG cables				
	1 Exge to Darbar House (C-C1)				
	2 Exge to Ayodhya Hotel(C-C2)				
II	J Guledagudda Exge UG cables				
	1 Exge to Bus Stand(J-J1)				
	2 Exge to Bus Stand to Market Chowk(J-J1-J2)				
	3 Exge to Market Main road(J-J3)				
III	E Hungund Exge UG cables				
	1 Exge to Bus Stand(E-E1)				
	2 Exge to Bus Stand to Nagur Cross(E-E1-E2)				
	3 Exge to Amaravathi(E-E3)				
	4 Exge to Bus Stand to Nagur Cross to Nagur Village(E-E1-E2-E4)				
IV	F Ilkal Exge UG cables				
	1 Exge to Main Circle(F-F1)				
	2 Exge to President Chowk(F-F2)				
V	G Arningad Exge UG cables				
	1 Exge to Bus Stand(G-G1)				
	2 Exge to Sulibhavi(G-G2)				
	3 Exge to Hulihal(G-G3)				
VI	H Kamatagi Exge UG cables				
	1 Exge to Bus Stand(H-H1)				
	2 Exge to Market(H-H2)				
VII	A Gaddanalem Exge UG cables				
	1 Exge to GDK Cross(A-A1)				
	2 Exge to GDK Cross to Belgaum Road(A-A1-A2)				
	3 Exge to Grama Panchayat(A-A3)				
	4 Exge to GDK Cross to Pushapak Hotel(A-A1-A4)				
VIII	BB Tulasigere Exge UG cables				
	1 Exge to Hanuman Temple(B-B1)				
	2 Exge to Sonnar Street(B-B2)				
IX	C Benakatti Exge UG cables				
	1 Exge to Masutikatti(C-C1)				
	2 Exge to Yallarling Temple(C-C2)				
X	D Shirur Exge UG cables				
	1 Exge to Maratha Khanavali(D-D1)				
	2 Exge to Masuti(D-D2)				
	3 Exge to Kalasad Katte(D-D3)				
XI	B Navanagar Exge UG cables				
	1 Exge to Vidhyagiri Circle(B-B1)				
	2 Exge to Navanagar Garden(B-B2)				

Director
 Telecom Engineering Centre
 1, Connaught Place, New Delhi
 110 028

Case No.: KNK- 906					
Name of the Power Line: 220 kV SC line on DC towers from existing 220/110/33/11 kV S/S at Bagalkot to proposed 220/11 kV S/S for KLIS Second stage at Balakundi village in Hungund Taluk, Bagalkot District.		Map Scale : 1 cm = 500 m. Route Length : 68.116 km Soil Resistivity : 25000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

SOUTH WESTERN RAILWAY					
Ref. No: SG/SWR/PTCC/F-2786/1791/06			DATED: 04-10-2018		
<u>Affected Blocks & Telecom Circuits Details</u>					
1	BDM-GED	0.5	0.0001	10000	1
2	GED-BGK	6.5	0.0034	10000	34

P. K. Kulkarni

महोदय,
सहायक प्रमुख,
विद्युत विभाग,
राज्य विद्युत निगम,
मुंबई.
दिनांक: 04-10-2018

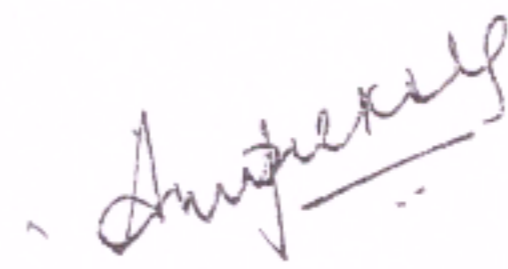
B/46937/Sigs 7(b)/1259/

11 Dec 2018

Chief Engineer (Electricity)
Karnataka Power Transmission Corporation Ltd
State Load Despatch Centre,
28, R.C. Cross Road
Bengaluru - 560 009

**PROPOSED 220KV SC LINE ON DC TOWERS FROM EXISTING 220/110/33KV SS AT
BAGALKOT TO PROPOSED 220/11KV SS FOR KLIS IIND STAGE AT BALAKUNDI
VILLAGE IN HUNGUND TALUK, BAGALAKOT DISTRICT**

1. Ref your letter No CEE/SLDC/ PTCC/F-2786/-9077-85 dt 21 Aug 2018 (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.