



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-928/570-71

Date: 22.09.2020

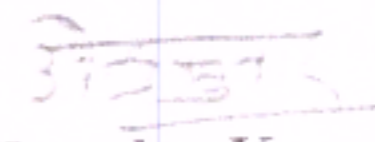
Subject: Induced voltage calculation in respect of 220 kV DC line on MC towers from proposed 400/220 kV SS at Mylasandra to existing 220/66 kV at Yarandanahalli (by drawing 220 kV DC line on new corridor from proposed 440/220kV SS at Mylasandra to T.No. 11 and from T.No.11 to existing 220/66 kV SS at Yarandanahalli in the existing 220 kV Somanhalli-Yaradanahalli DC line corridor) in Bangalore Urban District-regd.

- Ref. :**
- | | |
|--|-------------------|
| (i) KPTCL Ref. No. CEE/SLDC/PTCC/F-2996/13822-30 | Dated: 22.11.2019 |
| (ii) BSNL Ref. No. SR-PTCC/SKT-2657/3 | Dated: 27.01.2020 |
| (iii) South Western Railway Ref. No. SG/SWR/PTCC/F-2996/1995 | Dated: 26.12.2019 |
| (iv) Defense Ref. No. B/46937/Sigs 7(b)/1906 | Dated: 16.01.2020 |

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 35,000 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.


(Upendra Kumar)
Chief Engineer, PCD

To,
The Divisional Engineer (PTCC), Southern Zone,
Bharat Sanchar Nigam Limited (BSNL), O/o DET (PTCC),
Inspection Circle, 1st Floor, Raj Bavan Exchange No. 26,
Sardar Patel Road, Guindy, Chennai-600032.

Copy to:

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

(Annex-I)


Case No.F-2996 /SKT 2657		SSA: Bengaluru			
Name of the power line: PTCC Proposal of Proposed 220KV DC line on MC Towers from proposed 400/220KV SS at Mysandra to existing 220/66KV SS at Yarandanahalli [by drawing 220KV DC line on new corridor from proposed 400/220KV SS at Mysandra to T.no.11 and from T.no.11 to existing 220/66KV SS at Yarandanahalli in the existing 220KV Somanahalli-Yarandanahalli DC line corridor] in Bangalore Urban District.					
Length:	8.136 Kms				
Average SR value : 35,000 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	HRR Hosur Road Exge UG Cables				
	1 Exge to Rotary Nagar (HR-HR1)	}	}	}	}
	2 Exge to Begur Road (HR-HR2)				
	3 Exge to Garvi Bhavi Nagar (HR-HR3)				
	4 Exge to Kundlu Road (HR-HR4)				
	5 Exge to Novel (HR-HR5)				
II	IIM IIM Exge UG Cables				
	1 Exge to Bilakenahalli(IM-IM1)	}	}	}	}
	2 Exge to D S Palya(IM-IM2)				
III	CK Chennakeshvanager Exge UG Cables				
	1 Exge to Singasandra(CK-CK1)	}	}	}	}
	2 Exge to Novel(CK-CK2)				
	3 Exge to Royal County(CK-CK3)				
	4 Exge to Chikka Thogur(CK-CK4)				
	5 Exge to Bharat Shell(CK-CK5)				
	6 Exge to Central Jail(CK-CK6)				
IV	EC Electronic City Exge UG Cables				
	1 Exge to SBI(EC-EC1)	}	}	}	}
	2 Exge to Chikka Thogur(EC-EC2)				
	3 Exge to Chikka Thogur(EC-EC3)				
V	HBG Hebbagidi Exge UG Cables				
	1 Exge to KIADB(HB-HB11)	}	}	}	}
	2 Exge to Chendapur(HB-HB2)				
VI	BNG Banneraghatta Exge UG Cables				
	1 Exge to Chanasriram(BN-BN1)	}	}	}	}
	2 Exge to Vajjarahalli(BN-BN2)				
	3 Exge to Hakki Bikki Colony(BN-BN3)				
VII	JIG Jigani Exge UG Cables				
	1 Exge to Bandenasandra(JI-JI1)	}	}	}	}
	2 Exge to Koppa(JI-JI2)				
	3 Exge to Harappanahalli(JI-JI3)				
	4 Exge to Hulimangala(JI-JI4)				
VIII	WC Weavers Colony Exge UG Cables				
	1 Exge to C K Palya Road(WC-WC1)	}	}	}	}
	2 Exge to Union Bank(WC-WC2)				
	3 Exge to Hermitage(WC-WC3)				
IX	APOT APOTEX Exge UG Cables				
	1 Exge to Sriramapura(AP-AP1)	}	}	}	}
	2 Exge to Yelmara Mandir(AP-AP2)				
X	RBI RBI L/O Exge UG Cables				
	1 Exge to JP Ngr 9th Ph Pai l/o(RB-RB1)	}	}	}	}
	2 Exge to Srinidhi L/o(RB-RB2)				
	3 Exge to Brigade Millenium(RB-RB3)				
XI	GOT Gottikere Exge UG Cables				
	1 Exge to Himigiri Medicals(GT-GT1)	}	}	}	}
	2 Exge to GP L/O(GT-GT2)				
	3 Exge to Sai L/O(GT-GT3)				
	4 Exge to Kamanahalli(GT-GT4)				
XII	KNK Konanakunte Exge UG Cables				
	1 Exge to Ganapathipura(KN-KN1)	}	}	}	}
	2 Exge to Harinagar(KN-KN2)				
	3 Exge to DK Sandra(KN-KN3)				
XIII	VPN Vishvapriyanager Exge UG Cables				
	1 Exge to Daco Heights(VP-VP1)	}	}	}	}
	2 Exge to Golden Heights(VP-VP2)				

Stamp: BANGALORE URBAN DISTRICT
MAY 20 2018
OFFICE OF THE
MAYOR

ANNEXURE - II

Case No.: KNK- 928 Name of the Power Line: 220 kV DC line on MC towers from proposed 400/220 kV SS at Mylasandra to existing 220/66 kV at Yaradanahalli (by drawing 220 kV DC line on new corridor from proposed 440/220kV SS at Mylasandra to T.No. 11 and from T.No.11 to existing 220/66 kV SS at Yaradanahalli in the existing 220 kV Somanhalli-Yaradanahalli DC line corridor) in Bangalore Urban District.		Map Scale : 1 cm = 500 m. Route Length : 8.136 km Soil Resistivity : 35000 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-2996/1995 DATED: 26-12-2019					
Affected Blocks & Telecom Circuits Details					
1	Karmelaram to Heelalige	1.1	0.0002	9841	2
2	Heelalige to Anekal Road	Out of parallelism			0


TANUJ
 Asst. Director-II
 Ministry of Power
 Government of India

Tele : 23019746

Annex - III

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

B/46937/Sigs 7(b)/1906

Jan 2020

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 MC TOWERS FROM PROPOSED 400/220KV SS AT MYLASANDRA TO EXISTING 220/66KV SS AT YARANDANAHALLI IN BANGALORE URBAN DISTRICT

1. Ref your letter No CEE/SLDC/ PTCC/F-2996/-13822-30 dt 22 Nov 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

Divisional Engineer Telegraph (PTCC)
O/o GM (North); BSNL, QA & Inspection Circle,
CTS Compound, Africa Avenue Road,
Netaji Nagar, New Delhi-110023

for information