



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-925/573-75

Date: 11.09.2020

Subject: Induced voltage calculation in respect of 220 kV LILO line from existing 220/66 kV Hoskote-BIAL (Begur) MCMV line to the proposed 220/66 kV SS at KIADB IT/BT Park (Aerospace) in Devanahalli Taluk, Bengaluru District-regd.

Ref. : (i) KPTCL Ref. No. CEE/SLDC/PTCC/F-2945/4882-90 Dated: 17.07.2019
(ii) BSNL Ref. No. SR-PTCC/SKT-2558/04 Dated: 19.11.2019
(iii) South Western Railway Ref. No. SG/SWR/PTCC/F-2945/1939 Dated: 23.08.2019
(iv) Defense Ref. No. B/46937/Sigs 7(b)/1740 Dated: 28.08.2019

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.

(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:

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-2943/SKT-2533

SSA:BGTD

Name of the power line

Proposed 220 KV LILO line from existing 220/66 KV Hoskote-BIAL (Begur) MCMV line to the Proposed 220/66 KV SS at KIADB IT/BT Park(Aerospace) in Devanahalli Taluk, Bengaluru District.

Length:

6.694 Kms

Sl.No.	Name of Telecom line	Type of BSNL Cable: PIJF cable			
		LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I	BAGALUR(BGR) Exge UG cables				
1	Exge to Maralakunte(BG-BG1)				
2	Exge to Chokkanahalli(BG-BG2)				
3	Exge to Mitaganahalli(BG-BG3)				
4	Exge to Rasakpalya(BG-BG4)				
5	Exge to Kadayarappanhalli(BG-BG5)				
II	CHIKKAJALA Exge (CKJ) UG cables				
1	Exge to Vidyanagar Cross to Billamaranahalli (CK-CK1)				
2	Exge to Sadahalli to Nagamangala (CK-CK2-CK5)				
3	Exge to Vidyanagar Cross to Hunasemaranahalli (CK-CK1-CK3)				
4	Exge to Bainahalli(CK-CK4)				
5	Exge to Tarabanahalli(CK-CK6)				
6	Exge to Masiganahalli(CK-CK7)				
7	Exge to Doddajala(CK-CK8)				
III	BUDIGERE Exge (BDG) UG cables				
1	Exge to Hittarhalli(BD-BD1)				
2	Exge to Manchoppanahalli(BD-BD2)				
3	Exge to Choudappanahalli(BD-BD3)				
IV	DEVANAHALLI Exge (DVH) UG cables				
1	Exge to Mallanahalli(DV-DV1)				
2	Exge to Kempalingapalli(DV-DV2)				
3	Exge to Bommavara(DV-DV3)				
4	Exge to Anneswar(DV-DV4)				
5	Exge to Channahalli(DV-DV5)				

Case No.: KNK- 925					
Name of the Power Line: 220 kV LILO line from existing 220/66 kV Hoskote-BIAL (Begur) MCMV line to the proposed 220/66 kV SS at KIADB IT/BT Park (Aerospace) in Devanahalli Taluk, Bengaluru District.		Map Scale : 1 cm = 500 m. Route Length : 6.694 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-2945/1939			DATED: 23-08-2019		
Affected Blocks & Telecom Circuits Details					
1	DHL- YNK	1.1	0.0002	6982	2

Armed

Aug 2019

B/46937/Sigs 7(b)/1740

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 LILO LINE FROM EXISTING 220/66KV HOSKOTE-BIAL (BEGUR) MCMV
LINE TO THE PROPOSED 220/66KV SS AT KIADB IT/BT PARK [AEROSPACE] IN
DEVANAHALLI TALUK, BENGALURU DISTRICT

1. Ref your letter No CEE/SLDC/ PTCC/F-2945/-4882-90 dt 17 Jul 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.

(Anurag Mishra)
Lt Col
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

Handwritten notes and signatures

*1379
3/9/19*