



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-927/ 567-69

Date: 21.09.2020

Subject: Induced voltage calculation in respect of 220 kV LILO line on MC towers from existing 220 kV Antharasanahalli- Nelamangala(B-1) line to proposed 220/66 kV SS in the premises of 66/11 kV SS at Nelamangala (by constructing 220 kV LILO line on Narrow based MCMV towers on existing corridor of Nelamangala-Dabaspete 66 kV DC line from Nelamangala SS to LILO point) in Nelamangala Taluk, Bengaluru District.-regd.

- Ref. :**
- | | |
|--|-------------------|
| (i) KPTCL Ref. No. CEE/SLDC/PTCC/F-2972/9721-29 | Dated: 12.09.2019 |
| (ii) BSNL Ref. No. SR-PTCC/SKT-2613/3 | Dated: 27.12.2019 |
| (iii) South Western Railway Ref. No. SG/SWR/PTCC/F-2972/1967 | Dated: 16.10.2019 |
| (iv) Defense Ref. No. B/46937/Sigs 7(b)/1807 | Dated: 11.11.2019 |

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.

MIC

(Annex-2)

Case No. SKT-2613		SSA: BGTD			
Name of the power line: 220 KV LILO line on MC towers from existing 220 KV Antharasanahalli-Nelamangala (B1) line to proposed 220/66 KV SS in the premises of 66/11 KV SS at Nelamangala [by constructing 220 KV LILO line on Narrow based MCMV towers on existing corridor of Nelamangal-Dabaspete 66 KV DC line from Nelamangala SS to LILO point] in Nelamangala Taluk, Bengaluru District					
Length:	2.759 Kms		Type of BSNL cable: PIJF cable		
Average SR value : 25000 ohm cms					
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I. NA	Nlamangala Exge UG cables				
1	Exge to Jakkasandra NA-NA 1	}	IV less than 450V		
2	Exge to Guragalapalya NA-NA 2				
3	Exge to Byatappana palya NA-NA 3				
4	Exge to Bettanagere NA-NA 4	}	Out of parallelism		
5	Exge to Binnamangala NA-NA 5				

Tanj

TANUJ
आसिस्टेंट डायरेक्टर-II / Assit. Director-II
केन्द्रीय विद्युत प्राधिकरण / C.E.A.
विद्युत विभाग / Ministry of Power
भारत सरकार / Govt. of India
नई दिल्ली / New Delhi-60

Tele 23019745

Annexure 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)/1807

Nov 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 LILO LINE ON MC TOWERS FROM EXISTING 220KV
ANTHARASANAHALLI-NELAMANGALA [B1] LINE TO PROPOSED 220/66KV SS IN THE
PREMISES OF 66/11KV SS AT NELAMANGALA IN NELAMANGALA TALUK, BENGALURU
DISTRICT

1. Ref your letter No CEE/SLDC/ PTCC/F-2972/-9721-29 dt 12 Sep 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.

[Signature]
(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/c GM (North), BSNL, QA & Inspection Circle,
CTS Compound, Africa Avenue Road,
Netaji Nagar, New Delhi-110023

for information

[Handwritten]
26/11/2019

[Faint handwritten notes and stamps]