



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-916/186-88

Date: 04.02.2020

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

Subject: Induced voltage calculation in respect of 220 kV LILLO line from existing 220 kV Nelamangala - Peenya DC (B-4) line to proposed 220/66 kV SS at Brindavan in Bangalore urban district..

Ref. : (i) KPTCL Ref. No. CEE/SLDC/PTCC/F-2870/17357-65
(ii) BSNL Ref. No. SR-PTCC/SKT-2350/4
(iii) South Western Railway Ref. No. SG/SWR/PTCC/F-2870/1861/32
(iv) Defense Ref. No. B/46937/Sigs 7(b)/1435

Dated: 01.02.2019

Dated: 18.11.2019

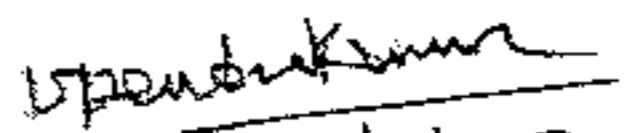
Dated: 13.02.2019

Dated: 03.04.2019

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.


4/3/2020
(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, Hubli-580020. (Annex-II only)
2. Chief Engineer, KPTCL O/o Chief Engineer Electricity, State Load Despatch Centre, #28, Race Course Cross Road, Bengaluru-560009.

M/c


Case No. F-2870/SKT-2350			SSA: Tumkur		
Name of the power line: 220 KV LILO line from the existing 220 KV Nelamangala-Peenya DC (B-4) line to proposed 220/66 KV SS at Brindavan in Bengaluru Urban District					
Length:		0.670 Kms			
Average SR value : 25,000 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. LG	Laggere Exge UG cables				
1	Exge to Nelagadarahalli LG-LG 1				
II. PEN	Peenya Exge UG cables				IV less than 430V
1	Exge to Madanayakanahalli PEN-PEN1				} Out of Parallelism
2	Exge to Chikkabanavara Mn.road PEN-PEN2				
III. NL	Nandini L/O Exge (NLO)				
1	Exge to Kurubarahalli NL-NL1				} Out of parallelism
2	Exge to Modi Hosp. road NL-NL2				
3	Exge to Chord road NL-NL3				
IV. BN	Basveshwara Nagar Exge UG cables				IV less than 430V
1	Exge to Shahkaramutt BN-BN 1				} Out of parallelism
2	Exge to Manjunath Nagar BN-BN 2				
V. RA	Rajaji Nagar Exge UG cables				
1	Exge to Rly O/L RA-RA 1				} IV less than 430V
2	Exge to Gopalapura RA-RA 2				
3	Exge to Chord Road RA-RA 3				
4	Exge to Raj 64th Cross RA-RA 4				
VI. VN	Vijayanagar Exge UG cables				
1	Exge to Manjunathnagar VN-VN 1				} Out of parallelism
2	Exge to Modi Hosp. road VN-VN 2				
3	Exge to Sanegurannahalli VN-VN 3				
4	Exge to Mudalapalya VN-VN 4				
5	Exge to RPC L/O VN-VN 5				

UPK
4/3/20

उपेन्द्र कुमार/UPENDRA KUMAR
मुख्य अभियन्ता/Chief Engineer
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
दिल्ली/New Delhi

Case No.: KNK-916					
Name of the Power line: 220 kV LILO line from existing 220 kV Nelamangala -Peenya DC (B-4) line to proposed 220/66 kV SS at Brindavan in Bengaluru urban district.		Map Scale : 1 cm=500 mts Total Length : 0.670 km 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-2870/1861/32 dated 13.02.2019					
Affected Blocks & Telecom Circuits Details					
1	NYH-SBC	Out of parallelism			0
2	SBC-BNC	Outside IV consideration zone			0
3	SBC-YPR	0.250	0.0003	8675	3
4	YPR-BYPL	Out of parallelism			0
5	BYPL-LOGH	Out of parallelism			0
6	LOGH-YNK	Out of parallelism			0
7	YPR-BAW	Out of parallelism			0
8	BAW-GHL	Out of parallelism			0


 4/3/20
 उपेन्द्र कुमार/UPENDRA KUMAR
 मुख्य अभियन्ता/Chief Engineer
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
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