

I/28083/2023



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत संचार विकास प्रभाग

Power Communication Development Division



CEA Case No. : KNK-1001		
PTCC approval for 400 kV D/C Koppal – Narendra (New) transmission Line (137.701 km)-regd.		
S. No	Reference No.	Dated
(i)	KNL/TL-PTCC/2021-22/15	26.04.2022
(ii)	ReNew/Koppal/2022/PTCC/01,02,003	23.08.2022 22.09.2022 28.02.2023
(iii)	ReNew Power: E-mail	09.05.2023
(iv)	KNL/Hub/2023/PTCC/11	23.05.2023
(v)	CEA Letter: I/23583/2022	13.09.2022
(vi)	CEA Letter: I/26541/2023	03.03.2023
(vii)	BSNL: SR-PTCC/SKT3012/15	03.03.2023
(viii)	South Western Railway: SG/SWR/PTCC/KNL/2447	15.12.2022
(ix)	Southern Railway: W.384/3/6/5(KAR)	30.11.2022
(x)	Defense: B/46937/Sigs 7(b)/2865	11.07.2022

The PTCC proposal submitted vide reference (i), (ii), (iii) & (iv) has been examined. The LF induction on communication circuits of BSNL and South Western Railway with respect to details furnished vide above references (vii) and (viii) respectively have been computed. The voltage likely to be induced on paralleling communication cables of BSNL and South Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I and Annexure-II respectively. The screening factors as applicable have been considered. Vide reference (ix) above, GM, S&T, Southern Railway has issued No Objection Certificate (NOC). Vide reference (x) above, DG Signals, MoD has issued No Objection Certificate (NOC) (enclosed as Annexure-III).

EPR Zones for proposed substations are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
400/220 kV Koppal S/s	225	37.8	0.023	230	76	NA	NA

As per the details submitted by BSNL vide reference (vii) above, no telephone exchange is falling in the EPR zone of the proposed substations.

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Digitally Signed by Upendra Kumar

Date: 30-05-2023 16:59:44

Reason: Approved
Chief Engineer

I/28083/2023

To,

1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle,1st Floor, Raj Bhavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032	
2.	Principal Chief Signal & Telecom Engineer	South Western Railway, Rail Soudha, Gadag road, Hubballi - 20	
3.	Project Manager – Transmission	M/s Koppal Narendra Transmission Ltd, 138, Ansal Chambers-II, Bhikaji Cama Place, Delhi – 110066	Copy for information

I/28083/2023

ANNEXURE-I

CEA Case No.: KNK-1001 Name of the Power line: 400 kV D/C Koppal – Narendra (New) transmission Line			Map Scale : 1 cm= 500 m Total Length : 137.701 km S.R. Value : 10000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL Letter No: SR-PTCC/SKT3012/15 Date: 03.03.2023					
I	GJD Telephone Exchange				
1	Exchange to SBH Bank (A-A1)			IV less than 430 V	
2	Exchange to SBH Bank (A-A2)			IV less than 430 V	
3	Exchange to Mahendrakar Pillar (A-B1)			IV less than 430 V	
4	Exchange to Mahendrakar Pillar (A-B2)			IV less than 430 V	
5	Exchange to Kammarsali Pillar (A-C1)			IV less than 430 V	
6	Exchange to Kammarsali Pillar (A-C2)			IV less than 430 V	
7	Exchange to Kolliyavar Cross (A-D1)			IV less than 430 V	
8	Exchange to K K Circle (A-E1)			IV less than 430 V	
9	Exchange to K K Circle (A-E2)			IV less than 430 V	
10	Exchange to Navanagara(A-F1)			IV less than 430 V	
11	Exchange to APMC (A-G1)			IV less than 430 V	
12	Exchange to APMC (A-G2)			IV less than 430 V	
13	Exchange to DPH (A-H1)			IV less than 430 V	
14	K K Circle to Channamma circle (E1-I1)			IV less than 430 V	
15	DPH to Ayurvedic college (H1 to J1)			IV less than 430 V	
16	APMC to Annadaneshwar ITI (G1 to K1)			Out of parallelism	
17	Channamma circle to Diploma college (I1 to L1)			IV less than 430 V	
II	Yelburga Telephone Exchange				
1	Exchange to Rangamandira (E-A1)			IV less than 430 V	
2	Exchange to Rangamandira (E-A2)			IV less than 430 V	
3	Exchange to Taluka Panchayath (E-A3)			Out of parallelism	

I/28083/2023

4	Taluka Panchayath to KEB Substation (A3-DP B1)	Out of parallelism
III	Kukanoor Telephone Exchange	
1	Exchange to Ambedkar circle	IV less than 430 V
IV	Talagal Telephone Exchange	
1	Exchange to Bus Stand	IV less than 430 V
V	Hanumansagar Telephone Exchange	
1	Exchange to HP Petrol bank (A-A1)	IV less than 430 V
2	Exchange to HP Petrol bank to Ilkal cross (A-A2)	IV less than 430 V
3	Exchange to Raghvendra Matta (A-A3)	IV less than 430 V
4	Exchange to Banashankari Temple (A-A4)	IV less than 430 V
5	Exchange to Piller (A-A5)	IV less than 430 V
6	Exchange to New Bus Stand road (A-A6)	IV less than 430 V
VI	Muttagi Telephone Exchange	
1	Exchange to within NTPC premises (A-A1)	IV less than 430 V
VII	Alamatti Telephone Exchange	
1	Exchange to Nidangudi (B-B1)	IV less than 430 V
2	Exchange to Alamatti Quarters area (B-B2)	IV less than 430 V
VIII	Aminghad Telephone Exchange	
1	Exchange to Bagalkot road (C-C1)	IV less than 430 V
2	Exchange to Hungund road (C-C2)	IV less than 430 V

I/28083/2023

ANNEXURE-II

CEA Case No.: KNK-1001		Map Scale : 1 cm= 500 m			
Name of the Power line: 400 kV D/C Koppal – Narendra (New) transmission Line		Total Length : 137.701 km			
		S.R. Value : 10000 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: SG/SWR/PTCC/KNTL/2447 Date: 15.12.2022					
1	Sompur Road (SOQ) to Banni Koppa (BNA)	1.1	0.0001	11735	1
2	Banni Koppa (BNA) to Talakal (TLKL)	2.34	0.00158	11833	19
3	Talakal (TLKL) to Bhanapur (BNP)	0.65	0.00172	12088	21
4	Bhanapur (BNP) to Koppal (KBL)	Out of parallelism			
5	Koppal (KBL) to Ginigera (GIN)	Out of parallelism			
6	Mugallai Halt (MGL) to Jadramakunti (JRKT)	Outside IV consideration zone			
7	Jadramakunti (JRKT) to Alamatty (LMT)	6.5	0.00059	27118	16
8	Alamatty (LMT) to Wandal (WDL)	7.9	0.00072	24787	18
9	Wandal (WDL) to Basavana Bagewadi Road (BSRX)	9.95	0.0009	26569	24
10	Basavana Bagewadi Road (BSRX) to Kudgi (KDG)	5.25	0.00047	28726	14
11	Kudgi (KDG) to Mulvad (MVD)	Out of parallelism			
12	Talakal (TLKL) to Kuknoor (KANR)	10.5	0.034	11145	379
13	Kuknoor (KANR) to Sanganahal (SGNL)	9.6	0.0039	10282	40

/28083/2023 Tele : 23019746

KNK-1001

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

B/46937/Sigs 7(b)/2865/

11 Jul 2022

Project Manager-Transmission
 Koppal Narendra Transmission Limited
 ReNew Hub, Commercial Block-1, Zone-6
 Golf Course Road, DLF City Phase-V
 Gurugram-122009

**PTCC PROPOSAL FOR CONSTRUCTION OF 400KV DC KOPPAL-NARENDRA
 (NEW) TRANSMISSION LINE**

1. Refer your letter No KNTL/TL-PTCC/2021-22/15 26 Apr 2022 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.



(SP Choyal)
 Lt Col
 GSO 1 (Coord)
 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

The DET(PTCC), Northern Zone
 O/o PGM (North), QA & Inspection Circle,
 D-Tax Building, Eastern Court, Janpath
 New Delhi-110001

