File No.CEA-PS-17-11(14)/3/2022-PCD Division





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-935 / 46-48

PTCC proposal of 220 kV 2^{6d} circuit from existing 220/66 kV S/S at Yarandahalli (on the existing corridor of 220 kV Somanahalli to Yarandahalli S/C line) up to Location No. 11 of existing 220 kV Somanahalli to Devarabisanahalli (Vikas Tech Park) D/C line (ckt-1) & also connecting the Somanahalli to Yarandahalli existing line to ckt-2 for providing independent supply from Somanahalli to Yarandahalli by disconnecting supply towards Devarabisanahalli (Vikas Tech Park) S/S in Bangalore Urban District: 6.497 km

Reference: S. No. Reference No. Dated (i) KPTCL: CEE/SLDC/PTCC/F-3019/16965-73 08.01.202 (ii) BSNL: SR-PTCC/SKT-2690/4 12.01.202 (iii) South Western Railway: SG/SWR/PTCC/F-3019/2017 07.02.202 (iv) Defense: B/46937/Sigs 7(b)/1969 02.03.202		
S. No.		Datad
(i)	KPTCL: CEE/SLDC/PTCC/F-3019/16965-73	
(ii)	BSNL: SR-PTCC/SKT-2690/4	
(iii)		
(iv)	Defense: B/46937/Sigs 7(b)/1969	
	Delense: B/40337/31gs /(U)/1909	02.03.

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of South Western Railway with respect to details furnished vide above references (ii) and (iii) respectively has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and Block & Telecom circuits of 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 above reference (iv), Defence Authority have issued No Objection Certificate (NOC) (a copy enclosed as Annex-III).

Taking above into consideration, necessary action for issuance of PTCC route approval may be taken.

Encl.: As above.

प्राचीतु स्टाप प्रिष्ट ग्रु.।. ११

To.

10,			
1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032.	Annexure-I & Annexure-III
2.	ASTE/TELE/HQ	SWR O/o Principal Chief Signal & Telecom Engineer,1st floor, West Block, Rail Soudha, Gadag Road, Hubli-580020.	Annexure-II
3.	Chief Engineer, Electricity	KPTCL, State Load Despatch Centre, #28, Race Course Cross Road, Bengaluru-560009.	Copy for information

MIC

File No.CEA-PS-17-11(14)/3/2022-PCD Division





भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण **Central Electricity Authority** विद्युत संचार विकास प्रभाग

Power Communication Development Division

के.वि.प्रा. केस सं. : KNK-935:/ 46-48 पी.टी.सी. प्रस्ताव 220 kV 2nd circuit from existing 220/66 kV S/S at Yarandahalli (on the existing corridor of 220 kV Somanahalli to Yarandahalli S/C line) up to Location No. 11 of existing 220 kV Somanahalli to Devarabisanahalli (Vikas Tech Park) D/C line (ckt-1) & also connecting the Somanahalli to Yarandahalli existing line to ckt-2 for providing independent supply from Somanahalli to Yarandahalli by disconnecting supply Devarabisanahalli (Vikas Tech Park) S/S in Bangalore Urban District: 6.497 km

सन्दर्भ:		दिनांक
क्रमांक	सन्दर्भ सं.	08.01.2020
(v)	KPTCL: CEE/SLDC/PTCC/F-3019/16965-73	12.01.2021
(vi)	BSNL: SR-PTCC/SKT-2690/4	07.02.2020
(vii)	South Western Railway: SG/SWR/PTCC/F-3019/2017	02.03.2020
(viii)	Defense: B/46937/Sigs 7(b)/1969	

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। उपर्युक्त संदर्भी (ii) और (iii) में दिए गए विवरणों के संबंध में बीएसएनएल के दूरसंचार केबलों और दक्षिण पश्चिम रेलवे के ब्लॉक और दूरसंचार सर्किटों पर क्रमशः कम आवृत्ति प्रेरण की गणना की गई है। सिंगल लाइन टू ग्राउंड फॉल्ट की स्थिति के तहत बीएसएनएल और दक्षिण पश्चिम रेलवे के ब्लॉक और टेलीकॉम सर्किट के समानांतर दूरसंचार केबलों पर प्रेरित होने की संभावना वाले वोल्टेज क्रमशः अनुलग्नक- । और अनुलग्नक- ॥ में संलग्न हैं। स्क्रीनिंग कारकों पर विचार कर लिया गया है। उपरोक्त संदर्भ (iv) द्वारा, रक्षा प्राधिकरण ने अनापति प्रमाण पत्र (एनओसी) जारी किया है । (एक प्रति अनुलग्नक-111 के रूप में संलग्न है)

उपरोक्त को ध्यान में रखते हुए, पीटीसीसी मार्ग अनुमोदन जारी करने के लिए आवश्यक कार्रवाई की

संलग्नः ऊपरोक्त अनुसार

To,	·	Civile let Floor Rai Bayan	अन्लग्नक-1 &
Γ	Divisional Engineer (PTCC), Southern	Exchange No. 26, Sardar Patel Road, Guindy, Chennai-	अनुलग्नक-III
L	Zone	600032. SWR O/o Principal Chief Signal & Telecom	a rativa II
2.	ASTE/TELE/HQ	Engineer, 1st floor, West Block, Ran Soudha, Gadag	अनुलग्नक-II
3.	Chief Engineer, Electricity	KPTCL, State Load Despatch Centre, #28, Race Course Cross Road, Bengaluru-560009.	जानकारी हेतु

Case No.ski	Case No.SKT-2690/F3019		SSA: Rengalirii		
		The state of the s			
Name of	Name of the power line: PTCC Proposal for 220KV 2nd Circuit from existing 220/66 KV SS at	cuit from	existing	220/66 K	JE SS A
Yarandana	Yarandanahalli [on the existing corridor of 220KV Somanahalli-Yarandanahalli SC Line] up to	hali-Yar	andanah	alli sc Lin	ej up to
location N	location No.11 of 220KV Somenahalli-Devarabisanahalli DC line and connecting Somenahalli-	Clinean	d connec	ting Som	anahali-
Yar and an	Yarandanahalii line for providing independent supply from Somanahalli to Yarandanahalli by	Somana		farancian	iahalli by
disconnec	disconnecting supply towards Devarabisanahalli SS in Bengaluru Urban District.	galuru U	ban Dist	HCt.	
Length:	6.497	Kıns			
Average SR	Average SR value : 26807:75*Ohms-cms	Type of BSNL cable: PIJF			
	(egy en eg en en en en en eggelegh Adullisien, man en besefen en en en en en eggelegen en en eggelegen en en e	D	M	T.	Š
S. P. C.	Name of Telecom line			A CONTRACTOR OF THE CONTRACTOR	
espanicures,					
G)	Jigani Exchange			_	
	Exge to Bandenasandra (IIG-JI1)				
2	Exge to Koppa (JIG-JI2)				
w	Exge to Harapanahalli (JIG-JI3)	•			
4	Exge to Hullmangala (JIG-Ji4)				
		<i>t.</i>			
H APOTEX	Apotex Exchange	77.95	7 150		
1	Exge to Srirampura (APOTEX-AP1)				
Ŋ	Exge to Yelmara Mandir (APOTEX-AP2)				
III EC	Electronics City Exchange				
jest	Exge to SBI (EC-EC1)				
2	Exge to Chikka Thogur (EC-EC2)				
3	Exge to Chikka Thogur (EC-EC3)				

SH-2690/182

हाराक निवेशक-II/Asstt. Director-II केन्द्रीय विश्वत आधिकरण/C.E.A. विश्वत अधिकारण/C.E.A. विश्वत अधिकारण/C.E.A. भारत सरकार/Govt. of India महं विस्त्री/New Delni-66

सहायक कि क्षेत्र के भी हैं। "Jirector-II केन्द्रीय विश्वत ग्राधिकरण /C.E.A. विद्युत मंत्रालय/Ministry of Power भारत सरकार/Govt. of India वर्ड विस्ती/New Delhi-o6

An.

		כ				
 IV CKNR	Chennakeshvanagar Exchange					
 1 -2	Exge to Singasandra (CKNR-CN1)	\dashv				
 2	Exge to Novel (CKNR-CN2)		-			
 ₃	Exge to Royal County (CKNR-CN3)		4	<u>}</u>		1)
Ą	Exge to Chikka Thogur (CKNR-CN4)		177	TV JESS THOM 4500		0
 U	Exge to Bharat Shell (CKNR-CN5)	\neg				
 හ	Exge to Central Jall (CKNR-CN6)		·		2 to 100 miles (2 mil	
 м нвс	Hebbagudi Exchange	_				
 	Exge to KIADB (HBG-HB1)		-			
 2	Exge to Chandapur (HBG-HB2)	-				
		/		_		

547-2690/292

ANNEXURE - II

CEA Case No.: KNK-935
Name of the Power Line: 220 kV 2 nd circuit from existing 220/66 kV
S/S at Yarandahalli (on the existing corridor of 220 kV Somanahalli to
Yarandahalli S/C line) up to Location No. 11 of existing 220 kV
Somanahalli to Devarabisanahalli (Vikas Tech Park) D/C line (ckt-1)
& also connecting the Somanahalli to Yarandahalli existing line to
ckt-2 for providing independent supply from Somanahalli to
Yarandahalli by disconnecting supply towards Devarabisanahalli
(Vikas Tech Park) S/S in Bangalore Urban District.

Map Scale : 1 cm = 500 m. Route Length : 6.497 km Soil Resistivity : 25,000 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/PT	CC/F-3019/20)17 Dat	ed: 07.02.202	20
	Affected Blocks & Telecom Circuits Details				
. 1	Karmelaram to Heelalige	1.1	0.0002	9899	012
2	Anekal Road to Heelalige		Out of Parallelis	m	00

Jany

तहायक निर्देश । PASSIT Director-11 केन्द्रीय विद्युत प्राधिकरण / C.E.A. विद्युत मंत्रालय/Winistry of Power भारत सरकार/Govt. of India नई दिल्ली/New Delhi-66 Tele: 23019746

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)/1969

①L_Mar 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 FOR CONSTRUCTION OF 220KV 2ND CIRCUIT FROM EXISTING 220/66KV SS
AT YARANDANAHALLI UPTO LOCATION NO 11 OF EXISTING 220KV SOMANAHALLIDEVARABISANAHALLI DC LINE [CKT-1] & ALSO CONNECTING THE SOMANAHALLIYARANDANAHALLI EXISTING LINE TO CKT-II FOR PROVIDING INDEPENDENT SUPPLY
FROM SOMANAHALLI TO YARANDANAHALLI BY DISCONNECTING SUPPLY TOWARDS
DEVARABISANAHALLI SS IN BENGALURU URBAN DISTRICT

- Ref your letter No CEE/SLDC/ PTCC/F-3019/-16965-73 dt 08 Jan 2020 (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

الشكة لا ساله

29,1