





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

### Power Communication Development Division

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CEA Case No.: AND-702  PTCC approval for diversion of existing 220 kV Renigunta – G. D. Nellore DC line by laying 2 km of 220 kV DC UG cable and erection of 2 nos. D type towers and 2 nos. CTT towers - regd.					
(i)	APTRANSCO: CE-Proj/SE-220&132kV/EE-1/DEE-1/F.Airport/ PTCC/D.No.30/23	27.01.2023			
(ii)	APTRANSCO: CE-Proj/SE-220&132kV/EE-1/DEE-1/F.Airport/ PTCC/D.No.122/23	19.04.2023			
(iii)	BSNL: SR-PTCC/SAP2934/06	24.02.2021			
(iv)	Southern Railway: W.384/3/5/97A	29.09.2020			
(v)	South Central Railway: SG.85/4/3/PTCC/SCR/2022-23/AP-20RTD	29.03.2023			
(vi)	Defense: B/46937/Sigs 7(b)/3208	31.05.2023			

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

The instant PTCC case is related to diversion of existing line, therefore, EPR zone verification is not required.

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

Encl.: As above

### **Chief Engineer**

### To.

	10,			
	1.	Divisional	BSNL, Inspection Circle,1st Floor, Raj Bhavan	
Engineer (PTCC),		Engineer (PTCC),	Exchange No. 26, Sardar Patel Road, Guindy,	
		Southern Zone	Chennai-600032	
	2.	GM (S&T)	Southern Railway, Head Quarters Office, S&T	
			Branch, Chennai – 600003	
	3. GM (Tele)		South Central Railway, O/o PCSTE, 7th Floor,	
			Rail Nilayam, Secunderabad - 5000025	
	1	Chief Engineer,	APTRANSCO, Vidyut Soudha, Vijayawada -	Conv. for information
4.		Projects	520004	Copy for information

# ANNEXURE-I

			Map Scale	: 1 cm= 500 m	1
CEA Case No.: AND-702  Name of the Power line: Diversion of existing 220 kV Renigu			Total Length: 1.698 km UG & 0.298 km OH		
		•			
	DC line by laying 2 km of 220 kV DC UG cable and type towers and 2 nos. CTT towers	erection of 2	S.R. Value :	10,000 Ohm-ci	m
		Length of	3.5	Effective	* * * 7
		Parallelis	Mutual	Fault	I.V
		m	Coupling	current	in
S.No.	Telecom. Details	in Km.	in Ohms.	in Amps.	Volts.
	BSNL Letter No: SR-PTCC/	SAP2934/06 D	ate: 24.02.2021		
	GAJULAMANDYAM EXCHANGE UG				
I G	CABLE				
1	Exge to Pillar 62 to DP 11 (G-G1)		IV less than 430 V		
II A	AIRPORT EXCHANGE UG CABLE				
1	Exge to Airport DP (A-A1)			1	
2	Exge to Pillar 14 to DP 10 (A-A2)	IV less than 430 V			
3	Exge to Pillar 14 to DP 2 (A-A3)		1 V 1088 t	nan 430 V	
4	Exge to DP 22 (A-A4)				
III R	RENIGUNTA EXCHANGE UG CABLE				
1	Exge to Pillar 27 (R-R1)		IV less t	han 430 V	
2	Exge to Pillar 51 (R-R2)	0.8	0.0284	10812	307
3	Exge to Pillar 31 to DP 19 (R-R3)		•	1	
4	Exge to Pillar 32 to DP 13 (R-R4)				
5	Exge to Pillar 34 to DP 20 (R-R5)		IV less t	han 430 V	
6	Exge to Pillar 33 to DP 16 (R-R6)				
7	Exge to Pillar 22 (R-R7)				
8	Exge to Pillar 34 to DP 25 (R-R8)				
IV K	KARAKAMBADI EXCHANGE UG CABLE				
1	Exge to Mini Pillar to DP 18 (K-K1)		IV less t	han 430 V	

# 1/28253/2023

2	Exge to Pillar 31 to Amararaja (K-K2)	
3	Exge to Pillar 31 to Grindwelnorton (K-K3)	IV less than 430 V

# **ANNEXURE-II**

CEA Case No.: AND-702  Name of the Power line: Diversion of existing 220 kV Renigunta – G. D. Nellore DC line by laying 2 km of 220 kV DC UG cable and erection of 2 nos. D type towers and 2 nos. CTT towers			& 0.236 KIII OII		
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Southern Railway Letter No: W.384/3/5/97A Date: 29.09.2020					
1	Pudi - Renigunta	1.7	0.0043	10290	44

# **ANNEXURE-III**

CEA Case No.: AND-702  Name of the Power line: Diversion of existing 220 kV Renigunta – G. D. Nellore DC line by laying 2 km of 220 kV DC UG cable and erection of 2 nos. D type towers and 2 nos. CTT towers		& 0.230 KIII OII			
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
	South Central Railway Letter No: SG.85/4/3/PT	CC/SCR/2022	2-23/AP-20RTI	Date: 29.03.20	023
1	Mamanduru (MRM) – Renigunta (RU)	Out of parallelism 0			0
2	Renigunta (RU) – Yerpedu (YPD)	0.1	0.0001	11070	1
3	Renigunta (RU) – Tiruchanuru (TCNR)	1.4	0.0023	10950	25
4	Tiruchanuru (TCNR) – Tirupati (TPTY)	0.5	0.0005	10840	5

Tele: 23019746

**Directorate General of Signals** Signals 7 **General Staff Branch** 

**DHQ PO, New Delhi – 110011** 

Integrated HQ of MoD, (Army)

B/46937/Sigs 7(b)/3208

**ペ**上 May 2023

Chief Engineer, Projects **APTRANSCO** Transmission Corporation of Andhra Pradesh Limited Vidyut Soudha, Vijayawada- 520004

SUPPLY, ERECTION, TESTING AND COMMISSIONING OF (I) DIVERSION OF 220KV RENIGUNTA-G.D. NELLORE DC LINE BY LAYING 2KM OF 220KV DC UG CABLE AND ERECTION OF 2NOS D TYPE TOWERS AND 2NOS CTT TOWERS (II) DIVERSION OF 132KV RENIGUNTA-CHITTOOR SC LINE BY LAYING 2KM OF 132KV SC UG CABLE AND ERECTION OF 3NOS S TYPE TOWERS AND 2NOS CTT TOWERS AND (III) DIVERSION OF 132KV RENIGUNTA-PUTTUR DC LINE BY LAYING 2KM OF 132KV DC UG CABLE AND **ERECTION OF 3NOS NB+60 TOWERS AND 2NOS CTT TOWERS IN CHITTOOR DISTRICT-PTCC PROPOSAL** 

- CE-Proj./SE-220&132KV/EE-1/DEE-No Lr. No. your letter 1. Refer 1/F.Airport/PTCC/D.No. 30/23 dt 27 Jan 2023 (copy att).
- No Objection Certificate (NOC) is accorded based on inputs provided as per Map sheets received vide your letter mentioned above.

Documents alongwith map sheets (in original) are returned herewith for your further necessary action.

Lt Col

GSO 1 (Comn) for ADG T

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 **Bharat Sanchar Nigam Limited** O/o PGM (North), QA & Inspection Circle, D-Tax Building, Eastern Court, Janpath New Delhi-110001