



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. : AND-707 :

PTCC proposal of 220 kV D/C Over Head transmission line from 220 kV Rachnagunneri S/S to the proposed 220 kV Racherla S/S: 53.491 km

Reference:

S. No.	Reference No.	Dated
(i)	APTRANSCO: CPT 140/SE/PM/DE-1A1/Racherla SS/PTCC/D.No.2184/2020	04.12.2020
(ii)	BSNL: SR-PTCC/SAP-2966/04	02.09.2021
(iii)	South Central Railway: SG.85/4/3/PTCC/SCRAP202102 RTD	28.01.2021
(iv)	Defense: B/46937/Sigs 7(b)/2262	21.01.2021

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 Central 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 Central 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 Annexure-III).

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

Encl.: As above.

शुभेन्द्र प्रताप सिंह
Director 18.2.22

To,

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.	SSTE/TELE/HQ	South Central Railway; Head Quarters Office, Signal & Telecomm Branch, Rail Nilayam, Secunderabad-500025.	Annexure-II
3.	Chief Engineer, Construction	Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Vijayawada-520004.	Copy for information



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के.वि.प्रा. केस सं. : AND-707 :
पी.टी.सी.सी. प्रस्ताव 220 kV D/C Over Head transmission line from 220 kV Rachnaguneri S/S to the proposed 220 kV Racherla S/S: 53.491 km

सन्दर्भ:		
क्रमांक	सन्दर्भ सं.	दिनांक
(i)	APTRANSCO: CPT 140/SE/PM/DE-1A1/Racherla SS/PTCC/D.No.2184/2020	04.12.2020
(ii)	BSNL: SR-PTCC/SAP-2966/04	02.09.2021
(iii)	South Central Railway: SG.85/4/3/PTCC/SCRAP202102 RTD	28.01.2021
(iv)	Defense: B/46937/Sigs 7(b)/2262	21.01.2021

संदर्भ (i) द्वारा प्रस्तुत पीटीसीसी प्रस्ताव की जांच की गई है। उपर्युक्त संदर्भों (ii) और (iii) में दिए गए विवरणों के संबंध में बीएसएनएल के दूरसंचार केबलों और दक्षिण मध्य 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 मध्य रेलवे के ब्लॉक और टेलीकॉम सर्किट के समानांतर दूरसंचार केबलों पर प्रेरित होने की संभावना वाले वोल्टेज क्रमशः अनुलग्नक- I और अनुलग्नक- II में संलग्न हैं। स्क्रीनिंग कारकों पर विचार कर लिया गया है। उपरोक्त संदर्भ (iv) द्वारा, रक्षा प्राधिकरण ने अनापत्ति प्रमाण पत्र (एनओसी) जारी किया है। (एक प्रति अनुलग्नक-III के रूप में संलग्न है)

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

संलग्न: उपरोक्त अनुसार

राष्ट्रवेन्दु प्रताप सिंह
निदेशक 15.02.22

To,

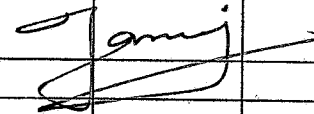
1.	Divisional Engineer (PTCC), Southern Zone	BSNL, Inspection Circle, 1st Floor, Raj Bavan Exchange No. 26, Sardar Patel Road, Guindy, Chennai-600032.	अनुलग्नक-I & अनुलग्नक-III
2.	SSTE/TELE/HQ	South Central Railway; Head Quarters Office, Signal & Telecomm Branch, Rail Nilayam, Secunderabad-500025.	अनुलग्नक-II
3.	Chief Engineer, Construction	Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Vijayawada-520004.	जानकारी हेतु

CEA: AND-707

(Annexure-I)

Case No. SAP 2966		SSA: TIRUPATI			
Name of the power line: PTCC Proposal for 220 KV DC Over Head Line from 220 KV SS Rachagunneri to the Proposed 220 KV SS Racherla.					
Length:		53.491 Kms			
Average SR value : 26.94 Ohm-ms $5,000 \rightarrow cm$ Type of BSNL cable: PIJF					
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I Y	YERPEDU EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2128				
2	Exge to P.22 to DP.2229				
3	Exge to P.32 to DP.3232				
4	Exge to P.99 to DP.9937				
II L	LANCO EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2129				
2	Exge to P.99 to DP.9910				
III SR	SRIRAMNAGAR EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2147				
2	Exge to P.33 to DP.3328				
3	Exge to P.46 to DP.4630				
4	Exge to P.44 to DP.4418				
5	Exge to P.45 to DP.4518				
IV SK	SRICALAHASTHI EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2147				
2	Exge to P.24 to DP.2421				
3	Exge to P.44 to DP.4418				
4	Exge to P.32 to DP.3218				
5	Exge to P.39 to DP.3902				
6	Exge to P.47 to DP.4718				
7	Exge to P.52 to DP.5208				
8	Exge to P.28 to DP.2815				
9	Exge to P.49 to DP.4908				
V B	B N KANDRIGA EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2114				
2	Exge to P.26 to DP.2610				
3	Exge to P.27 to DP.2712				
4	Exge to P.24 to DP.2411				
VI V	VARADAIHPALEM EXCHANGE UG CABLES				
1	Exge to P.21 to DP.2117				
2	Exge to P.31 to DP.3105				
3	Exge to P.35 to DP.3506				
4	Exge to P.42 to DP.4208				
5	Exge to P.36 to DP.3612				

IV less than 430V



TANUJ
 सहायक निदेशक-II/Asstt. Director-II
 केन्द्रीय विद्युत प्राधिकरण/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi-66

ANNEXURE – II

CEA Case No.: AND-707 Name of the Power Line: 220 kV D/C Over Head transmission line from 220 kV Rachnagunneri S/S to the proposed 220 kV Racherla S/S.		Map Scale : 1 cm = 500 m. Route Length : 53.491 km Soil Resistivity : 5,000 ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

South Central Railway: SG.85/4/3/PTCC/SCRAP202102 RTD

Dated: 28.01.2021

Affected Blocks & Telecom Circuits Details

1	Renigunta (RU) to Yerpedu (YPD)	Outside IV Consideration Zone			00
2	Yerpedu to Rachagunneri (RCG)	1.1	0.0008	9626	08
3	Rachagunneri to Srikalahasti (KHT)	1.4	0.0037	9363	35
4	Srikalahasti to Yellakaru (YLK)	Out of Parallelism			00



तनुज / TANUJ

सहायक निदेशक-II/Ass:
केन्द्रीय विद्युत प्राधिकरण
विद्युत मंत्रालय/Ministry of
भारत सरकार/Govt. of
नई दिल्ली/New Delhi

तनुज / TANUJ

सहायक निदेशक-II/Asstt. Director-II
केन्द्रीय विद्युत प्राधिकरण/C.E.A.
विद्युत मंत्रालय/Ministry of Power
भारत सरकार/Govt. of India
नई दिल्ली/New Delhi-66

Tele : 23019746

AND-707

(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)/2262/

21 Jan 2021

Chief Engineer, Construction
Transmission Corporation of Andhra Pradesh Ltd
AP TRANSCO, Vidyut Soudha
Vijayawada – 520 004

**ERECTION OF 220KV DC LINE FROM 400/220KV SS RACHAGUNNERI TO THE
PROPOSED 220/132KV SS RACHERLA IN CHITTOOR DISTRICT-PTCC
PROPOSAL- FORWARDED**

1. Ref your letter No Lr. No. CPT 140/SE/PM/DE-1A1/Racherla SS/PTCC/D.No.2184/2020 dt 04 Dec 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

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

for inf