



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

Case No.: TNG-98 :	07-24-02-21
PTCC proposal of 220 kV DC line from 220/132/33 kV SS Manuguru to Bhadradi Thermal Power Station (4 X 270 MW) in Bhadradi Kothagudem district.	

Reference:		
S. No.	Reference No.	Dated
(i)	TSTRANSCO: CPT-320/SE/Const/F.220kVline BTPS-Manuguru/PTCC/D.No.208/2020	18.02.2020
(ii)	BSNL: SR-PTCC/STS-2713/08	12.01.2021
(iii)	South Central Railway: SG.85/4/3/PTCC/SCRSTS202012 RTD	03.03.2020
(iv)	Defense: B/46937/Sigs 7(b)/2070	04.09.2020

The PTCC proposal submitted vide ref. (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 Annex-III).

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

**Encl.:** As above.

Signature Not Verified  
 Digitally signed by RAGHUVENDRA PRATAP SINGH  
 Date: 2021.02.24 11:11:36 IST

**Director**

**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	SCR, Head Quarters Office, Signal & Telcomm Branch, Rail Nilayam, Secunderabad-500025.	Annexure-II
3.	Chief Engineer, Lift Irrigation Schemes	TSTRANSCO, Vidyut Soudha, Hyderabad-500082.	Copy for information

M/C

(Annexure-I)

Case No. STS 2713		SSA: Khammam			
Name of the power line: PTCC Proposal for the Erection of 220 KV DC line from BTPS (220 KV Switch yard of Bhadradri Thermal Plant) to the Existing 220/132/33 KV SS Manuguru.					
Length:		22.5	Kms		
Average SR value : <del>164.65</del> <sup>25,000</sup> ohm kms		Type of BSNL cable: PUF			
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I A	Manuguru Telephone Exchange Cables				
1	Exge to Seetharama Theatre (A-A1)				
2	Exge to Gandhi Statue(A-A2)				
3	Exge to Flower Market(A-A3)				
4	Exge to Gandhi Statue(A-A4)				
5	Exge to Suraksha(A-A5)				
6	Exge to TDP Center(A-A6)				
7	Exge to Bombay Colony(A-A7)				
8	Exge to Kunavaram (A-A8)				
9	Exge to Rice Mill(A-A9)				
10	Exge to Sundariah Nagar (A-A10)				
11	Exge to Homeneeds (A-A11)				
12	Exge to C-type(A-A12)				
13	Exge to CZ Pillar(A-A13)				
14	Exge to Ramalayam (A-A14)				
15	Exge to Super Bazar (A-A15)				
16	Exge to Sivalingapuram (A-A16)				
17	Exge to Bus Depot (A-A17)				
18	Exge to MC Quarter Depot(A-A18)				


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**

<b>CEA Case No.: TNG-98</b>					
<b>Name of the Power line:</b> 220 kV DC line from 220/132/33 kV SS Manuguru to Bhadradi Thermal Power Station (4 X 270 MW) in Bhadradi Kothagudem district.		<b>Map Scale :</b> 1 cm=500 mts <b>Total Length :</b> 22.5 km <b>Soil Resistivity :</b> 25,000 ohm-cm			
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

<b>South Central Railway</b> letter no:- SG.85/4/3/PTCC/SCRTS202012 RTD Dated :03.03.2020					
S.No.	<b>Affected Blocks &amp; Telecom Circuits Details</b>				
1.	Aswapuram -Manuguru	Out of parallelism		0	

  
 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-65

Tele : 23019746

TNG-98

(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)/2070

07 Sep 2020

The Chief Engineer, Construction  
Transmission Corporation of Telangana Limited  
Vidyut Soudha,  
Hyderabad - 500 082

**ERECTION OF 220KV DC LINE (22.5KM) FROM 220/132/33KV SS MANUGURU TO  
BHADRADRI THERMAL POWER STATION (4X270MW) IN BHADRADRI KOTHAGUDEM  
DISTRICT-PTCC PROPOSAL- FORWARDED-REGARDING**

1. Ref your letter No CPT-320/SE/Const/F.220KV line BTPS-Manuguru/PTCC/D.No. 208/2020 dt 18 Feb 2020 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided vide Map sheets received under your above mentioned letter.
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, Janpath  
New Delhi-110001

} for information