



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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Case No.: TNG-103 :	16.09.2021
PTCC proposal for LILO of 220 kV Gachibowli to Miyapur transmission line at proposed 400/220/132 kV Rayadurg GIS: 6.64 km	

Reference:		
S. No.	Reference No.	Dated
(i)	TSTRANSCO: CE/400kV/SE-II/400kV/D1-A4/F.e-EHVT-01/18/D.No. 730/20	15.10.2020
(ii)	BSNL: SR-PTCC/STS-2866/05	19.07.2021
(iii)	South Central Railway: SG.85/4/3/PTCC/SCRTS202106 RTD	27.01.2021
(iv)	Defense: B/46937/Sigs 7(b)/2275	10.02.2021

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.

Signature Not Verified  
Digitally signed by RAGHUVENDRA PRATAP SINGH  
Date: 2021.09.16 16:14:03 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/400 kV	TSTRANSCO, Vidyut Soudha, Hyderabad-500082.	Copy for information

(Annexure-I)

Case No. STS 2866 **TNG-103** SSA: HYDERABAD

Name of the power line: PTCC Proposal for Erection of LILO of 220 KV Gachibowli - Miyapur  
 Lineto the Proposed 400/220/132 kV Rayadurg GIS- 6.640 kMs with XLPE UG Cable (1000 Sq.mm).

Length: 6.64 Kms

Average SR value: ~~403.3333~~ <sup>50,000</sup> ohm-ms

Type of BSNL cable: PIJF

SI.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
<b>I APS (A)</b>	<b>APSP EXCHANGE UG CABLES</b>				
1	Exge to Pillar.28 at Police Betallion Main Gate (A-A1)	} IV less than 430V			
<b>II HCU (B)</b>	<b>HYDERABAD CENTRAL UNIVERSITY EXCHANGE UG CABLES</b>				
1	Exge to Pillar.23,23A & 29 at Gulmohar Park (B-B1)				
2	Exge to Pillar.22 at Doyans Colony (B-B2)				
3	Exge to Pillar.28 at SBI R & D (B-B3)				
4	Exge to Pillar.21 & 24 at HCU Main Gate (B-B4)				
5	ExBe to Pillar.25 near HCU Second Gate (B-B5)				
<b>III MJB (C)</b>	<b>MASJIDBANDA EXCHANGE UG CABLES</b>				
1	Exge to Pillar.00 at Inner Zone (C-C1)				
2	Exge to Pillar.34 at MLA House (C-C2)				
3	Exge to Pillar.35 at Grave Yard (C-C3)				
<b>IV SAP (D)</b>	<b>SRILA PARK EXCHANGE UG CABLES</b>				
1	Exge to Pillar.21 at SBI (D-D1)				
<b>V WTD (E)</b>	<b>WHITE FIELD EXCHANGE UG CABLES</b>				
1	Exge to Pillar.00 at Inner Zone (E-E1)				
2	Exge to Pillar.37 at Opp Jaya Residency (E-E2)				
3	Exge to Pillar.37A at Opp Venkat Enclave (E-E3)				
<b>VI NRG (F)</b>	<b>NANAK RAM GUDA EXCHANGE UG CABLES</b>				
1	Exge to Pillar.00 at Inner Zone (F-F1)				
<b>VII GCB (G)</b>	<b>GACHIBOWLI EXCHANGE UG CABLES</b>				
1	Exge to Pillar.22 at Telecom Nagar (G-G1)				

2	Exge to Pillar.37 at Police Comm.Office (G-G2)								
3	Exge to Pillar.38 at Jannardhan Hills (G-G3)								
4	Exge to Pillar.39 at Amaravathi Restaurant (G-G4)								
5	Exge to Pillar.23 at Gachibowli X Road (G-G5)								
6	Exge to Pillar.31 at RTTC Campus Opp Exchange (G-G6)								
7	Exgeto Pillar.24 at Indiranagar X Road (G-G7)								
8	Exge to Pillar.25 at GPRA Campus (G-G8)								
9	Exge to Pillar.29 at Opp IIT NR TCS Gate (G-G9)								
10	Exge to Pillar.30 at Vinayaka Nagar (G-G10)								
11	Exge to Pillar.40 at Greenland Colony (G-G11)								
<b>VIII HRS (H)</b>	<b>HILL RIDGE SPRINGS EXCHANGE UG CABLES</b>								
1	Exge to Pillar.21 at Hill Ridge Springs (H-H1)								
2	Exge to Pillar.22 at Hill Ridge Villa (H-H2)								
<b>IX INT (I)</b>	<b>INFOTECH EXCHANGE UG CABLES</b>								
1	Exge to Pillar.00 at Inner Zone (I-I1)								
2	Exge to Pillar.21 at Infotech X Road (I-I2)								
<b>X ISB (J)</b>	<b>INDIAN SCHOOL OF BUSINESS EXCHANGE UG CABLES</b>								
1	Exge to Pillar.00 at Inner Zone (J-J1)								
<b>XI KEV (K)</b>	<b>KENDRIYA VIHAR EXCHANGE UG CABLES</b>								
1	Exge to Pillar.00 at Inner Zone (K-K1)								
2	Exge to Pillar.21 at NR Aditya DSR Gate (K-K2)								
3	Exge to Pillar.22 at DLF Cyber 2 Gate (K-K3)								
<b>XII SRT (L)</b>	<b>L &amp; T INFOTECH EXCHANGE UG CABLES</b>								
1	Exge to Pillar.00 at Inner Zone (L-L1)								
2	Exge to Pillar.21 at Urdu University (L-L2)								

*IV less than 430V*

3	Exge to Pillar.22 at Opp.SRT Gate(L-L3)				
<b>XIIIMIC (M)</b>	<b>MICROSOFT EXCHANGE UG CABLES</b>				
1	Exge to Pillar.00 at Inner Zone (M-M1)				
<b>XIV NCC (I)</b>	<b>NAGARJUNA CONSTRUCTION COMPANY UG CABLES</b>				
1	Exge to Pillar.00 at Inner Zone (N-N1)				
<b>XV KHB (O)</b>	<b>HYDKPHB EXCHANGE UG CABLES</b>				
1	Exge to Pillar.39 at MRO Office(O-01)				
2	Exge to Pillar.41 at INTU Gate(O-02)				
3	Exge to Pillar.27 ay Admission(O-03)				
4	Exge to Pillar.44 at ICON Hospital(O-04)				
5	Exge to Pillar.47 at NR Polimers(O-05)				
6	Exge to Pillar.50 at Union Bank(O-06)				
7	Exge to Pillar.51 at Gokul Plots(O-07)				
8	Exge to Pillar.37 at Srujana Mall (O-08)				
9	Exge to Pillar.30 at Remedie(O-09)				
10	Exge to Pillar.65 at Road.no.4(O-010)				
11	Exge to Pillar.74 near Post Office(O-011)				
12	Exge to Pillar.60 at Road.no.1(O-012)				
13	Exge to Pillar.38 at Road.no.2(O-013)				
14	Exge to Pillar.53(O-014)				
15	Exge to Pillar.54(O-015)				
16	Exge to Pillar.79(O-016)				
17	Exge to Pillar.80(O-017)				
<b>XVI VAS (P)</b>	<b>VASANTHA NAGAR EXCHANGE UG CABLES</b>				
1	Exge to Pillar.33 (P-P1)				
2	Exge to Pillar.33A (P-P2)				
3	Exge to Pillar.34 (P-P3)				
4	Exge to Pillar.77 (P-P4)				
<b>XVII BLI (Q)</b>	<b>BALAJI NAGAR EXCHANGE UG CABLES</b>				
1	Exge to Pillar.76 (Q-Q1)				
2	Exge to Pillar.76A (Q-Q2)				
3	Exge to Pillar.32 (Q-Q3)				
4	Exge to Pillar.72A (Q-Q4)				

*IV less than 430V*

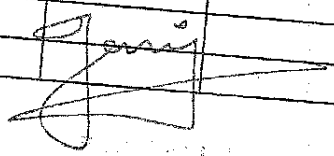
**XVIII VIVEKANANDHAR NAGAR EXCHANGE  
VVK (R) UG CABLES**

- 1 Exge to Pillar.51 (R-R1)
- 2 Exge to Pillar.52 (R-R2)
- 3 Exge to Pillar.53 (R-R3)
- 4 Exge to Pillar.27 (R-R4)
- 5 Exge to Pillar.28 (R-R5)
- 6 Exge to Pillar.21 (R-R6)
- 7 Exge to Pillar.22 (R-R7)
- 8 Exge to Pillar.38 (R-R8)
- 9 Exge to Pillar.25 (R-R9)
- 10 Exge to Pillar.23 (R-R10)
- 11 Exge to Pillar.23A (R-R11)
- 12 Exge to Pillar.97 (R-R12)
- 13 Exge to Pillar.97A (R-R13)
- 14 Exge to Pillar.59 (R-R14)
- 15 Exge to Pillar.59A (R-R15)

*IV less than 430V*

**XIX HYDHUR NAGAR EXCHANGE UG CABLES  
HDR (R)**

- 1 Exge to Pillar.41 (S-S1)
- 2 Exge to Pillar.42 (S-S2)
- 3 Exge to Pillar.67 (S-S3)
- 4 Exge to Pillar.67A (S-S4)



10/11/2011  
 Director, P.W.D. & S.E.  
 Government of India  
 New Delhi-110002

**ANNEXURE -II**

<b>CEA Case No.: TNG-103</b> <b>Name of the Power line:</b> LILO of 220 kV Gachibowli to Miyapur transmission line at proposed 400/220/132 kV Rayadurg GIS.		<b>Map Scale</b> : 1 cm=500 mts <b>Total Length</b> : 6.64 km <b>Soil Resistivity</b> : 50,000 ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms	Effective Fault current in Amps	I.V in Volt

South Central Railway letter no:- SG.85/4/3/PTCC/SCRTS202106 RTD Dated :27.01.2021

S.No.	Affected Blocks & Telecom Circuits Details				
1.	Hyderabad to Hussain Sagar Junction	Outside IV Consideration Zone		00	
2	Hussain Sagar Junction to Sanathnagar	Out of Parallelism		00	
3	Sanathnagar to Hafizpet	3.2	0.0004	8868	04
4	Hafizpet to Lingampalli	2.1	0.0006	8793	05
5	Lingampalli to Tellapur	Out of Parallelism		00	
6	Sanathnagar to Ammuguda	Out of Parallelism		00	

*Jany*

Jany  
 Senior Engineer  
 Electrical Department  
 South Central Railway  
 Hyderabad  
 Telangana  
 India-500001

Tele : 23019746

TNG-103

## Annexure - III

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


(10) Feb 2021

B/46937/Sigs 7(b)/2275

Chief Engineer, (400kV)  
TSTRANSCO  
Transmission Corporation of Telangana Limited  
Vidyut Soudha,  
Hyderabad - 500 082

**ERECTION OF RAYADURG SYSTEM IMPROVEMENT SCHEME-SUPPLY,  
ERECTION, TESTING AND COMMISSIONING OF 400/220/132KV GIS AT  
RAYADURG AND CONNECTED NETWORK ON TURNKEY BASIS-LILO  
OF 220KV GACHIBOWLI-MIYAPUR LINE TO PROPOSED 400/220/132KV  
RAYADURG GIS WITH 220KV 1000SQMM XLPE UG CABLE FOR A  
LENGTH OF 6.64KMS-PTCC PROPOSALS-FORWARDED-REG.**

1. Refer your letter No Lr. No. CE/400kV/SE-II/400kV/D1-A4/F.e-EHVT-01/18/D.No. 730/20 dt 15 Oct 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

for information

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