



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

<b>Case No.: AND-706:</b>
PTCC proposal of 220 kV D/C transmission line from 400/220 kV Kalapakka S/S to the proposed cable head section enroute to 220/11 kV GIS at HPCL Refinery in Vizag: 11.448 km

<b>Reference:</b>		26-08-2021
Sl. No.	Reference No	Dated
(i)	HPCL: HPCL/PTCC/200 KV OH line/L-573	09.11.2020
(ii)	BSNL: SR-PTCC/SAP/3218/14	09.08.2021
(iii)	East Coast Railway: ECoR/S&T/BBS/Tele/57/271	20.07.2021
(iv)	Defense: B/46937/Sigs 7(b)/2218	29.12.2020

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of East Coast 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 East Coast 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 reference (iv) above, 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  
RAGHVENDRA PRATAP SINGH  
Date: 2021.08.26 17:52:50 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.	ASTE/TELE/HQ	SWR O/o Principal Chief Signal & Telecom Engineer, 1st floor, West Block, Rail Soudha, Gadag Road, Hubli-580020.	Annexure-II
3.	HPCL	Visakh Refinery, Post Box No. 15, Visakhapatnam-530011.	Copy for information

(Annexure - I)

Case No. SAP 3218		SSA: Visakhapatnam			
Name of the power line: PTCC Proposal for the Extension of HT Power Supply at CL of 200 MW to M/s. Hindustan Petroleum Corporation Ltd, near Malkapuram, Visakhapatnam at 220 KV level from 400/220 KV Kalapakka SS (Over Head Line + Underground Cable).					
Length:	50,000 m	11.448	Kms		
Average SR value : 327.935 ohm-kms		Type of BSNL cable: PIJF			
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I A	PORTECO EXCHANGE UG CABLES				
1	Exge to Pillars 21,22,23,24.RHS lane (A-A1)				
2	Exge to Pillars 25,26,27,28.Straight lane (A-A2)				
II B	PARAVADA EXCHANGE UG CABLES				
1	Exge to MDO Pillar.21 to E.bonangi (B-B1-B2)				
2	Exge to MDO Pillar.21 to PHC (B-B1-B3)				
3	Exge to MDO Pillar.21 to Jajulavani palem (B-B1-B4)				
4	Exge to Market Pillar.22(B-B5)				
5	Exge to Cinema Jn Pillar.20 to LHS Gajuwaka route (B-B6-B7)				
6	Exge to Cinema Jn Pillar.20 to RHS Atchutapuram route (B-B6-B8)				IV less than 30V
III C	PHARMACITY EXCHANGE UG CABLES				
1	Exge to IZ.RAMKY new bldg (R-R1)				
2	Exge to IZ.IOCL TORRENT route (C-C2-C3-C4)				
3	Exge to IZ.LUPIN Jn to KANORIA route (C-C1-C5)				
4	Exge to IZ.Pharma Zel, SEZ (C-C6)				
IV D	LANKELAPALEM EXCHANGE UG CABLES				
1	Exge to IZ.Anakapalli route (D-D1)				
2	Exge to IZ.Gajuwaka route (D-D2)				
3	Exge to IZ.Sabbavaram route (D-D3)				
4	Exge to IZ.LHS and RHS of fly over bridge route (D-D4)				
V E	DLU AUTONAGAR EXCHANGE UG CABLES (DAN)				
1	Exge to IZ to DP.0011 DP (E-E1)				
2	Exge to P.67 to DP.6711 (E-E2)				
VI F	MINDI EXCHANGE UG CABLES (MND)				
1	Exge to P.59 to DP.5921 (F-F1)				
2	Exge to P.63 to DP.6311 (F-F2)				
3	Exge to P.64 to DP.6412 (F-F3)				
4	Exge to P.65 to DP.6511 (F-F4)				
5	Exge to P.66 to DP.6615 (F-F5)				
6	Exge to P.69 to DP.6924 (F-F6)				
7	Exge to P.71 to DP.7111 (F-F7)				
8	Exge to P.73 to DP.7316 (F-F8)				
9	Exge to P.91 to DP.9121 (F-F9)				
10	Exge to P.98 to DP.9819 (F-F10)				

तन्वी/TANUJ  
सहायक निदेशक-II/Asstt. Director-II  
केन्द्रीय विद्युत नियंत्रण/ C.E.A  
विद्युत मंत्रालय/Ministry of Power  
भारत सरकार/Govt. of India  
नई दिल्ली/New Delhi-65

VII DSN	DLU SHEELA NAGAR EXCHANGE UG CABLES				
1	Exge to P.80 to DP.8023 (DSN-DSN2)				
2	Exge to P.83 to DP.8312 (DSN-DSN1)				
VIII DPV	DLC PANCHAVATI UG CABLES				
1	Exge to DP.IZ0015 (DPV-DPV1)				
IX PGT	PEDAGANTYADA EXCHANGE UG CABLES				
1	Exge to P.30 to DP.3050 (PGT-PGT1)				
2	Exge to P.32 to DP.3231 (PGT-PGT2)				
3	Exge to P.32 to DP.3230 (PGT-PGT3)				
4	Exge to P.40 to DP.4034 (PGT-PGT4)				
5	Exge to P.41 to DP.4119 (PGT-PGT5)				
6	Exge to P.26 to DP.2605 (PGT-PGT6)				
7	Exge to P.27 to DP.2711 (PGT-PGT7)				
8	Exge to P.44 to DP.4420 (PGT-PGT8)				
X DVN	VISWESWARAYA NAGAREXCHANGE UG CABLES				
1	Exge to DP.5804 (DVN-DVN1)				IV less than 430V
XI BCV	BALACHERUVU EXCHANGE UG CABLES				
1	Exge to P.21 (B-B.21)				
2	Exge to P.22 (B-B.22)				
3	Exge to P.23 (B-B.23)				
4	Exge to P.24 (B-B.24)				
5	Exge to P.25 (B-B.25)				
6	Exge to P.26 (B-B.26)				
7	Exge to P.31 (B-B.31)				
8	Exge to P.31A (B-B.31A)				
9	Exge to P.31B (B-B.31B)				
10	Exge to P.32 (B-B.32)				
11	Exge to P.32A (B-B.32A)				
12	Exge to P.33 (B-B.33)				
13	Exge to P.33A (B-B.33A)				
14	Exge to P.33B (B-B.33B)				
15	Exge to P.34 (B-B.34)				
16	Exge to P.35 (B-B.35)				
17	Exge to P.35A (B-B.35A)				
18	Exge to P.35B (B-B.35B)				
19	Exge to P.36 (B-B.36)				
20	Exge to P.36A (B-B.36A)				
21	Exge to P.36B (B-B.36B)				
XII STS	STEEL PLANT EXCHANGE UG CABLES				
1	Exge to P.40 (STS-ST5 40)				
2	Exge to P.41 (STS-ST5 41)				
3	Exge to P.41A (STS-ST5 41A)				
4	Exge to P.42 (STS-ST5 42)				
5	Exge to P.42A (STS-ST5 42A)				
6	Exge to P.43 (STS-ST5 43)				
7	Exge to P.44 (STS-ST5 44)				
8	Exge to P.44A (STS-ST5 44A)				
9	Exge to P.45 (STS-ST5 45)				
10	Exge to P.46 (STS-ST5 46)				
11	Exge to IZ				

तन्मज्जि  
 सहायक निदेशिका-11 / Asstt. Director  
 केन्द्रीय विद्युत निदेशिका/ C.E.A.  
 विद्युत विभाग / Ministry of Power  
 भारत सरकार / Govt. of India  
 नई दिल्ली / New Delhi-66

XIII KUA	KURMANNAPEM EXCHANGE UG CABLES				
1	Exge to P.21 & P.21A (K-K1)				
2	Exge to P.24 (K-K2)				
3	Exge to P.25 (K-K3)				
4	Exge to P.35 (K-K4)				
5	Exge to P.34 to P.23A (K-K5-K6)				
6	Exge to P.22 to P.23 (K-K7-K8)				
7	Exge to P.22 to P.29 (K-K7-V1)				
8	Exge to P.25 to P.28 to P.31 (K-K9-K10-K11)				
9	Exge to P.27 (K-Karch-K12)				
10	Exge to P.32 to P.30 (K-K13-K14)				
XIV S	SIVAJI NAGAR UG CABLES				
1	Exge to P.27 & P.28 (S-S1)				
XV VEPZ	DUVVADA EXCHANGE UG CABLES				
1	Exge to P.29 (VP-VP1)				
2	Exge to P.33 (VP-VP2)				
XVI MKP	MALKAPURAM EXCHANGE UG CABLES				
1	Exge to Trinadhapuram (MKP-MKP1)				
2	Exge to Janatha Colony (MKP-MKP2)				
3	Exge to Indira Colony (MKP-MKP3)				
4	Exge to Exserviceman Colony (MKP-MKP4)				
5	Exge to HSL Officers Colony (MKP-MKP5)				
6	Exge to Mahalakshmi theatre (MKP-MKP6)				
7	Exge to Schindia Bus stop (MKP-MKP7)				
8	Exge to Schindia junction (MKP-MKP8)				
9	Exge to Gullala palem (MKP-MKP9)				
10	Exge to Jawahar Nagar (MKP-MKP10)				
XVII MGD	MULAGADA EXCHANGE UG CABLES				
1	Exge to Coromandal Fertilizers Limited (MGD-MGD1)				

IV less than 430V

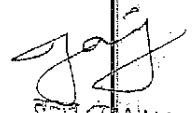
*[Signature]*

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

(7/11)

## ANNEXURE - II

Case No.: AND-706		Map Scale : 1 cm = 500 m.			
Name of the Power Line: 220 kV D/C transmission line from 400/220 kV Kalapakka S/S to the proposed cable head section enroute to 220/11 kV GIS at HPCL Refinery in Vizag.		Route Length : 11.448 km		Soil Resistivity : 50,000 Ohm-cm	
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)
East Coast Railway: ECoR/S&T/BBS/Tele/57/271		Dated: 20.07.2021			
<b>Affected Blocks &amp; Telecom Circuits Details</b>					
1	DVD-JGPM	0.6	0.0004	7885	04
2	JGPM-VDPD	0.8	0.0004	7898	04
3	VDPD-GJC	1.2	0.0021	8920	19

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

(Annexure-III)

Tele : 23019746

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


B/46937/Sigs 7(b)/2218

29 Dec 2020

Chief Manager (Projects)  
Hindustan Petroleum Corporation Limited  
Visakh Refinery, Post Box No. 15,  
Visakhapatnam-530 011 (Andhra Pradesh)

PROPOSED 220KV OVERHEAD TRANSMISSION LINE FROM 400/220KV KALAPAKA  
SUBSTATION TO THE PROPOSED CABLE HEAD STATION ENROUTE TO 220/11KV  
GIS AT HPCL REFINERY IN VIZAG-PTCC ROUTE APPROVAL

1. Ref your letter No HPCL/PTCC/220 KV OH Line/L-573 dt 09 Nov 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.

  
(Rakesh Kumar)  
Lt Col  
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, Janpath  
New Delhi-110001