



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.: TN-694
PTCC proposal of 230 kV S/C transmission line on D/C towers from GRT 150 MW Solar Power Plant to PGCIL 400/230 kV Tuticorin-II (GIS), Thoothikkudi(6.75 km)

Reference:		
S. No.	Reference No.	Dated
(i)	M/s GRT Jewellers (India) Pvt Ltd : CEA/PTCC/GRT-150MW/Thoothikkudi/07/21	01.07.2021
(ii)	BSNL: SR-PTCC/TN-1722/08	23.09.2021
(iii)	Southern Railway: SR-HQ0SNT(TELE)/35/2021-O/oAXSTE/TELE/HQ/SR	20.08.2021
(iv)	Defense: B/46937/Sigs 7(b)/2485	26.08.2021

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on BSNL cables and block & telecom circuits of Southern Railway as per details furnished vide reference (ii) and (iii) respectively has been examined. Voltages likely to be induced on paralleling BSNL cables and block & telecom circuits of Southern 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 ref. (iv) above, Defense have conveyed No Objection Certificate (a copy enclosed as Annexure-III).

Taking above into consideration, take necessary action for issuance of PTCC route approval.

Encl.: As above.

Signature Not Verified

Digitally signed by RAGHUVENDRA PRATAP SINGH
Date: 2021.10.06 17:11:05 IST

Director

To,

1.	The Divisional Engineer (PTCC), Southern Zone	BSNL, O/o DET (PTCC), Inspection Circle, 1st Floor, Raj Bhavan Exchange, No. 26, Sardar Patel Road, Guindy, Chennai-600032	
2.	GM (S&T)	Southern Railway, Head Quarters Office, S&T Branch, Chennai - 600003	Annexure -II only
3.	M/s GRT Jewellers (India) Pvt Ltd	21, Coats Road (North Usman Road), T. Nagar, Chennai - 600017	Copy for information

CEA Case No. - TN-694

Annex-I

Case No. TN 1722		SSA: THOOTHUKUDI			
Name of the power line: PTCC Proposal for 230 KV S/C Transmission Line on D/C Towers from GRT 150 MW Solar Power Plant to PGCIL 400/230 KV Tuticorin-II (GIS), Thoothukudi.					
Length:		6.75 Kms (Approx) Kms		SR : 5000 2cm	
Average SR value : 46.55 ohm ms					
Type of BSNL cable: PIJF					
Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I D	DURAIYUR TELEPHONE EXCHANGE				
1	Exge to P.00 to DP.0001				
2	Exge to P.00 to DP.0002				
3	Exge to P.00 to DP.0003				
4	Exge to P.00 to DP.0006				
5	Exge to P.00 to DP.0007				
6	Exge to P.00 to DP.0008				
7	Exge to P.00 to DP.0009				
8	Exge to P.00 to DP.0010				
9	Exge to P.00 to DP.0012				
10	Exge to P.00 to DP.0023				
11	Exge to P.00 to DP.0024				
12	Exge to P.00 to DP.0025				
13	Exge to P.00 to DP.0038				
14	Exge to P.21 to DP.2103				
15	Exge to P.21 to DP.2104				
16	Exge to P.21 to DP.2105				
17	Exge to P.21 to DP.2106				
18	Exge to P.21 to DP.2107				
19	Exge to P.21 to DP.2108				
20	Exge to P.21 to DP.2118				
21	Exge to P.21 to DP.2119				
22	Exge to P.21 to DP.2120				
23	Exge to P.21 to DP.2154				
24	Exge to P.21 to DP.2156				
II P	PASUVANTHANAI TELEPHONE EXCHANGE				
1	Exge to P.00 to DP.0001A				
2	Exge to P.00 to DP.0002				
3	Exge to P.00 to DP.0003				
4	Exge to P.00 to DP.0005				
5	Exge to P.00 to DP.0007				
6	Exge to P.00 to DP.0009				
7	Exge to P.00 to DP.0080				
8	Exge to P.00 to DP.0056				
9	Exge to P.00 to DP.0037				
10	Exge to P.00 to DP.0033				
11	Exge to P.00 to DP.0032				
12	Exge to P.00 to DP.0017				
13	Exge to P.00 to DP.0073				
14	Exge to P.00 to DP.0066				
15	Exge to P.00 to DP.0038				
16	Exge to P.00 to DP.0038B				
17	Exge to P.00 to DP.0019				

IV less than 430V

Prateek

प्रतीक श्रीवास्तव / PRATEEK SRIVASTAVA
 सहायक निदेशक-II / Asstt. Director-II
 केंद्रीय विद्युत प्राधिकरण / C.E.A.
 विद्युत मंत्रालय / Ministry of Power
 भारत सरकार / Govt. of India
 नई दिल्ली / New Delhi

CEA Case No. - TN-694

Annex-I

Case No. TN 1722
 Name of the power line: PTCC Proposal for 230 KV S/C Transmission Line on D/C
 Towers from GRT 150 MW Solar Power Plant to PGCIL 400/230 KV Tuticorin-II (GIS),
 Thoothukudi.

SSA: THOOTHUKUDI

Length: 6.75 Kms (Approx) Kms
 Average SR value : 46.55 ohm ms
 SR : 5000 p cm

Sl.No.	Name of Telecom line	Type of BSNL cable: PUF			
		LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I D	DURAIYUR TELEPHONE EXCHANGE				
1	Exge to P.00 to DP.0001				
2	Exge to P.00 to DP.0002				
3	Exge to P.00 to DP.0003				
4	Exge to P.00 to DP.0006				
5	Exge to P.00 to DP.0007				
6	Exge to P.00 to DP.0008				
7	Exge to P.00 to DP.0009				
8	Exge to P.00 to DP.0010				
9	Exge to P.00 to DP.0012				
10	Exge to P.00 to DP.0023				
11	Exge to P.00 to DP.0024				
12	Exge to P.00 to DP.0025				
13	Exge to P.00 to DP.0038				
14	Exge to P.21 to DP.2103				
15	Exge to P.21 to DP.2104				
16	Exge to P.21 to DP.2105				
17	Exge to P.21 to DP.2106				
18	Exge to P.21 to DP.2107				
19	Exge to P.21 to DP.2108				
20	Exge to P.21 to DP.2118				
21	Exge to P.21 to DP.2119				
22	Exge to P.21 to DP.2120				
23	Exge to P.21 to DP.2154				
24	Exge to P.21 to DP.2156				
II P	PASUVANTHANAI TELEPHONE EXCHANGE				
1	Exge to P.00 to DP.0001A				
2	Exge to P.00 to DP.0002				
3	Exge to P.00 to DP.0003				
4	Exge to P.00 to DP.0005				
5	Exge to P.00 to DP.0007				
6	Exge to P.00 to DP.0009				
7	Exge to P.00 to DP.0080				
8	Exge to P.00 to DP.0056				
9	Exge to P.00 to DP.0037				
10	Exge to P.00 to DP.0033				
11	Exge to P.00 to DP.0032				
12	Exge to P.00 to DP.0017				
13	Exge to P.00 to DP.0073				
14	Exge to P.00 to DP.0066				
15	Exge to P.00 to DP.0038				
16	Exge to P.00 to DP.0038B				
17	Exge to P.00 to DP.0019				

IV less than 430V

Prateek

प्रतीक श्रीवास्तव/PRATEEK SRIVASTAVA
 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

18	Exge to P.00 to DP.0018				
19	Exge to P.00 to DP.0014				
20	Exge to P.00 to DP.0013				
21	Exge to P.00 to DP.0013B				
22	Exge to P.00 to DP.0015				
23	Exge to P.00 to DP.0077				
24	Exge to P.00 to DP.0016				
25	Exge to P.00 to DP.0039				
26	Exge to P.00 to DP.0040				
27	Exge to P.00 to DP.0034				
28	Exge to P.00 to DP.0035				
29	Exge to P.00 to DP.0036				
30*	Exge to P.00 to DP.0055				
III K	KADAMBUR TELEPHONE EXCHANGE				
1	Exge to P.42 to DP.4215				
2	Exge to P.42 to DP.4218				
3	Exge to P.42 to DP.4220				
4	Exge to P.42 to DP.4239				
5	Exge to P.42 to DP.4212				
6	Exge to P.42 to DP.4217				
7	Exge to P.42 to DP.4237				

IV loss
than 480V

Prateek

प्रतीक श्रीवास्तव/PRATEEK SRIVASTAVA
 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

ANNEXURE - II

Case No.: TN-694					
Name of the Power Line: 230 kV S/C transmission line on D/C towers from GRT 150 MW Solar Power Plant to PGCIL 400/230 kV Tuticorin-II (GIS), Thoothikkudi		Map Scale : 1 cm = 500 m. Route Length : 6.75 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)

SOUTHERN RAILWAY					
Ref. No: SR-HQ0SNT(TELE)/35/2021-O/oAXSTE/TELE/HQ/SR dated 20.08.2021					
Affected Blocks & Telecom Circuits Details					
1	Virudunagar Jn. – Vanchi Maniachi Jn.	OUTSIDE IV CONSIDERATION ZONE			0

Prateek

प्रतीक श्रीवास्तव/PRATEEK SHRIWASTAWA
 सहायक निदेशक-II/Asstt. Director-II
 राष्ट्रीय विद्युत आयोग/C.E.A.
 विद्युत मंत्रालय/Ministry of Power
 भारत सरकार/Govt. of India
 नई दिल्ली/New Delhi

Annexure - III

Tele : 23019746

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


8/46937/Sigs 7(b)/2485

26 Aug 2021

GRT Jewellers (India) Private Limited
Renewable Power Division
21, Coats Road, (North Usman Road)
T. Nagar, Chennai-600 017

**PTCC ROUTE APPROVAL OF PROPOSED 230KV S/C TRANSMISSION LINE
ON D/C TOWERS FROM GRT 150MW SOLAR POWER PLANT TO PGCIL
400/230KV TUTICORIN-II (GIS) DISTRICT THOOTHUKKUDI,
STATE TAMIL NADU**

1. Refer your letter No CEA/PTCC/GRT-150MW/Thoothukkudi/07/21 dt 01 Jul 2021 (copy att).
2. No Objection Certificate (NOC) is accorded based on inputs provided as per 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, Eastern Court, Janpath
New Delhi-110001