

I/23270/2022(2)



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

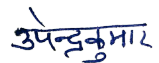
CEA Case No.: TN-702	Date: 18.08.2022
PTCC proposal for 230 kV SC Overhead Transmission Line on DC towers from the existing PGCIL 400/230 kV Tuticorin II GIS SS to NTPC – Ettayapuram Solar Project (230 MW) Pooling SS (230/33 kV) at Ettayapuram (Length-19.080 Km).	

Reference:		
S.No.	Reference No.	Dated
(i)	NTPCL: NTPC/Ettayapuram/TL/PTCC	08.03.2022
(ii)	BSNL: SR-PTCC/STN 1725/07	13.06.2022
(iii)	Southern Railway: W.384/3/6/3(TN)	13.06.2022
(iv)	Defense: B/46937/Sigs 7(b)/2845	23.06.2022
(v)	NTPCL e-mail regarding clarification for submitted PTCC proposal	12.08.2022

The PTCC proposal submitted vide reference (i) and (v) has been examined. The LF induction on telecom cables of BSNL and block & telecom circuits of Southern Railway with respect to details furnished vide above references (ii) & (iii) respectively, has been computed. The voltages likely to be induced on paralleling telecom cables of BSNL and block & telecom circuits of Southern Railway under Single Line to Ground fault condition are enclosed at Annexure-I & II respectively. The screening factors, as applicable, have been considered. Vide reference (iv) above, the Defense Authority have issued No Objection Certificate (NOC) (a copy enclosed as Annex-III).

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

Encl.: As above.


Chief Engineer

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 & III
2.	GM (S&T)	Southern Railway Head Qtr. Office S&T Branch, Chennai-600003	Annexure-II
3.	NTPC Limited	Ettayapuram Solar Power Project, Dist. Thoothukudi, Tamil Nadu-628902	For information

(Annexure-I)

Case No. TN 702		SSA: TUTICORIN			
Name of the power line: PTCC Proposal for 230 KV SC OH Line on DC Towers with ACSS Zebra EQ Conductor from the Existing PGCIL 400/230 KV SS at Tuticorin II GIS SS, Tuticorin to the Proposed NTPC.- Ettayapuram Solar Project 230 KV Pooling Sub-station of M/s. NTPC Limited at Ettayapuram Village, Tuticorin District.					
Length	19.08 Kms				
Average SR value : 5000 ohm-cm		Type of BSNL cable: PIJF			
SI No	Name of the Telecom Line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
SL. NO.	NAME OF THE EXCHANGE				
I DUR	DURAIYUR TELEPHONE EXCHANGE				
1	Exge to DP 0001				
2	Exge to DP 0006				
3	Exge to DP 0010				
4	Exge to DP 0012				
5	Exge to DP 0021				
6	Exge to DP 0023				
7	Exge to DP 0024				
8	Exge to P 21 to DP 2104				
9	Exge to P 21 to DP 2116				
10	Exge to P 21 to DP 2118				
11	Exge to P 21 to DP 2156				
II KDM	KADAMBUR TELEPHONE EXCHANGE				
1	Exge to P 42 to DP 4211				
2	Exge to P.42 to DP.4212				
III PSV	PASUVANTHANAI TELEPHONE EXCHANGE				
1	Exge to DP.0003				
2	Exge to DP.0005				
3	Exge to DP.0005A				
4	Exge to DP.0004				
5	Exge to DP.0036				
6	Exge to DP.0037				
7	Exge to DP.0038				
8	Exge to DP.0071				
9	Exge to DP.0072				
10	Exge to DP.0073				
11	Exge to DP.0075A				
12	Exge to DP.0068				
IV KDL	KADALAIYUR TELEPHONE EXCHANGE				
1	EXGE to DP0001				
2	EXGE to DP0002				
3	EXGE to DP0005				
4	EXGE to DP0006				
5	EXGE to DP0008				
6	EXGE to DP0012				
7	EXGE to DP0014				
8	EXGE to DP0015				

Less than 430V

9	EXGE to DP0016				
10	EXGE to DP0017				
11	EXGE to DP0018				
12	EXGE to DP0019				
13	EXGE to DP0020				
14	EXGE to DP0022				
15	EXGE to DP0023				
16	EXGE to DP0024				
17	EXGE to DP0025				
18	EXGE to DP0029				
19	EXGE to DP0030A				
20	EXGE to DP0030B				
21	EXGE to DP0031				
22	EXGE to DP0032				
V	VTI VEERAPATTI TELEPHONE EXCHANGE				
1	EXGE to DP0003				
2	EXGE to DP0007				
3	EXGE to DP0008				
4	EXGE to DP0010				
5	EXGE to DP0011				
6	EXGE to DP0012				
7	EXGE to DP0013				
8	EXGE to DP0014				
9	EXGE to DP0017				
10	EXGE to DP0018				
11	EXGE to DP0019				
VI	EPY ETTAYAPURAM TELEPHONE EXCHANGE				
1	EXGE to DP0001				
2	EXGE to DP0002				
3	EXGE to DP0004				
4	EXGE to DP0012				
5	EXGE to P21 to DP2103				
6	EXGE to P22 to DP2214				
7	EXGE to P22 to DP2216				
8	EXGE to P22 to DP2218				
9	EXGE to P22 to DP2220				
10	EXGE to P23 to DP2306				
11	EXGE to P23 to DP2307				
12	EXGE to P23 to DP2309				
13	EXGE to P23 to DP2312				
14	EXGE to P23 to DP2315				

Less than 430V

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 19-07-2022 } Ass. Director-II
 PCD Division
 C.E.A

15	EXGE to P23 to DP2316			
16	EXGE to P23 to DP2318			
17	EXGE to P23 to DP2319			
18	EXGE to P24 to DP2420			
19	EXGE to P24 to DP2421			
20	EXGE to P24 to DP2422			
21	EXGE to P24 to DP2423			
22	EXGE to P24 to DP2424			
23	EXGE to P24 to DP2425			
24	EXGE to P24 to DP2426			
25	EXGE to P24 to DP2427			
26	EXGE to P24 to DP2431			
27	EXGE to P24 to DP2432			
28	EXGE to P25 to DP2519			
29	EXGE to P25 to DP2520			
30	EXGE to P25 to DP2539			
31	EXGE to P25 to DP2540			
32	EXGE to P25 to DP2541			
33	EXGE to P25 to DP2542			
34	EXGE to P25 to DP2543A			
35	EXGE to P25 to DP2543B			
VII	KVT KOVILPATTI TELEPHONE EXCHANGE			
1	EXGE to 28 to DP2821			
2	EXGE to 28 to DP2824			
3	EXGE to 28 to DP2850			
4	EXGE to 28 to DP2852			
5	EXGE to 75 to DP7504			
6	EXGE to 75 to DP7510			
7	EXGE to 75 to DP7515			
8	EXGE to 75 to DP7554			
9	EXGE to 62 to DP6206			
10	EXGE to 62 to DP6226			

Less than 430V

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ANNEXURE-II

CEA Case No.: TN-702

Name of the Power line: 230 kV Overhead Transmission Line from NTPC Ettayapuram Solar Project (230 MW) to PGCIL Tuticorin, GIS-II.

Map Scale : 1 cm = 500 m

Total Length : 19.080 km

S.R. Value : 5000 Ω-cm

S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
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South Railway: W.384/3/6/3(TN) Dated 13.06.2022

Affected Blocks & Telecom Circuits Details

1	Kovilpatti- Nalli	Out of Consideration Zone	0
2	Kumarapuram- Kadambur		0

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 19-07-2022 } Ass. Director-II
 PED Division
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