



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.: KER-332A :

PTCC proposal of 220 kV D/C transmission line from Kottayam(Pakalomattom) to Ettumanoor under 220/110 kV MCMV Transgrid Kottayam transmission lines package: 6.8 km

Reference:		
S. No.	Reference No.	Dated
(i)	KSEBL: DCE(TS)/EEII/AEEVIII/PTCC/220/110 kV MC/MV Transgrid kottayam/2019-20/1109 ( and details submitted on 27.10.2021)	01.08.2019
(ii)	BSNL: SR-PTCC/SKL/2562/03	22.05.2021
(iii)	Southern Railway: W.384/3/4/561	23.08.2018
(iv)	Defense: B/46937/Sigs 7(b)/1778	31.10.2019

The PTCC proposal submitted vide reference (i) has been examined. The low frequency induction on telecom cables of BSNL and Block & Telecom circuits of Southern 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 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 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.

Digitally signed by PRADEEP SINGH  
Date: 2021.12.05 10:50:55 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/S&T	Southern Railway, Head Quarters Office, S&T Branch, Chennai-600003.	Annexure-II
3.	Deputy Chief Engineer (Tech)	KSEBL; O/o Chief Engineer (Transmission South), Vydyuthi Bhavanam, Pattom, Thiruvananthapuram-695004.	Copy for information

171e

KER-332A

(Annexure-I)

Case No. SKL 2562

SSA: Kottayam

Name of the power line: PTCC Proposal for Construction/Upgradation of lines to 220/110 KV MCMV/DC/MC Lines under Transgrid Kottayam

Ettumanoor 220 KV DC line

Length:

6.8

Kms

Average SR value : 30,000  $\Omega$ cm

Type of BSNL cable: PLIF

Sl.No.	Name of Telecom line	LOP in KMs	MC in Ohms	FC in Amps	IV in Volts
I ETR	ETTUMANOOR TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
4	Exge to DP.4				
5	Exge to DP.5				
6	Exge to DP.6				
II KTH	KOTHANALLOR TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
III KVG	KURUVILANGADU TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
4	Exge to DP.4				
5	Exge to DP.5				
6	Exge to DP.6				
7	Exge to DP.7				
IV VYL	VAYALA TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
V MOP	MONIPPALLY TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
VI NJR	NJEEZHOOOR TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
VII AYK	AYAMKUDY TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
4	Exge to DP.4				
VIII KOY	KADUTHURUTHY TELEPHONE EXCHANGE				
1	Exge to DP.1				

IV less than 430V

Director-II  
Kottayam

2	Exge to DP.2				
3	Exge to DP.3				
4	Exge to DP.4				
5	Exge to DP.5				
6	Exge to DP.6				
IX TYP	THALAYOLAPARAMBU TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				
4	Exge to DP.4				
5	Exge to DP.5				
X VAM	VAIKOM TELEPHONE EXCHANGE				
1	Exge to DP.1				
2	Exge to DP.2				
3	Exge to DP.3				

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

**ANNEXURE -II**

CEA Case No. : KER-332A Name of the Power line: 220 kV D/C transmission line from Kottayam(Pakalomattom) to Ettumanoor under 220/110 kV MCMV Transgrid Kottayam transmission lines package.			Map Scale : 1 cm=500 m Soil Resistivity : 30,000 Ω-cm Total Length : 6.8 km		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.

Southern Railway letter no:- W.384/3/4/561 dated: 23.08.2018

Affected Blocks & Telecom Circuits Details

1	Piravam Road to Vaikam Road	2.6	0.0004	6787	03
2	Vaikam Road to Kurupanitura	6.4	0.0024	7432	18
3	Kurupanitura to Etamur	5.3	0.0029	8868	26
4	Etamur to Kottayam	Out of parallelism			00
5	Kumbalam to Turavur	Out of parallelism			00
6	Turavur to Chertala	0.3	0.0001	9743	01



लतुज / TANUJ  
 सहायक निवेशक-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

Tele : 23019746

KER-332 ?  
(Annexure-III)

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

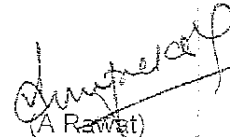
B/46937/Sigs 7(b)/1778/

31 Oct 2019

Kerala State Electricity Board Limited  
Office of the Chief Engineer (Transmission South)  
Vydyuthi Bhavanam, Pattom  
Thiruvananthapuram-695 004, Kerala

CONSTRUCTION OF 220/110KV MCMV LINES UNDER TRANSGRID KOTTAYAM LINE  
PACKAGE-SUBMITTING DOCUMENTS FOR PTCC CLEARANCE OF THE ROUTE-REG.

1. Ref your letter No DCE(TS)/EEIII/AEE VIII/PTCC/220/110 KV MC/MV Transgrid kottayam/2019-20/1109 dt 01 Aug 2019 (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.

  
(A Rawat)  
Maj  
GSO 1 (Comm)  
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

Divisional Engineer Telegraph (PTCC)  
O/d GM (North); BSNL, QA & Inspection Circle,  
CTS Compound, Africa Avenue Road,  
Netaji Nagar, New Delhi-110023

- for information