



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

Case No. : WB-124:	dt: 7/05/2021
PTCC proposal of 400 kV D/C (Quad) Jigmeling to Alipurduar transmission line (WB portion; 53.312 km).	

Reference:		
S. No.	Reference No.	Dated
(i)	PGCIL : ER-II/APD/TLC/PTCC	22.06.2017
(ii)	BSNL: DE/PTCC/ER/EWB040720171721	22.05.2018
(iii)	Northeast Frontier Railway: N/146/2/10 Pt. VI(TC)	19.02.2019
(iv)	Defense: B/46937/ Sigs 7(b)/596	04.09.2017

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on telecom cables of BSNL and Block & Telecom circuits of Northeast Frontier 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 Northeast Frontier 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. The Defense Authority have accorded NOC vide above reference (iv) for the proposed power line ( a copy enclosed at Annexure-III).

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

Encl.: As above.

Director 7.05.21

To,

1.	Divisional Engineer (PTCC), Eastern Zone	BSNL O/o DET(PTCC), Eastern Zone, Inspection & QA Circle, Q.A. Bhawan, EP-GP Block, Sector-V, Salt lake, Kolkata-700091.	Annexure-I & Annexure-III only
2.	Dy.CSTE/Tele/Maligaon	Northeast Frontier Railway O/o General Manager (S&T), Maligaon, Guwahati-781011	Annexure-II only
3.	General Manager (Proj-II)	PGCIL-ERTS-II, CF-17, Action Area-1C, New Town, Kolkata-700156	Copy for information

Particular details of Parallel Telecom alignment proforma

Case No. DE/PTCC/EWB040720171721 Dated: 18/04/2018 Map Scale: 1"=1 Mile / 1 Cm = 500 Mts

SI No.	Telecom Circuit	Marked as	Length of parallelism in Km	Mutual Coupling in Ohms	Effective fault current in Amp.	I.V. in Volts	Safe separation in Yards
1	2	3	4	5	6	7	8
1	<u>Barobisa Telephone Exchange:</u>	1 of Toposheet 1					
a	Barobisa Telephone Exchange to Jorai 200 Pr U/G, Distance 2 Km	1a	500 mtr				
b	Barobisa Telephone Exchange to Rampur 200 Pr U/G, Distance 7 Km	1b	1000 mtr				
2	<u>Kamakhayaguri Telephone Exchange:</u>	2 of Toposheet 1					
a	Kamakhayaguri T/E to Kamakhayaguri Market 800 Pr U/G, Distance 2 Km	2a	1000 mtr				
b	Kamakhayaguri T/E to Dakkhin Parokata 50 Pr U/G, Distance 4 Km	2b	1000 mtr				
3	<u>Bhatibari Telephone Exchange:</u>	3 of Toposheet 1					
-a	Bhatibari T/E to Chickliguri 50 Pr U/G, Distance 5 Km	3a	1500 mtr				
b	Bhatibari T/E to Uttar Bhatibari 50 Pr U/G, Distance 3 Km	3b	1200 mtr				
c	Bhatibari T/E to Karjipara 50 Pr U/G, Distance 2 Km	3c	1000 mtr				
4	<u>Baxirhat Telephone Exchange:</u>	4 of Toposheet 1					
a	Baxirhat T/E to old Baxirhat T/E 2500 Pr U/G, Distance: 1 Km	4a	500 mtr				
b	Baxirhat T/E to Baxirhat Market 500 Pr U/G, Distance 500 mtr	4b	200 mtr				
c	Baxirhat T/E to Bhanukumari 200 Pr U/G, Distance 3 km	4c	1000 mtr				
d	Baxirhat T/E to Jorai more Balakutti 200 Pr U/G, Distance 5 km	4d	2000 mtr				

Total Length : 53.312 Kms Under West Bengal Portion Only

IV Less than 430 V  
 I V Less than 430 V  
 I V Less than 430 V  
 I V Less than 430 V

*[Handwritten Signature]*

सहायक निदेशक-II/Asstt. Dist. Engr-II  
 कक्षाय विद्युत प्रसिक्ता/CEA  
 बिजुत विभाग/Ministry of Power  
 नई दिल्ली/New Delhi-66

Page (2)

Particular details of Parallel Telecom alignment form

Case No. DE/PTCC/EWB040720171721 Dated: 18/04/2018 Map Scale: 1"=1 Mile / 1 Cm = 500 Mts

Name of Power Line: 400 KV D/C (Quad) Jigmeling-Alipurduar Transmission Line Total Length : 53.312 Kms Under West Bengal Portion Only

SI No.	Telecom Circuit	Marked as	Length of parallelism in Km	Mutual Coupling in Ohms	Effective fault current in Amp.	I.V. in Volts	Safe separation in Yards
1	2	3	4	5	6	7	8
5	<b>Baneswar Telephone Exchange:</b>	5 of Toposheet 1					
a	Baneswar T / E to Baneswar Market 2500 Pr U/G, Distance 200 mtr	5a	200 mtr				
b	Baneswar T / E to Rail Gate 200 Pr U/G, Distance 1 km	5b	200 mtr				
c	Baneswar T / E to Bokali Mith 200 Pr U/G, Distance 4 km	5c	2000 mtr				
6	<b>Alipurduar Telephone Exchange:</b>	6 of Toposheet 1					
a	Alipurduar Telephone Exchange to APD Choupathi 6000 Pr U/G, Distance 3 km	6a	1000 mtr				
b	Alipurduar T/ E to Birpara More 4000 Pr U/G, Distance 4 km	6b	1500 mtr				
c	Alipurduar T/ E to Tapikhata 100 Pr U/G, Distance 6 km	6c	2000 mtr				

IV less than 430V



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**ANNEXURE - II**

<b>Case No.:</b> WB-124 <b>Name of the Power Line:</b> 400 KV D/C (Quad) Jigmeling to Alipurduar Transmission line. (WB portion)		Map Scale : 1 cm = 500 m. Route Length : 53.312 km. Soil Resistivity : 10,000 Ohm-cm			
S.No.	Telecom Details	Length of Parallelism (in km)	Mutual Coupling (Ohms)	Fault Current (Amps)	Induced Voltage (Volts)

Northeast Frontier Railway Ref. No. N/146/2/10 Pt. VI(TC) dated 19.02.2019

<u>Affected Blocks &amp; Telecom Circuits Details</u>					
1	New Coochbehar to New Baneswar	2.1	0.0006	11699	07
2	New Baneswar to New Alipurduar	7.5	0.0022	11869	26
3	New Alipurduar to Samuktala Road	0.4	0.0001	11627	02
4	Alipurduar Court to Alipurduar	0.3	0.0001	11316	01
5	Alipurduar to Baneswar	7.8	0.0025	12155	31
6	Baneswar to New Coochbehar	2.1	0.0005	11808	06



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-66

FR 60-104

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)/596/

04 Sep 2017

Mr S.K. Pramanik  
General Manager (Projects -2)  
Eastern Region Transmission System - II,  
Babupara, PO. & Dist - Alipurduar, - 736121 (WB)

**PTCC APPROVAL FOR 400KV D/C (QUAD) JIGMELING - ALIPURDUAR  
TRANSMISSION LINE (LENGTH = 53-334Kms UNDER THE STATE OF WEST  
BENGAL) AT HVDC CONVERTER STATION, ALIPURDUAR**

1. Reference your letter No ER-II/APD/TLC/PTCC/3535/ dt 16 Jun 2017.
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.

(AV Umdekar)  
Lt Col  
GSO 1 (Comn)  
for SO-in-C

**Enclosures** (As above)

**Copy to :-**

✓ Chief Engineer, (PTCC), CEA,  
NREB Complex  
18-A, Shaheed Jeet Singh Marg,  
Katawaria Sarai, New Delhi - 110016

: for info and necessary action.

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