



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली संचार विकास प्रभाग

Power System Communication Development Division



CEA Case No.: ORS-231		
PTCC proposal of 400 kV D/C Transmission Line from ACPP-II JSPL to PGCIL, Phulpada, Angul (Length- 33.602 km)- regd.		
S. No	Reference No.	Dated
(i)	REF: JSPL/TL/PTCC/24-25/05 (Received on 28.02.2025)	18.12.2024
(ii)	BSNL: DE/ER/PTCC/EWB070120256478/04 (Received on 09.03.2026)	16.01.2026
(iii)	East Coast Railway: ECoR/S&T/BBS/Tele/PTCC/57	01.04.2025
(iv)	Defense: B/46937/Sigs-7(b)/4850	18.08.2025

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of BSNL and East Coast Railway with respect to details furnished vide above reference (ii) and (iii) respectively have been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL and 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. DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (iv).

EPR zone for proposed S/s is mentioned below:

Name of the proposed Substation	Half diagonal distance , D/2 (mts)	Fault Current I (kA)	Resistance of Earth Mat, R (ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7kV	d (mts) at 10kV
400 kV ACPP-II PSS	145	20	0.12	665	91	N.A	N.A

As per the Telecom Details submitted by BSNL vide above reference (ii), there is no Telephone Exchange lying within the EPR zone of proposed 400 kV ACPP-II PSS.

Taking above into consideration, necessary action for issuance of PTCC route approval (RAC) shall be taken under intimation to this office in the stipulated period as specified in PTCC Manual and subsequent CLPTCC meetings.

As per the decision taken in 111th and 112th CLPTCC meeting, necessary instructions for “Deemed Energization approval” shall be specified while issuing RAC.

Digitally signed by
Suman Kumar Maharana
Date: 09-04-2026
17:31:04
Chief Engineer

To,

1.	Divisional Engineer (PTCC), Eastern Zone	BSNL QA & Inspection Circle, QA Bhawan, EP-GP Block, Sector-V, Saltlake, Kolkata	Annexure-I
2.	Dy.CSTE/Tele&NW/ECOR	O/o Principal Chief Signal & Telecom Engineer, Ground Floor, North Block, Rail Sadan, Bhubaneswar -17	Annexure-II
3.	Managing Director, Jindal Steel & Power Limited	Jindal Centre, Tower-B, Plot No. 2, Sector-32, Gurugram 122001	Copy for information.

ANNEXURE-I

CEA Case No.: ORS-231			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C Transmission Line from ACPP-II JSPL to PGCIL, Phulpada, Angul			Total Length : 33.602 km		
			S.R. Value : 20000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL : DE/ER/PTCC/EWB070120256478/04			Dated 16.01.2026		
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	800 PAIR UG COPPER CABLE				IV Less than 430
2.	400 PAIR UG COPPER CABLE				
3.	200 PAIR UG COPPER CABLE				
4.	100 PAIR UG COPPER CABLE				
5.	50 PAIR UG COPPER CABLE				
6.	800 PAIR UG COPPER CABLE				
7.	400 PAIR UG COPPER CABLE				
8.	200 PAIR UG COPPER CABLE				
9.	100 PAIR UG COPPER CABLE				
10.	400 PAIR UG COPPER CABLE				
11.	200 PAIR UG COPPER CABLE				
12.	400 PAIR UG COPPER CABLE				
13.	200 PAIR UG COPPER CABLE				
14.	100 PAIR UG COPPER CABLE				
15.	100 PAIR UG COPPER CABLE				
16.	50 PAIR UG COPPER CABLE				

ANNEXURE-II

CEA Case No.: ORS-231			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C Transmission Line from ACPP-II JSPL to PGCIL, Phulpada, Angul			Total Length : 33.602 km		
			S.R. Value : 20000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
East Coast Railway: ECoR/S&T/BBS/Tele/PTCC/57					
Dated 01.04.2025					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	KPJG-JSPL Railway Section	3.0	0.0048	24000	115
2.	JSPL-ANSL Railway Section	Out of Parallelism			