



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. : BHR-167, JHR-54		
PTCC approval for 400 kV D/C North Karanpura to Gaya Transmission Line [Part-I (Bihar portion)-Length 29.20 km and Part-II(Jharkhand portion)- Length- 69.20 km, Combined Total Length-98.41 km]-Regd.		
S. No	Reference No.	Dated
(i)	NKTL: NKTL/PTCC/Bihar/07-2020	27.07.2020
(ii)	NKTL: Letter No dated 21.07.2020	21.07.2020
(iii)	NKTL: e-mail	20.09.2025
(iv)	BSNL: DE/PTCC/ER/EBR041120200002/IV/1 (Received via e-mail dated: 07.10.2025)	22.06.2023
(v)	BSNL: DE/PTCC/ER/EJH041220200001/IV/1 (Received via e-mail dated: 07.10.2025)	22.06.2023
(vi)	East Central Railway: 168678	13.06.2023
(vii)	East Central Railway: 231185/331	26.03.2025
(viii)	Defense: B/46937/Sigs7(b)/2111	07.10.2020
(ix)	Defense: B/46937/Sigs7(b)/2265	24.02.2021

The PTCC proposals submitted vide reference (i), (ii) and (iii) has been examined. The LF induction on Block and Telecom circuits of BSNL with respect to details furnished vide above reference (iv) & (v) have been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I & Annexure-II respectively.

The LF induction on Block and Telecom circuits of East Central Railway with respect to details furnished vide above reference (vii) have been computed. The voltage likely to be induced on paralleling Block and Telecom circuits of East Central Railway under Single Line to Ground fault condition are enclosed at Annexure-III.

The screening factors as applicable have been considered. DG Signals, MoD vide reference (viii) & (ix) have issued No Objection Certificate (NOC). Dy.CSTE, East Central Railway for a part of transmission line have issued No Objection Certificate (NOC) vide reference (vi).

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.

Chief Engineer

To,

1.	Divisional Engineer (PTCC), Eastern Zone	BSNL QA & Inspection Circle, QA Bhawan, EP-GP Block, Sector-V, Kolkata	
2.	General Manager (S&T)	O/o GM (S&T) East Central Railway, Hajipur	
3.	Project Manager North Karanpura Transmission Limited	Sunita Sadan, 1 st Floor Ashram Marg Near Military Firing Range Ranchi, Jharkhand	Copy information. for

ANNEXURE-I

CEA Case No.: BHR-167 & JHR-54			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C North Karanpura to Gaya Transmission Line			Total Length : 98.41 km		
			S.R. Value : 10000 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/PTCC/ER/EBR041120200002/IV/1

Dated 22.06.2023

Affected Blocks & Telecom Circuits Details

1.	OFC cable from Dobhi to Barachatti	IV less than 430 V			
2.	OFC cable from Bodh Gaya to Dobhi	IV less than 430 V			
3.	Bhadeya T/E	IV calculation not required			
4.	Bara BTS				
5.	Dubhi BTS				
6.	Barachhathi BTS				
7.	Bodh Gaya Exchange				

ANNEXURE-II

CEA Case No.: BHR-167 & JHR-54			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C North Karanpura to Gaya Transmission Line			Total Length : 98.41 km		
			S.R. Value : 10000 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/PTCC/ER/EBR041120200001/IV/1					
Dated 22.06.2023					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Bagra More Mobile Tower		IV calculation not required		
2.	Lamta Mobile Tower		IV calculation not required		
3.	Main Telephone Exchange Cjatra		IV calculation not required		
4.	OFC Chatra to Jouri route		IV less than 430 V		
5.	OFC Bagra to Simariya route		IV less than 430 V		
6.	OFC Chatra to Bagra More route		IV less than 430 V		

ANNEXURE-III

CEA Case No.: BHR-167 & JHR-54			Map Scale : 1 cm= 500 m		
Name of the Power line: 400 kV D/C North Karanpura to Gaya Transmission Line			Total Length : 98.41 km		
			S.R. Value : 10000 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 Central Railway: 231185/331 Dated 26.03.2025					
<u>Affected Blocks & Telecom Circuits Details</u>					
1.	Bhukru to Phulbasia	3.5	0.0027	31000	85
2.	Phulbasia to Manatu	Out of Parallelism			