



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**

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<b>CEA Case No. : RAJ-768</b>		
<b>PTCC approval for 765 kV D/C Beawar to Dausa Transmission Line [Part-I Length-122.5 km and Part-II Length- 114.701 km, Combined Total Length-237.201 km]-Regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	POWERGRID: NR-I/PBDTL/Ajmer/2025/800	27.08.2025
(ii)	POWERGRID: NR-I/PBDTL/Jaipur/2025/800	09.04.2025
(iii)	POWERGRID e-mail	02.09.2025
(iv)	BSNL: DET/PTCC/ND/DV-10548/Raj-1596/2025-2026	12.06.2025
(v)	BSNL: DET/PTCC/ND/DV-10559/Raj-1605/2025-26	07.07.2025
(vi)	North Western Railway: SG/158/NWR/PTCC/1035	24.01.2025
(vii)	North Western Railway: SG/158/NWR/PTCC/1013	20.11.2024
(viii)	Defense: B/46937/Sigs7(b)/4276	22.01.2025
(ix)	Defense: B/46937/Sigs7(b)/4117	30.10.2024

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) 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.

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

The screening factors as applicable have been considered. DG Signals, MoD vide reference (viii) & (ix) have issued No Objection Certificate (NOC). DET, PTCC NZ, BSNL for a part of transmission line have issued No Objection Certificate (NOC) vide reference (v).

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
765 kV Dausa S/s	436	44.1	0.00937	N.A	N.A	N.A	N.A
765 kV Beawar S/s	332	44.1	0.0664	1929	1164	N.A	N.A

As per the Telecom Details submitted by BSNL vide above reference (iv), there is no Telephone Exchange lying within the EPR zone of proposed 765 kV Beawar and Dausa S/s.

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 111<sup>th</sup> and 112<sup>th</sup> CLPTCC meeting, necessary instructions for “*Deemed Energization approval*” shall be specified while issuing RAC.

Encl.: As above

**Chief Engineer**

**To,**

1.	Divisional Engineer (PTCC), Northern Zone	BSNL, O/o GM (North), QA & Inspection Circle D-Tax Building, Eastern Court, Janpath New Delhi-110001	
2.	GM (S&T)	North Western Railway, Headquarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur - 302017	
3.	SR. DGM POWERGRID	Powergrid Beawar Dausa Transmission Limited Ajmer	Copy for information.
4.	SR. DGM POWERGRID	Powergrid Beawar Dausa Transmission Limited Jaipur	Copy for information.

**ANNEXURE-I**

<b>CEA Case No.:</b> RAJ-768			<b>Map Scale</b> : 1 cm= 500 m		
<b>Name of the Power line:</b> 765 kV D/C Beawar to Dausa Transmission Line			<b>Total Length</b> : 237.201 km		
			<b>S.R. Value</b> : 20000 Ohm-cm		
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>
<b>BSNL:</b> DET/PTCC/ND/DV-10548/Raj-1596/2025-2026 Dated 12.06.2025					
<b><u>Affected Blocks &amp; Telecom Circuits Details</u></b>					
1.	Nagelaw to Mangaliyawas Armoured OFC		IV less than 430 V		
2.	Srinagar to Kanpura Armoured OFC		IV less than 430 V		

**ANNEXURE-II**

<b>CEA Case No.: RAJ-768</b>			<b>Map Scale : 1 cm= 500 m</b>		
<b>Name of the Power line: 765 kV D/C Beawar to Dausa Transmission Line</b>			<b>Total Length : 237.201 km</b>		
			<b>S.R. Value : 20000 Ohm-cm</b>		
<b>S.No.</b>	<b>Telecom. Details</b>	<b>Length of Parallelism in Km.</b>	<b>Mutual Coupling in Ohms.</b>	<b>Effective Fault current in Amps.</b>	<b>I.V in Volts.</b>

**North Western Railway: SG/158/NWR/PTCC/1035 Dated 24.01.2025**

**Affected Blocks & Telecom Circuits Details**

1.	Ajmer to Daurai	Out of Parallelism			
2.	Daurai to Saradhana	Out of Parallelism			
3.	Saradhana to Makrera				
4.	Makrera to Mangaliyawas	3.5	0.003	26000	78
5.	Mangaliyawas to Lamana	2.5	0.0043	27500	118
6.	Lamana to Kharwa	Out of Parallelism			
7.	Ajmer to Adarsh Nagar	Out of Parallelism			
8.	Adarsh Nagar to Hatundi	Out of Parallelism			
9.	Hatundi to Rajosi	2.0	0.00287	28500	82
10.	Rajosi to Nasirabad	Out of Parallelism			
11.	Nasirabad to Jharwasa	Out of Parallelism			
12.	Jharwasa to Bandanwara	Out of Parallelism			
13.	Bandanwara to Singhawal	Out of Parallelism			

**ANNEXURE-III**

CEA Case No.: RAJ-768 Name of the Power line: 765 kV D/C Beawar to Dausa Transmission Line			Map Scale : 1 cm= 500 m Total Length : 237.201 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.

North Western Railway: SG/158/NWR/PTCC/1013 Dated 20.11.2024

**Affected Blocks & Telecom Circuits Details**

1.	Sanganer to Sheodaspura-Padampura	3.5	0.0027	31000	85
2.	Sheodaspura-Padampura to Chaksu	Out of Parallelism			
3.	Haksu to Channani	Out of Parallelism			
4.	Dausa to Baniyana	Out of Parallelism			
5.	Baniyana to Salempura Arniya Khurd	Out of Parallelism			
6.	Baniyana to Lalsot	Out of Parallelism			