



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**  
 \*\*\*\*\*

<b>CEA Case No. : RAJ-784</b>		
<b>Induced Voltage (IV) calculation for PTCC proposal of 220 kV S/C line on D/C tower from 220/33 kV PSS for 200 MW Solar Power project of M/s Avaada Solar Power Private Limited to 220 kV Badnu GSS of RVPN. [Length- 10 km]-Regd.</b>		
<b>S. No</b>	<b>Reference No.</b>	<b>Dated</b>
(i)	Avaada Solar Power Private Limited: Avaada/Badhnu/PTCC/01	14.01.2025
(ii)	BSNL: DE/PTCC/NZ/ BSNL-TD/DV-10539/RAJ-1589/2025-26	16.05.2025
(iii)	North Western Railway: SG/158/NWR/PTCC/1033	24.01.2025
(iv)	Defense: B/46937/Sigs7(b)/4395	08.04.2025

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on Block and Telecom circuits of North Western Railway with respect to details furnished vide above reference (iii) has 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-I. The screening factors as applicable have been considered. DET-PTCC, NZ BSNL and DG Signals, MoD has issued No Objection Certificate (NOC) vide reference (ii) & (iv) respectively.

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
220/33 kV PSS for 200 MW Avaada Solar Plant	80	25	0.31	1362	874	9	N.A

As per the Telecom Details submitted by BSNL vide above reference (ii), no telephone exchange of BSNL is falling within the EPR zone of proposed Substation.

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.

**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) NWR	North Western Railway, Headquarter Office, Room No. 136, First Floor, Near Jawahar Circle, Jaipur - 302017	
3.	Avaada Solar Power Private Limited	C-11, Sector-65 Gautama Budha Nagar, Noida, UP	Copy for information.

**ANNEXURE-I**

<b>CEA Case No.:</b> RAJ-784			<b>Map Scale</b> : 1 cm= 500 m		
<b>Name of the Power line:</b> 220 kV S/C line on D/C tower from 220/33 kV PSS for 200 MW Solar Power project of M/s Avaada Solar Power Private Limited to 220 kV Badnu GSS of RVPN.			<b>Total Length:</b> 10 km		
			<b>S.R. Value</b> : 7500 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>

North Western Railway: SG/158/NWR/PTCC/1033

Dated 24.01.2025

**Affected Blocks & Telecom Circuits Details**

1.	Banisar R/s to Sudsar R/s	Out of Parallelism
2.	Sudsar R/s to Napasar R/s	Out of Parallelism