



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. : RAJ-877		
Induced Voltage (IV) Calculation for PTCC proposal of 220 kV D/C line from 500 MW NTPC REL Solar Power PSS at Village Kalasar to Bikaner-III S/s (Length: 14.036 km)		
S. No	Reference No.	Dated
(i)	NREL/TXL/Sec-164/005	02.07.2025
(ii)	BSNL: DE/PTCC/NZ/BSNL-TD/DV-10610/RAJ-1640/2025-26	11.11.2025
(iii)	North Western Railway: SG/158/NWR/PTCC/1166	19.08.2025
(iv)	Defense: B/46937/Sigs 7(b)/4938	12.09.2025

The PTCC proposal submitted vide reference (i) has been examined. DET (PTCC), NZ, BSNL vide reference (ii), Deputy CSTE, North Western Railway vide reference (iii) and DG Signals, MoD vide reference (iv) has given their NOC for charging the line.

EPR Zones for proposed substations are mentioned below.

Name of the proposed SS	Half Diagonal Distance, D/2 (mts)	Fault Current, I (kA)	Resistance of earthmat, R (Ohms)	d (mts) at 430 V	d (mts) at 650 V	d (mts) at 7 kV	d (mts) at 10 kV
500 MW Solar Power PSS of NTPC	104.7	50	0.47	5617	3681	247	141

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), Northern Zone	BSNL, O/o PGM(North), QA & Inspection Circle D-Tax Building, Eastern Court, Janpath, New Delhi-110001
2.	M/s NTPC Renewables Energy Limited	NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi – 110 003