



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-954</b>		
<b>Induced Voltage (IV) calculation for PTCC proposal of 400 kV S/C line on D/C tower from Common Pooling Substation -2 (PSS-2) of M/s ReNew Solar (Shakti Six) Private Limited to Common Pooling Substation -1 (PSS-1) of M/s ReNew Solar (Shakti Six) Private Limited at Bhadla (Length: 20.22 kms)</b>		
S. No	Reference No.	Dated
(i)	RSSSPL/CEA/PTCC-02	24.11.2025
(ii)	E-mail	02.03.2026
(iii)	BSNL: DE/PTCC/NZ/BSNL-TD/ DV-10675/Raj-1686 /2025-26	03.02.2026
(iv)	North Western Railway: SG.158/NWR/PTCC/1268	12.01.2026
(v)	Defense: B/46937/Sigs-(b)/5397	07.01.2026

The PTCC proposal submitted vide reference (i) and (ii) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above reference (iii) have been computed. The voltage likely to be induced on paralleling communication cables of BSNL under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered

GM (S&T), North Western Railway, vide reference (iv), and ADG (Telecom) MoD, vide reference (v), have issued their No Objection Certificates (NOCs) for charging of the line.

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 7 kV	d (mts) at 10 kV
Common Pooling Substation -2 (PSS-2) of M/s ReNew Solar (Shakti Six) Private Limited	53.44	26.46	0.143	417	258	NA	NA
Common Pooling Substation -1 (PSS-1) of M/s	66.46	37.68	0.209	1151	739	8	NA

ReNew Solar (Shakti Six) Private Limited							
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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.

Encl.: As above

**Chief Engineer**

**To,**

1.	Divisional Engineer (PTCC), Western Zone	QA & Inspection circle, 1 <sup>st</sup> floor, D- wing, BSNL Admin Bldg., Juhu Tara Road, Santacruz (West), Mumbai-400054	
2.	M/s ReNew Solar (Shakti Six) Private Limited	ReNew Hub, Commercial Block-1, Zone-6, Golf Course Road, DLF City Phase-V, Gurugram – 122 009	Copy for information.

**ANNEXURE-I**

<b>CEA Case No.: RAJ-954</b>					
<b>Name of the Power line:</b> 400 kV S/C line on D/C tower from Common Pooling Substation -2 (PSS-2) of M/s ReNew Solar (Shakti Six) Private Limited to Common Pooling Substation -1 (PSS-1) of M/s ReNew Solar (Shakti Six) Private Limited at Bhadla			<b>Map Scale</b> : 1 cm= 500 m		
			<b>Total Length</b> : 20.22 km		
			<b>S.R. Value</b> : 15,000 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 Letter No DE/PTCC/NZ/BSNL-TD/ DV-10675/Raj-1686 /2025-26 Date: 03.02.2026</b>					
1.	Kanasar Circle to Kanasar armoured OFC		IV less than 430 V		