

I/34732/2024



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. : AND-736		
Induced Voltage (IV) Calculation for PTCC proposal of 400 kV S/C line on D/C tower from 400/33 kV 675 MW Solar Pooling Substation at Alamuru Village, Nandyal to Central Pooling Switching Station, Kalava Village, Kurnool (Length: 24.621 km)		
S. No	Reference No.	Dated
(i)	NIL	29.11.2023
(ii)	AMGEPL E-mail:	22.03.2024
(iii)	AMGEPL E-mail:	24.03.2024
(iv)	BSNL: SR-PTCC/STS5691/6	21.03.2024
(v)	South Central Railway: SG.85/4/3/PTCC/SCR/2023-24/AP 24 RTD	06.03.2024
(vi)	Defense: B/46937/Sigs7(b)/3628	15.02.2024

The PTCC proposal submitted vide reference (i), (ii) and (iii) has been examined. The LF induction on communication circuits of South Central Railway with respect to details furnished vide above references (v) has been computed. The voltage likely to be induced on paralleling communication cables of South Central Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET, PTCC, BSNL (Southern Zone) vide reference (iv) and DG Signals, MoD vide reference (vi) have issued their No Objection Certificate (NOC).

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
400/33 kV 675 MW Solar Pooling Substation at Alamuru Village	78	24	0.3	1228	786	2	NA
400 kV GIS Greenko AP01 IREP Pvt Ltd. Central Pooling S/s, Kalva village	153.6	33.39	0.66	7718	5054	330	185

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As per the details submitted by BSNL vide reference (iv) above, no telephone exchange is falling in the EPR zone of the proposed substations.

Taking the above into consideration, necessary action for issuance of PTCC route approval may be taken under intimation to this office.

Encl.: As above

Chief Engineer

To,

1.	Divisional Engineer (PTCC)	O/o CGM, QA & Inspection circle, 2 nd Floor, Sanchar complex, WMS compound, Jayanagar, 5 th block, 9 th main, 47 th cross, Bengaluru- 560 041	
2.	Principal Chief Signal & Telecom Engineer	South Central Railway, 7 th floor, Rail Nilayam, Secunderabad – 500 025	
3.	M/s AM Green Energy Private Limited	A-74, Nizamuddin East, Humayun Tomb, New Delhi – 110 013	Copy for information

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ANNEXURE-I

CEA Case No.: AND-736		Map Scale : 1 cm= 500 m			
Name of the Power line: 400 kV S/C line on D/C tower from 400/33 kV 675 MW Solar Pooling Substation at Alamuru Village, Nandyal to Central Pooling Switching Station, Kalava Village, Kurnool		Total Length : 24.621 km			
		S.R. Value : 30000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
South Central Railway: SG.85/4/3/PTCC/SCR/2023-24/AP 24 RTD Date: 06.03.2024					
1	Panyam (PNM) to Krishnammakona (KEF)	Out of parallelism			
2	Krishnammakona (KEF) to Bugganipalli (BEY)	3.6	0.0162	14012	227
3	Bugganipalli (BEY) to Betamcherla (BMH)	2.7	0.0204	8187	167
4	Betamcherla (BMH) to Rangapuram (RGM)	Out of parallelism			

AND-736


B/46937/Sigs 7(b)/3628

Feb 2024

AM Green Energy Private Limited
Regd Off: A-74, Nizamuddin East
Humayu Tomb, New Delhi-110013, India

**PTCC PROPOSAL FOR CONSTRUCTION OF 400KV (TWIN ACSR MOOSE)
SINGLE CIRCUIT STRUNG ON DOUBLE CIRCUIT TOWER TRANSMISSION
LINE FROM 33/400KV 675MW SOLAR POOLING SUB-STATION AT ALAMURU
(VILLAGE), PANYAM (MANDAL), NANDYAL (DISTRICT), ANDHRA PRADESH
TO CENTRAL POOLING SWITCHING STATION (CPSS) AT KALAVA
(VILLAGE), ORVAKAL (MANDAL), KURNOOL (DISTRICT), ANDHRA PRADESH**

1. Refer your letter No Nil dt 29 Nov 2023 (copy att).
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documents alongwith map sheets (in original) are returned herewith for your further necessary action.


(Puneet Lakhanpal)
Lieutenant Colonel
General Staff Officer Grade 1 (Communication)
for Additional Director General (Telecommunication)

Enclosures : As above

Copy to :-

✓ The Director (PTCC), CEA
Power Communication Development Division
NRPC Complex, 18-A Shaheed Jeet Singh Marg
Katwaria Sarai, New Delhi - 110016

- for information

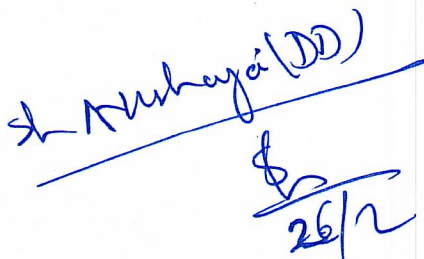
The DET(PTCC), Northern Zone
Bharat Sanchar Nigam Limited
O/o PGM (North), QA & Inspection Circle,
D-Tax Building, Eastern Court, Janpath
New Delhi-110001

Central Electricity Authority

PCD Division

Diary No. 22/2

Date: 22/2/2024


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