



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-743		
Induced Voltage (IV) Calculation for PTCC proposal of 33 kV line (Dog & Panther) on RSJ Poles from proposed 400/33 kV 314.1 MW Wind Pooling Substation of M/S AM Green Energy Private Ltd. at Krishnapuram Village, Kurnool to proposed SGRE Feeder No. 1 07 WTGs (comprising of 07 Nos. of 33 kV SF6 switchgear in Gonegandla, Kodumur & Krishnagiri at Kurnool District) (Length: 9.1 kms)		
S. No	Reference No.	Dated
(i)	AMGEPL/PTCC-Wind/2023-24/06	01.02.2024
(ii)	AMGEPL E-mail:	22.03.2024
(iii)	AMGEPL E-mail:	14.05.2024
(iv)	AMGEPL E-mail:	20.05.2024
(v)	BSNL: SR-PTCC/SAP5807/6	14.05.2024
(vi)	South Central Railway: SG.85/4/3/PTCC/SCR/2023-24/AP 27 RC	26.03.2024

The PTCC proposal submitted vide reference (i), (ii) and (iii) has been examined. The LF induction on communication circuits of BSNL with respect to details furnished vide above references (v) has 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 (Tele), South Central Railway vide reference (vi) has 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 314 MW Wind Power Pooling Substation at Krishnapuram Village, Kurnool	68.09	28	0.1225	475	291	NA	NA
33 kV Wind power unit S/s for SGRE Feeder No. 1	21.21	15	0.52	364	233	2	NA

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

Telecommunication details from DG Signals, MoD are awaited however, vide reference (iv) above, M/s AMGEPL have informed that all construction related work of the transmission line has completed and the line is awaiting charging due to want of PTCC approval. So as to charge the subject cited transmission line as per schedule, M/s AMGEPL has requested for issuance of provisional PTCC clearance and has submitted an undertaking that in case of any impact on telecom asset/ personnel of Defense due to charging of this transmission line, M/s AMGEPL shall take all remedial action.

Taking above into consideration, necessary action for issuance of provisional PTCC route approval may be taken under intimation to this office. LF induction on telecommunication circuits of Defense, will be communicated after the receipt of details from DG Signals, MoD.

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.	M/s AM Green Energy Private Limited	A-74, Nizamuddin East, Humayun Tomb, New Delhi – 110 013	Copy for information

ANNEXURE-I

CEA Case No.: AND-743			Map Scale : 1 cm= 500 m		
Name of the Power line: 33 kV line (Dog & Panther) on RSJ Poles from proposed 400/33 kV 314.1 MW Wind Pooling Substation of M/S AM Green Energy Private Ltd. at Krishnapuram Village, Kurnool to proposed SGRE Feeder No. 1 07 WTGs (comprising of 07 Nos. of 33 kV SF6 switchgear in Gonegandla, Kodumur & Krishnagiri at Kurnool District)			Total Length : 9.1 km		
			S.R. Value : 25000 Ohm-cm		
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
BSNL: SR-PTCC/SAP5807/6 Date: 14.05.2024					
1	Kodumur TE to RTC Route			IV less than 430 V	
2	Kodumur TE to Kondapeta Route			IV less than 430 V	
3	Kodumur TE to Varkur Route			IV less than 430 V	
4	Kodumur TE to Kota Route			IV less than 430 V	
5	Kodumur TE to Police station Route			IV less than 430 V	
6	Kodumur TE to Chowdeshwari Route			IV less than 430 V	