

# 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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CEA Case No.: KNK-1101  Induced Voltage (IV) calculation for PTCC proposal of 220 kV S/C line on D/C towers from 400/220/33 kV PSS at Firozabad, Kalaburgi to proposed 220/33 kV 230 MW Solar power S/s of M/s Avaada MHClean Pvt. Ltd at Hungunto village, Gulbarga (Length: 10.994 Kms) - regd.						
S. No	Reference No.	Dated				
(i)	CEE/SLDC/PTCC/F-3717/9438-46	19.03.2024				
(ii)	BSNL: SR-PTCC/SKT5789/2	06.05.2024				
(iii)	Central Railway: N.153/PTCC/220kV/KAR-119	22.04.2024				
(iv)	Defense: B/46937/Sigs 7(b)/3823	04.06.2024				

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

EPR zone for the proposed substation is mentioned below:

Et ix zone for the proposed substation 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 230	72.8	0.2	35	1112	702	NT A	NA
	12.8	0.2	33	1112	702	NA	NA
MW Solar power							
S/s of M/s Avaada							
MHClean Pvt. Ltd							
at Hungunto							
village, Gulbarga							

As per the details submitted by BSNL vide reference (ii) above, no telephone exchanges are falling in the EPR zone of the proposed substation.

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

**Chief Engineer** 

## To,

1. Divisional			O/o CGM, QA&I circle,	
Engineer (PTCC),		Engineer (PTCC),	2 <sup>nd</sup> floor, Sanchar Complex, WMS Compound,	
	Southern Zone		Jayanagar, 5 <sup>th</sup> block, 9 <sup>th</sup> main, 47 <sup>th</sup> cross,	
			Bengaluru- 560 041	
2. GM (S&T)		GM (S&T)	Central Railway, Office of PCSTE, 3 <sup>rd</sup> Floor,	
			Annex building, CSMT Mumbai – 400 001	
ĺ	2	Chief Engineer,	KPTCL, State Load Despatch Centre, #28, R.C.	Conv. for information
3.		Electricity	Cross Road, Bangalore - 560009	Copy for information

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# **ANNEXURE-I**

Name of kV PSS	se No.: KNK-1101  If the Power line: 220 kV S/C line on D/C towers for the Firozabad, Kalaburgi to proposed 220/33 kV/s of M/s Avaada MHClean Pvt. Ltd at Hungunto v	230 MW Solar	Total Length	: 1 cm= 500 m : 10.994 km : 20000 Ohm-cn		
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.	
	BSNL: SR-PTCC/SKT	5789/2 <b>Date</b> : 06	5.05.2024			
I	Shahabad Telephone Exchange					
1	Exchange to Shantnagar (A-A1)					
2	Exchange to Wadi Cross (A-A2)					
3	Exchange to ABL Gate (A-A3)		Out of parallelism			
4	Shantnagar to ABL Society (A-A4)					
5	Shantnagar to Bhankur cross (A-A5)					

### **ANNEXURE-II**

CEA Case No.: KNK-1101  Name of the Power line: 220 kV S/C line on D/C towers from 400/220/33 kV PSS at Firozabad, Kalaburgi to proposed 220/33 kV 230 MW Solar power S/s of M/s Avaada MHClean Pvt. Ltd at Hungunto village, Gulbarga			Map Scale : 1 cm= 500 m  Total Length : 10.994 km  S.R. Value : 20000 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelis m in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.	
	Central Railway: N.153/PTCC/22	20kV/KAR-119	Date: 22.04.2	024		
1	Martur to Shahbad	Out of parallelism				
2	Shahbad to Wadi	Out of parallelism				

E-mail: webstar@nic.in

Directorate General of Signals
Signals - 7
General Staff Branch
Integrated HQ of MoD, (Army)
DHQ PO, New Delhi – 110011

B/46937/Sigs 7(b)/3823

0կJun 2024

Office of the Chief Engineer Electricity, Karnataka Power Transmission Corporation Limited State Load Despatch Centre, # 28, R.C. Cross Road, Bengaluru – 560 009

PTCC PROPOSAL FOR CONSTRUCTION OF 220KV SC LINE ON DC TOWERS
FROM EXISTING 400/220/33KV POLLING STATION AT KALABURAGI NEAR
FIROZABAD VILLAGE TO THE PROPOSED 220/33KV ON 230 MW SOLAR
POWER SWITCHY ARD SS OF M/S AVAADA MHCLEAN PVT LTD AT
HUNGUN O VILLGAGE IN GULBURGA ALUK & DISTRICT

- 1. Refer your letter No CEE/SLDC/PTCC/F-3717/9438-46 dt 19 Mar 2024 (copy att).
- 2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheets 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:-

Chief Engineer, PSCD Division Central Electricity Authority Room No 702 (North Wing) Sewa Bhawan, R.K. Puram, Sector-1 New Delhi-110066

- 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