



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. : GUJ-877		
Induced Voltage (IV) Calculation for PTCC proposal for 765 kV D/C Khavda (KPS-II) – Lakadiya transmission line (Length: 177.25 km)		
S. No	Reference No.	Dated
(i)	KPS2/ADMIN/NOC/2024/359	31.03.2024
(ii)	BSNL: IC/MBI/PTCC/GUJ-2975	03.09.2024
(iii)	Western Railway: SG.158/28/12/1384	06.06.2024
(iv)	Defense: B/46937/Sigs7(b)/3866	23.07.2024

The PTCC proposal submitted vide reference (i) has been examined. The LF induction on communication circuits of Western Railway with respect to details furnished vide above references (iii) has been computed. The voltage likely to be induced on paralleling communication cables of Western Railway under Single Line to Ground fault condition are enclosed at Annexure-I. The screening factors as applicable have been considered. DET (PTCC), WZ, BSNL vide reference (ii) and DG Signals, MoD vide above reference (iv) (enclosed as Annexure-II) have issued their No Objection Certificate (NOC) for charging of 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
765 kV Khavda (KPS-II) SS	179.7	37.202	0.0095	NA	NA	NA	NA

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, 1st floor, D- wing, BSNL Admin Bldg., Junu Tara Road, Santacruz (West), Mumbai-400054
2.	GM (S&T), Western Railway	Office of PCSTE, 5 th Floor, Station Building, Churchgate, Mumbai – 400 020
3.	M/s Khavda II-A Transmission Limited	Adani Corporate House, Shantigram, S G Highway, Ahmedabad – 382 420

ANNEXURE-I

CEA Case No.: GUJ-877		Map Scale : 1 cm= 500 m			
Name of the Power line: 765 kV D/C Khavda (KPS-II) – Lakadiya transmission line (Length: 177.25 km)		Total Length : 177.25 km			
		S.R. Value : 7500 Ohm-cm			
S.No.	Telecom. Details	Length of Parallelism in Km.	Mutual Coupling in Ohms.	Effective Fault current in Amps.	I.V in Volts.
Western Railway: SG.158/28/12/1384 Date: 06.06.2024					
1.	Samakhiyali to Lakadiya	Out of IV consideration zone			
2.	Lakadiya to Shivilakha	0.7	0.00028	35714	10
3.	Shivilakha to Chitrod	0.5	0.00012	33333	4
4.	Chitrod to Kidiyanagar	Out of parallelism			

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

GUJ-877

B/46937/Sigs 7(b)/3866/

Jul 2024

General Manager
Khavda II-A Transmission Limited
Adani Corporate House, Shantigram,
S G Highway, Ahmedabad 382 420, Gujarat, India

**INTER-STATE TRANSMISSION SYSTEM FOR TRANSMISSION SCHEME FOR
EVACUATION OF 4.5GW RE INJECTION AT KHAVDA PS UNDER PHASE II –
PART A APPLICATION FOR NOC FOR PTCC CLEARANCE FOR 765KV D/C
KHAVDA (KPS2)- LAKADIA TRANSMISSION LINE**

1. Refer your letter No. KPS2/ADMIN/NOC/2024/359 dt 31 Mar 2024.
2. **No Objection Certificate (NOC) is accorded** based on inputs provided as per Map sheet received vide your letter mentioned above.
3. Documens 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

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

- for information

केन्द्रीय विद्युत प्राधिकरण

पी.सी.डी. प्रभाग

डायरी संख्या..... 223

दिनांक..... 8-8-24

Sh Anshy (DD)

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