



ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)

GRID CONTROLLER OF INDIA LIMITED

(A Government of India Enterprise)

[Formerly (POSOCO)]



दक्षिण क्षेत्रीय भार प्रेषण केन्द्र/ Southern Regional Load Despatch Centre

कार्यालय : २९, रेस कोर्स क्रॉस रोड, बेंगलूरु ५६० ००९.

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सन्दर्भ/Ref: एसआरएलडीसी SRLDC/SO-1/2026/

11-08-2026

सेवा मे/To

CE (System Operation),
KSEB, Kalamaserry

Subject: Recurring Insulator Failures at 220 kV Pothencode Substation leading to Grid Events – Reg

Sir/Madam,

In the recent past, it has been observed that multiple incidents have occurred at the 220 kV Pothencode Substation involving flashover/failure of insulators. These incidents have resulted in the operation of busbar protection, tripping of the associated buses and connected elements, and, in one instance led to the complete outage of the 220 kV Pothencode Substation and a load loss of 300MW. The list of grid events involving Pothencode Substation is given below:

Sl No.	Category of Grid Event	Time and Date of occurrence of Grid Event	Generation Loss	Load Loss	Brief details of the event
1	GD - 1	18-06-2026 08:50	0	300	The triggering incident is the failure of B-phase tension insulator near Isolator 89B of 220kV Pothencode Bus-2. Although the fault was physically confined to Bus-2, due to isolator status issue of 220kv Edamon Pothencode Line-2, the relay assumed Bus-1, Bus-2, and Bus-3 were interconnected and issued simultaneous trip commands to Zones A, B, and C. This led to the tripping of all associated elements connected to the 220 kV system, thereby resulting in a complete outage of the 220 kV Pothencode Substation.
2	GI-1	05-07-2026 17:00	0	0	At 220kV Pothencode SS, Bus-1 and 3 are permanently coupled. The triggering incident is Y-G fault caused by flashover of Y-phase tension insulator of 220kV Bus-1 (near 220KV-TRIVANDRUM-POTHENCODE-1 feeder). This resulted in the operation of busbar differential protection and tripped all elements connected to 220kV Bus-1 (including Bus-3 which is permanently coupled to Bus-1) of POTHENCODE SS
3	GI-1	02-08-2026 09:02	0	0	At 220kV Pothencode SS, Bus-1 and 3 are permanently coupled. The triggering incident was R-G fault due to the R phase disc insulator flashover in the Bus 1 side of 220 kV Bus coupler in the 220 kV Pothencode substation leading to the differential protection of Busbar 1 operated and tripped all the elements connected to Bus-1 and led to the Tripping at 220kV Bus-1 at Pothencode SS of KSEB

हे.मो.क.इ.रा.डी.
11-08-2026

पंजीकृत कार्यालय : बी- 9, प्रथम तल कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सारय, नई दिल्ली – 110 016.

Registered Office : No. B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016.

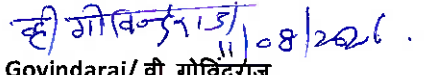
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The recurrence of insulator-related failures at 220 kV Pothencode Substation indicates the need for a comprehensive review of the condition and healthiness of the insulators and associated equipment. KSEB is requested to identify the underlying causes of the repeated failures and undertake suitable preventive and remedial measures, including replacement of defective, deteriorated or aged insulators wherever required, to prevent recurrence of such incidents. Further, periodic thermovision scanning and enhanced preventive maintenance may be carried out, with increased frequency of inspection and maintenance activities, particularly for the 220 kV buses and associated equipment, to identify and address potential defects at an early stage and prevent recurrence of such incidents. A brief report on the observations, root cause identified, and remedial measures taken may also be furnished.

धन्यवाद, Thanking you,

भवदीय / Yours faithfully,


V. Govindaraj/ वी. गोविंदराज,

Chief General Manager (System Operation)/ मुख्य महाप्रबंधक (सिस्टम ऑपरेशन)

प्रतिलिपि / Copy to:

1. सदस्य सचिव एसआरपीसी, बेंगलुरु / Member Secretary SRPC, Bengaluru
2. कार्यकारी निदेशक एसआरएलडीसी बेंगलुरु/ Executive Director, SRLDC Bengaluru