

Detailed Report

Date of Submission : 16-04-2026 17:25

TADIPATHRI - 220KV tripped at 10-04-2026 14:56 and restored at 10-04-2026 15:10

Summary of Event (घटना का सारांश) : During the LC period of 220kV Boyrareddypalli-Tadipatri feeder, while loads were being fed from 220kV Kondapuram SS and 220kV Gooty RS through 132kV network, tripping of connected 132kV feeders in the above 132kV network one after the other resulted in interruption of power supply to 220kV Tadipatri, 132kV Komatikuntla, 132kV RTSS Komali, 132kV Ankireddypalli SS and 132kV Penna cements.

Time and Date of the event (घटना का समय और दिनांक) : 10-04-2026 14:56

Name of the Substation/Generating Station/Pooling Station affected (Along with Voltage level) : TADIPATHRI - 220KV

Event Category (श्रेणी के साथ इवेंट प्रकार) : GD - 1

Location/Control Area (स्थान/नियंत्रण क्षेत्र) : ANDHRA PRADESH

Configuration of Bus (HV/LV) . Along with details of Bus split Operation (if any) :

Bus Configuration Type : Single Bus

Bus Coupler Status : NA

Bus 1 Connected Elements	Bus 2 Connected Elements	Bus 3 Connected Elements	Bus 4 Connected Elements

Station Connectivity / SLD during antecedent :

Weather Conditions : Normal

Elements under outage prior to the event :

Other Information (Antecedent Cnditions) :

Renewable Energy Trip : False

Details of SPS Operation (if any): : False

Reason of tripping :

Load and Generation Loss (लोड और जेनरेशन हानि) :

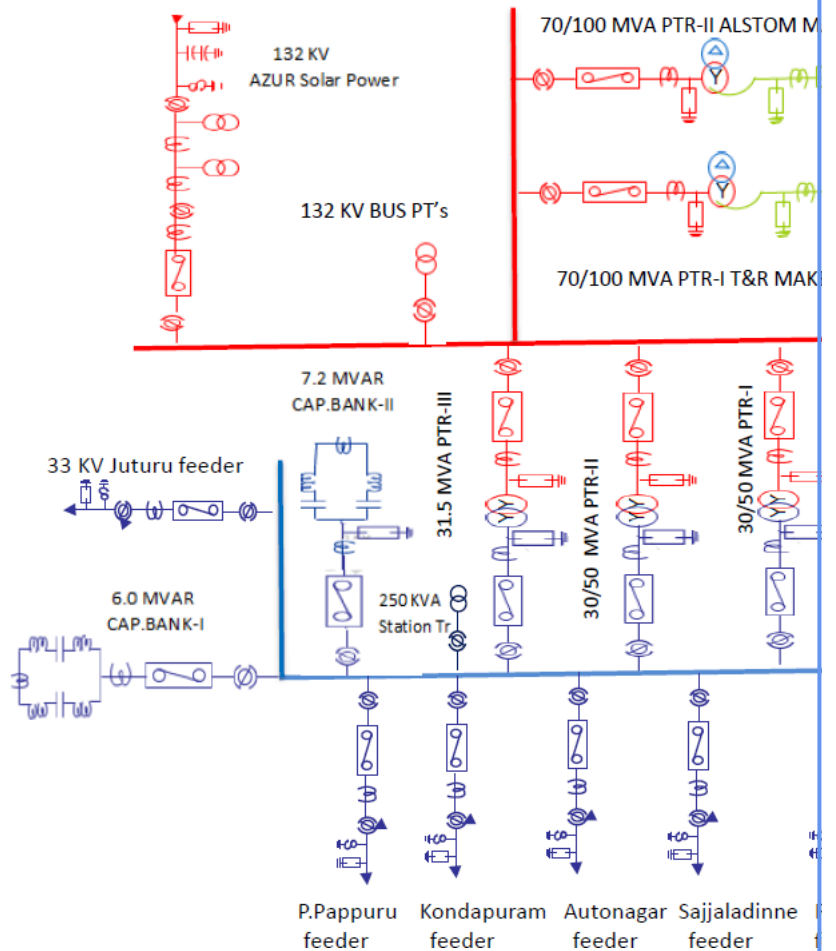
Total Generation Loss (MW)	Total Load Loss(MW)
0 MW	0 MW

Duration of interruption (रुकावट की अवधि) :

Details of Equipment Failure (if any during the event): :

Equipment Type	Equipment Make

List of elements tripped during the event : 1.



Analysis of the event :

Antecedent condition:

On 10/04/2026 at 10:28 Hrs. LC availed on 220kV Boyareddypalli-Tadipatri feeder for replacement of CTs at 220kV Boyareddypalli SS. In this condition, 220kV Tadipatri loads were fed from

220kV Kondapuram SS through 132kV Kondapuram-Tadipatri feeder

220kV Gooty RS through the path: 132kV Gooty RS-Gudipadu-Ankireddypalli-RTSS Komali- Tadipatri feeders.

Triggering incident:

At 14:56 Hrs. Fault occurred in 132kV Tadipatri-Kondapuram feeder and hence the following protection were operated at both the ends.

At Tadipatri end: (SEL311C): Zone-1, Y-Ph, Fault current: 1.7kA, Fault location: 19.07kM

At Kondapuram end: (SEL311C): Zone-1, R-Ph.

Incident that resulted in complete outage of subject substations:

After tripping of 132kV Tadipatri-Kondapuram feeder, all the loads of 220kV Tadipatri, 132kV Komatikuntla, 132kV RTSS Komali, 132kV Ankireddypalli SS and 132kV Penna cements were fed by 220kV Gooty RS (through 132kV Gooty RS-Gudipadu-Ankireddypalli-Komali-Tadipatri feeders).

In this condition at 14:56 Hrs., 132kV Ankireddypalli-Gudipadu feeder was tripped at Ankireddypalli end unwarrantedly due to operation of

Non-directional over current protection enabled in ABB make REX521 type relay.

Hence, complete outage of 220kV Tadipatri SS, 132kV Ankireddypalli, 132kV Komatikuntla and 132kV RTSS Komali occurred due to tripping of only feeder connected to only source feeding the loads by that time.

Load & Generation loss:

Load loss : 97 MW

Generation loss: 26.6MW

Protection / Operational Issues observed	:	On 15/04/2026, an unwarranted element in overcurrent function that was enabled at Ankireddypalli end was disabled.
Restoration Details	:	220kV Boyareddypalli-Tadipatri feeder charged at BR Palli end at 15:08 Hrs and at Tadipatri end on 15:10 Hrs respectively. 132kV Tadipatri-Kondapuram feeder was test charged at 15:22 Hrs and stood OK.
DR Time synchronization issues observed (सुरक्षा/ प्रचालन समस्या)	:	False
Remedial Measures Taken (सुधारात्मक सुझाव)	:	
Relay/PLCC Operation Details	:	
Control Panel Anunciation	:	132kV Tadipatr-Kondapuram feeder: At Tadipatri end: (SEL311C): Zone-1, Y-Ph, Fault current: 1.7kA, Fault location: 19.07kM At Kondapuram end: (SEL311C): Zone-1, 132kV Ankireddypalli-Gudipadu feeder at Ankireddypalli end: OC operated.
Main I Relay Indications	:	
Main II Relay Indications	:	
Other Relay Indications	:	
PLCC Counter Increment I/T	:	
PLCC Counter Increment D/T	:	
Fault Current Value (kAmp)	:	None
LA Counter	:	
Remarks	:	
Attachments	:	