

Detailed Report

Date of Submission : 11-05-2026 13:27

CHILLAKALLU - 220KV tripped at 30-04-2026 13:16 and restored at 30-04-2026 13:29

Summary of Event (घटना का सारांश) : At 220kV Chilakallu SS, Delayed tripping of B-Ph CB of 220kV Pulichintala feeder bay resulted in operation of LBB protection and all the elements connected to 220kV Bus-2 were tripped.

Time and Date of the event (घटना का समय और दिनांक) : 30-04-2026 13:16

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

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

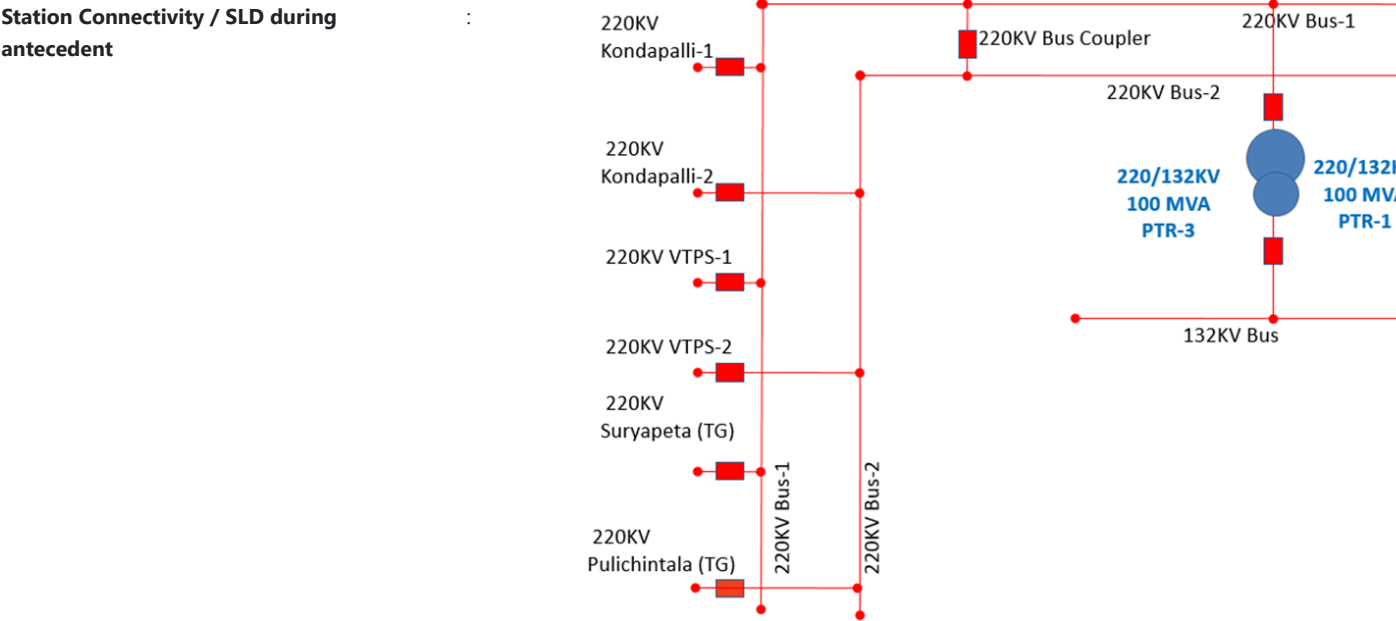
Location/Control Area (स्थान/नियंत्रण क्षेत्र) : ANDHRA PRADESH

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

Bus Configuration Type : Double Bus with Bus coupler

Bus Coupler Status : NA

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



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 : Others

Other Reason : LBB Protection operated due to delayed clearance of B-G fault in 220kV Pulichintal feeder

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.

Station Connectivity/SLD during the event :

Analysis of the event : **Antecedent conditions:**

At Chilakallu SS, elements were connected in the following manner.

Bus-1:Kondapalli-1,VTPS-1, Suryapeta, 100MVA PTR-1& 100MVA PTR-3.

Bus-2:Kondapalli-2,VTPS-2, Pulichintala, 100MVA PTR-2.

Bus coupler CB was in closed condition.

**Triggering incident:** At 13:16:53:334 Hrs, B-G fault was started in 220kV Pulichintala feeder

**Operation of protections:**

At Chilakallu end, Zone-1, B-Ph protection was operated and tripped B-Ph CB of 220kV Pulichintala feeder. After Dead time, AR was operated succesfully. Within reclaim time,B-G fault occured again and ehce SOTF/TOR protection was operated and AR was blocked. This resulted in tripping of R & Y phase limbs of CB but B-Ph CB was not tripped due to sluggishness. After 100mSec, LBB Re-trip was operated but still B-Ph CB of 220kV Pulichintala feeder was not opened, hence after 200mSec backtrip of LBB protection was operated and tripped CBs of all the connected elements including Bus coupler CB.Later B-Ph was opened.

Protection / Operational Issues observed :

Restoration Details :

1. Bus coupler CB closed at 13:29 Hrs.
2. 100MVA /PTR-2 CB closed at 13:30 Hrs.
3. 220kV VTS-2 feeder CB closed at 13:33 Hrs.
4. 220kV Kondapalli-2 feeder CB closed at 13:34 Hrs.
5. 220kV Pulichintala feeder CB was closed at 19:13 Hrs.

DR Time synchronization issues observed (सुरक्षा/ प्रचालन समस्या) : True

Remedial Measures Taken (सुधारात्मक सुझाव) :

1. B-Pole CB limb of 220kV Pulichintala feeder bay was lubricated thoroughly and tested for closing and opening operations on the same day. On 01/05/2026 availed LC on the same feeder bay and carried out lubrication of all the pole limbs, CB timings test, DCRM test was carried and found satisfactory.
2. The time drift in Bus bar protection relay (REB670) and Main-2 relay (REL670) was attended by correcting time zone settings in respective relays.

<b>Relay/PLCC Operation Details</b>	:	
Control Panel Anunciation	:	BBP relay : LBB operated
Main I Relay Indications	:	Pulichintala feeder _Main-1 relay: Zone-1, B-Ph, 13.44kM and 5.585kA,SOTF,AR Blk,CS/CR
Main II Relay Indications	:	Pulichintala feeder _Main-1 relay: Zone-1, B-Ph, 11.02kM, 4.359kA, SOTF, AR Blk,CS/CR
Other Relay Indications	:	
PLCC Counter Increment I/T	:	
PLCC Counter Increment D/T	:	
Fault Current Value (kAmp)	:	None
LA Counter	:	
Remarks	:	
<b>Attachments</b>	:	