

Detailed Report

Date of Submission : 01-06-2026 11:28

LOWER_SILERU - 220KV tripped at 26-05-2026 00:12 and restored at 26-05-2026 02:09

Summary of Event (घटना का सारांश)	: 1. At 21:39 Hrs Unit-1 synch to the grid on Bus-1 and Unit-2 to synch to the grid at 21:59 Hrs on Bus-2 and Bus-Coupler Breaker kept in Open Position. 2. At 23:22 Hrs unit-2 deparalled from the grid on Bus-2 and at 23:37 Hrs the Bus-Coupler breaker closed as per the APLDC instructions. 3. At 00:11 Hrs Bus-Coupler opened as per the APLDC instructions. During Bus-Coupler breaker opened condition the 220KV LS-ASKP and 220KV LS-CHNTR feeders tripped at Remote end due to operation of the non-directional earth fault protection and Unit-1 tripped on HV Standby Earth Fault protection at LS end.
Time and Date of the event (घटना का समय और दिनांक)	: 26-05-2026 00:12
Name of the Substation/Generating Station/Pooling Station affected (Along with Voltage level) :	: LOWER_SILERU - 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
1. 220KV-BOMMUR-LOWER_SILERU-1 2. 220KV-DONKARAYI-LOWER_SILERU-1	1. 220KV-LOWER_SILERU-Chintur-1 2. 220KV-ASUPAKA-LOWER_SILERU-1		

Station Connectivity / SLD during antecedent : The 220KV Lower Sileru-Bommuru and 220 KV Lower Sileru-Donkarayi feeders on Bus-1.

The 220KV Lower Sileru-Asupaka and 220 KV Lower Sileru-Chinthuru feeders on Bus-2.

The Bus-Coupler Breaker Closed position.

Weather Conditions : Normal

Elements under outage prior to the event :

Other Information (Antecedent Cnditions) : While opening of Bus-Coupler Breaker.

Renewable Energy Trip : False

Details of SPS Operation (if any): : False

Reason of tripping : Others

Other Reason : The Asupaka and Chinthuru feeders detected the BRC and VT Fuse Fail

Load and Generation Loss :
(लोड और जेनरेशन हानि)

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

Duration of interruption :
(रुकावट की अवधि)

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

Equipment Type	Equipment Make
CB	ABB make Bus Coupler

List of elements tripped during the event :

1. 220KV-ASUPAKA-LOWER_SILERU-1
2. 220KV-LOWER_SILERU-Chintur-1

Station Connectivity/SLD during the event :

The 220KV Lower Sileru-Bommuru and 220 KV Lower Sileru-Donkarayi feeders on Bus-1.

The 220KV Lower Sileru-Asupaka and 220 KV Lower Sileru-Chinthuru feeders on Bus-2.

The Bus-Coupler Breaker Closed position.

Analysis of the event :

As per the APSLDC instructions, the 220KV Bus-Coupler Breaker opened at 00.11 Hrs. The operator physically checked and confirmed that all three phases are opened. During that time observed that the BRC & VT fuse fail annunciation on both Asupaka and Chinthuru feeders, simultaneously both the feeders tripped at remote end on Earth fault and unit#1 also got tripped on Earth fault. After getting closing code, the 220 KV Chinthuru feeder hand tripped and charged 220KV Asupaka feeder and observed BRC annunciation not getting resetted. After getting opening code , the 220KV Asupaka feeder opened at both ends and chinthuru feeder charged and observed BRC

annunciation not resetted and also observed 185 amps flowing in R-phase only. So it was concluded that the Bus coupler Breaker R-phase limb not fully opened internally.

Protection / Operational Issues observed	:	As per the APSLDC instructions, the 220KV Bus-Coupler Breaker opened at 00.11 Hrs. The operator physically checked and confirmed that all three phases are opened but R-Phase limb not opened internally causing both feeders tripped at remote end.
Restoration Details	:	At 02:09 Hrs, the Bus-Coupler Breaker both Bus-1 and Bus-2 isolators opened and the 220KV Lower Sileru-Chinthuru feeder charged on Bus-2 at 02:19 Hrs and the 220KV Lower Sileru-Asupaka feeder charged on Bus-2 at 02:37 Hrs.
DR Time synchronization issues observed (सुरक्षा/प्रचालन समस्या)	:	False
Remedial Measures Taken (सुधारात्मक सुझाव)	:	Opened Bus Coupler breaker both Bus-1 and Bus-2 isolators and charged 220KV Chinthuru feeder at 2.19 Hrs and stood ok. After getting closing code, the 220KV Asupaka feeder charged at 2.34 hrs., and stood ok.
Relay/PLCC Operation Details	:	
Control Panel Anunciation	:	Main-1 BRC and PSB operated , Main-1 VT fuse fail operated
Main I Relay Indications	:	BRC operated , VT fuse fail
Main II Relay Indications	:	Nil
Other Relay Indications	:	Zone-1 / Zone 2 OCT operated
PLCC Counter Increment I/T	:	
PLCC Counter Increment D/T	:	

Fault Current Value (kAmp) : 0.157

LA Counter :

Remarks :

Attachments :