

Detailed Report

Date of Submission : 19-06-2026 11:03

HSR - 220KV tripped at 10-06-2026 10:53 and restored at 10-06-2026 11:22

Summary of Event (घटना का सारांश)

: At 10.52.42.808 Hrs : 220kV Mylasandra-HSR line-2 tripped at Mylasandra end sensing YN fault in Zone-1, fault current of 37.4kA is recorded in Y phase. CB tripped at Mylasandra end within 90 msec.

Within the above time, Mylasandra line-1 tripped at HSR end sensing YN fault in Zone-1 (suspect overreach of the relay.

220kV Mylasandra line-2 tripped at HSR end in Zone-2. Due to non receipt of carrier signal, the line tripped at HSR end after Zone-2 time delay. Slow developing fault and fault current of 12.18kA up to 350 msec is observed from the line DR of HSR end .

Nature of fault in Mylasandra-HSR line-2: Arcing observed in Y phase CVT in HSR line -2 at Mylasandra end.

For the above fault, at Naganathpura also, M1 and M2 relays of Mylasandra line picked up sensing YN fault in Zone-2. Fault current of 6.29kA was observed from the line DR. However due to M2 relay mal operation the line tripped instantly on SOTF.

After tripping of Mylasandra-Naganathpura and Mylasandra -HSR lines, loads of HSR,Koramanagala,NIMHANS and Naganathpura was met through Hoody source through EPIP -HSR line.

Due to 86 trip continuous high in Naganathpura -HSR line at Naganathpura end, when load current in HSR line (after tripping of Mylasandra line at Naganathpura)

crossed 0.2 A secondary) LBB operated at Naganathpura and all the elements tripped at Naganathpura SS(Single bus System).

After tripping of above line (Mylasandra-HSR 2 at both ends, Mylasandra-HSR-1 at HSR end, HSR-Naganathpura at Naganathpura end) ie after about 450msec Load current up 1040 A observed in HSR-EPIP line which subsequently reduced up to 620A after Naganathpura bus tripping and load relief obtained at HSR due to SPS operation is observed from the HSR-EPIP line DR. However due to sustained arcing in HSR-EPIP line bay at HSR end, the line was hand tripped resulting in main supply failure to HSR, Naganathpura, Kormanagala and NIMHANS substations.

Total load loss of 501 MW is reported due to this tripping(Naganathpura: 195 MW HSR: 96 MW Koramangala : 81 MW Nimhans : 129 MW)

Restoration: Supply restored to Nimhans,Koramangala at 11.10 Hrs by closing EDC-NIMHANS line

Supply restored to Naganathpura and HSR through Hoody source at 11.22 Hrs.

Time and Date of the event : 10-06-2026 10:53
(घटना का समय और दिनांक)

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

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

Location/Control Area (स्थान/नियंत्रण क्षेत्र) : KARNATAKA

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

Station Connectivity / SLD during antecedent :

Weather Conditions : Normal

Elements under outage prior to the event :

Other Information (Antecedent Cnditions) : **Prefault Scenario :**

Prior to the incident 220kV NIMHANS -EDC line was kept open as per SLDC instructions hence NIMHANS was radial on HSR source:

220kV side bus configuration at HSR SS:

Bus- 1: 220kV Mylasandra Line-1, 220kV EPIP, 220/66kV 150MVA Trf-01 HV , 220/66kV 150MVA Trf-03 HV;

Bus-2: 220kV Mylasandra Line 2 , 220kV Naganathapura Line, 220kV BMRCL Line, 220kV Koramanagala Line, 220/66kV 100MVA Trf-02; Bus Coupler was in closed condition.

Renewable Energy Trip : False

Details of SPS Operation (if any): : True

Reason of tripping : Fault Tripping

Type of Fault : SLG
phases inv : None, None
Auto Reclosure Operation : No
Fault Clearing Time (ms) : 450.0

Load and Generation Loss :
(लोड और जेनरेशन हानि)

Total Generation Loss (MW)	Total Load Loss(MW)
0 MW	501 MW

Duration of interruption :
(रुकावट की अवधि)

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

Equipment Type	Equipment Make
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List of elements tripped during the event : 1.

Station Connectivity/SLD during the event :

Analysis of the event :

Details as updated in event summary

Protection / Operational Issues observed :

Protection mal operations observed :

Non receipt of carrier signal at HSR end in Mylasandra-HSR line-2

Over reaching of Mylasandra line-1 at HSR end

Main-2 relay mal operation in Mylasandra line (SOTF) at Naganathpura SS

Due to 86 output continues high in HSR line at Naganathpura LBB operated at Naganathpura

Arcing observed in HSR-EPIP line due to heavy loading

Restoration Details : Restoration: Supply restored to Nimhans,Koramangala at 11.10 Hrs by closing EDC-NIMHANS line

Supply restored to Naganathpura and HSR through Hoody source at 11.22 Hrs.

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

Remedial Measures Taken (सुधारात्मक सुझाव) : **Remedial measures taken Details:**

Settings of Mylasandra line-1 at HSR end is under review

PLCC issue at HSR end will be rectified by TCD wing

At Naganathpura detail testing of Mylasandra line Main-2 relay, BBP relay etc is scheduled on 20.06.2026

Operation wing have been informed to rectify GPS time synch issue at HSR and Naganathpura Substations.

Relay/PLCC Operation Details :

Control Panel Anunciation :

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	:	