Detailed Report

Date of Submission : 16-10-2026 14:27

NAGJHERI - 220KV tripped at ***12-10-2026 16:38*** and restored at ***12-10-2026 17:30***

Summary of Event (घटना का सारांश) : **Report on System disturbance at NPH station on 12.10.2026 at 16:38 hrs**

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Antecedent Condition:

Units/Lines in Service: Unit-1, Unit#2, All 220KV lines except.

Unit/Lines Not in Service: Units 3 to 6, NKS-1 & NKS-2 Lines

Total load = 195 MW, Bus Voltage=208KV, Bus Frequency=49.85Hz

Double bus with sectionalizer and Bus coupler.

Bus In Service: North Bus with Sectionalizer Closed and South East bus Charged through Bus coupler

Elements connected to North West Bus:

Unit#1
Unit#2
Nagjhari-Hubli Line-1
Nagjhari-Hubli Line-2
Nagjhari-Ambewadi Line-1
Nagjhari-Ambewadi Line-1

Elements connected to North East Bus:

Nagjhari-Hubli Line-3
Nagjhari-Bidnal Line

Fault details:

At 16:38 Hrs: Bus disturbance occurred due to Unit-2 220kV Y-Ph CT flashover.
NW- Bus bar differential Protection operated.
All Elements Connected to North West Bus tripped (Unit-1, Unit#2, Nagjhari-Ambewadi-1 & 2, Nagjhari-Hubli-1, & 2)
North East Bus Was normal with Nagjhari-Hubli Line-3 & Nagjhari-Bidnal Line in service.

Annunciations in Unit-2:

Unit-2:

Over all Differential relay operated.

Annunciations in All Lines & Unit-1:

Bus Bar Differential operated.

Normalisation:

16:45 Hrs DG started and station supply restored.

17:15 Hrs Unit-4 started and excited and station supply changed over from DG to UAT3

17:32 Hrs NH-1 line charged at both ends.

17:33 Hrs NH-2 line charged at both ends.

17:41 Hrs NA-2 line charged at both ends.

17:45 Hrs NA-1 line charged at both ends.

Time and Date of the event (घटना का समय और दिनांक) : 12-10-2026 16:38

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

Event Category (श्रेणी के साथ इवेंट प्रकार) : GI-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
1. NAGJHERI - UNIT 1 2. NAGJHERI - UNIT 2 3. 220KV-AMBEWADI-NAGJHERI-1 4. 220KV-AMBEWADI-NAGJHERI-2 5. 220KV-NAGJHERI-HUBLI-1 6. 220KV-NAGJHERI-HUBLI-2 7.	1. 220KV-NAGJHERI-BIDNAL-1		

Station Connectivity / SLD during antecedent : Double bus with sectionalizer and Bus coupler.

Bus In Service: North Bus with Sectionalizer Closed and South East bus Charged through Bus couipler

		Elements connected to North West Bus: Unit#1 Unit#2 Nagjhari-Hubli Line-1 Nagjhari-Hubli Line-2 Nagjhari-Ambewadi Line-1 Nagjhari-Ambewadi Line-1 **Elements connected to North East Bus:** Nagjhari-Hubli Line-3 Nagjhari-Bidnal Line
Weather Conditions	:	Normal
Elements under outage prior to the event	:	1. NAGJHERI - UNIT 3 2. NAGJHERI - UNIT 4 3. NAGJHERI - UNIT 5 4. NAGJHERI - UNIT 6 5. 220KV-NAGJHERI-KODASALLY-1 6. 220KV-NAGJHERI-KODASALLY-2 7.
Other Information (Antecedent Cnditions)	:	**Pre trip status:** Unit-1 & 2 was in running condition. Other units were under normal shutdown. LTAC supply was on station transformer. All 220KV lines were in service except NKS-1 & NKS-2. Total load = 195 MW, Bus Voltage=208KV, Bus Frequency=49.85Hz
Renewable Energy Trip	:	False
Details of SPS Operation (if any):	:	False
Reason of tripping	:	Others
Other Reason	:	Y ph CT flashover of Unit-2

Load and Generation Loss (लोड और जेनरेशन हानि) :

Total Generation Loss (MW)	Total Load Loss(MW)
195 MW	195 MW

Duration of interruption (रुकावट की अवधि) :

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

Equipment Type	Equipment Make
CT	

List of elements tripped during the event : 1.

Station Connectivity/SLD during the event :

Analysis of the event :

System Disturbance details:

At 16:38 Hrs: Bus disturbance occurred due to Unit-2 220kV Y-Ph CT flashover. Due to this Unit-1, Nagjhari-Ambewadi-1 & 2, Nagjhari-Hubli-1, & 2 tripped on Bus Bar differential protection.

Annunciations in Unit-2:

Unit-2:

Over all Differential relay operated.

Annunciations in Lines & Unit-1:

1) Bus Bar Differential operated.

Protection / Operational Issues observed	:	
Restoration Details	:	
DR Time synchronization issues observed (सुरक्षा/ प्रचालन समस्या)	:	False
Remedial Measures Taken (सुधारात्मक सुझाव)	:	CT replaced
Relay/PLCC Operation Details	:	
Control Panel Anunciation	:	
Main I Relay Indications	:	Bus Bar Differential operated.
Main II Relay Indications	:	Bus Bar Differential operated.
Other Relay Indications	:	
PLCC Counter Increment I/T	:	
PLCC Counter Increment D/T	:	
Fault Current Value (kAmp)	:	None
LA Counter	:	
Remarks	:	
Attachments	:	