Detailed Report

Date of Submission : 16-10-2026 13:53

NCTPS STG3 - 765KV tripped at ***15-10-2026 23:46*** and restored at ***16-10-2026 01:53***

Summary of Event (घटना का सारांश)	:	The NCTPS Stage 3 was under generation with unit load of 336 MW. Power was evacuated through the remote end substation 765kV NCPS - Ariyalur feeder#1. The 765kV Ariyalur Feeder #2 was already under tripped condition from 14.10.26@03.23Hrs. Under these conditions the 765kV NCPS - Ariyalur feeder#1 fault tripped and the NCTPS STG3 unit got tripped due to non availability of transmission line for power evacuation. with following relay indication. GR1: Power 2 Trip (Low Forward Power), F<2 Trip (47.5Hz, DT @2 Sec). These protections initiated tripping of Generator Circuit Breaker (27kV), HV CB (765kV_707 and 765kV_708).
Time and Date of the event (घटना का समय और दिनांक)	:	15-10-2026 23:46
Name of the Substation/Generating Station/Pooling Station affected (Along with Voltage level) :	:	NCTPS STG3 - 765KV
Event Category (श्रेणी के साथ इवेंट प्रकार)	:	GD - 1
Location/Control Area (स्थान/नियंत्रण क्षेत्र)	:	TAMILNADU

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

Bus Configuration Type : One and half breaker

Bus Coupler Status : NA

Bus 1 Connected Elements	Bus 2 Connected Elements	Bus 3 Connected Elements	Bus 4 Connected Elements
1. 765KV/27KV NCTPS STG3-GT-1 2. NCTPS STG3 - 765KV - Bus 1 3. 765KV-NCPS-NCTPS STG3-1	1. 765KV-NCPS-NCTPS STG3-2 2. NCTPS STG3 - 765KV - Bus 2		

Station Connectivity / SLD during antecedent :

Brief Analysis:

The NCTPS Stage 3 was under generation with unit load of 336 MW. Power was evacuated through the remote end substation 765kV NCPS - Ariyalur feeder#1. The 765kV Ariyalur Feeder #2 was already under tripped condition from 14.10.26@03.23Hrs.

Under these conditions the 765kV NCPS - Ariyalur feeder#1 fault tripped and the NCTPS STG3 unit got tripped due to non availability of transmission line for power evacuation.

Weather Conditions : Cloudy

Elements under outage prior to the event :

Other Information (Antecedent Cnditions) : NIL

Renewable Energy Trip : False

Details of SPS Operation (if any): : False

Reason of tripping : Others

Other Reason :

Load and Generation Loss (लोड और जेनरेशन हानि) :

Total Generation Loss (MW)	Total Load Loss(MW)
374 MW	336 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. 765KV/27KV NCTPS STG3-GT-1
2. NCTPS STG3 - UNIT 1

Station Connectivity/SLD during the event :

Analysis of the event :

The NCTPS Stage 3 was under generation with unit load of 336 MW. Power was evacuated through the remote end substation 765kV NCPS - Ariyalur feeder#1. The 765kV Ariyalur Feeder #2 was already under tripped condition from 14.10.26@03.23Hrs.

Under these conditions the 765kV NCPS - Ariyalur feeder#1 fault tripped and the NCTPS STG3 unit got tripped due to non availability of transmission line for power evacuation.

Protection / Operational Issues observed :

Restoration Details	:	Unit under light up condition
DR Time synchronization issues observed (सुरक्षा/ प्रचालन समस्या)	:	False
Remedial Measures Taken (सुधारात्मक सुझाव)	:	NIL
Relay/PLCC Operation Details	:	
Control Panel Anunciation	:	class 86A1 & Class C
Main I Relay Indications	:	Low forward , Under Voltage and Under Frequency
Main II Relay Indications	:	Low forward , Under Voltage and Under Frequency
Other Relay Indications	:	86 A,86C and 86D
PLCC Counter Increment I/T	:	
PLCC Counter Increment D/T	:	
Fault Current Value (kAmp)	:	None
LA Counter	:	
Remarks	:	
Attachments	:	