

Detailed Report

Date of Submission : 12-05-2026 17:42

NCTPS - 230KV tripped at 08-05-2026 03:30 and restored at 08-05-2026 03:58

Summary of Event (घटना का सारांश) :

Time and Date of the event (घटना का समय और दिनांक) : 08-05-2026 03:30

Name of the Substation/Generating Station/Pooling Station affected (Along with Voltage level) : NCTPS - 230KV

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 : Single Main and Transfer Bus

Bus Coupler Status : NA

Bus 1 Connected Elements	Bus 2 Connected Elements	Bus 3 Connected Elements	Bus 4 Connected Elements
1. 230KV-NCTPS- NCTPS- NCTPS STG3-1 2. 230KV- NCTPS- KILPAUK-1	1. 230KV-NCTPS- TONDIARPET-1 2. 230KV-NCTPS- SRIPERUMBADUR_TN-1	1. 230KV-NCTPS- TONDIARPET-2 2. 230KV-NCTPS- ATHIPATU-1 3. 230KV-NCTPS- ATHIPATU-2 4. 230KV- GUMMIDIPOONDI- NCTPS-1	

Station Connectivity / SLD :
during antecedent

Weather Conditions : Normal

Elements under outage prior to the event :
 1. 230KV-NCTPS-TONDIARPET-2
 2. 230KV-NCTPS-TONDIARPET-1
 3. 230KV-NCTPS-SRIPERUMBADUR_TN-1

Other Information :
(Antecedent Cnditions)

Renewable Energy Trip : False

Details of SPS Operation : False
(if any):

Reason of tripping : Fault Tripping

Type of Fault : LL

phases inv :

Auto Reclosure Operation : No

Fault Clearing Time (ms) : None

Load and Generation Loss :
(लोड और जेनरेशन हानि)

Total Generation Loss (MW)	Total Load Loss(MW)
505 MW	100 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. 230KV-NCTPS-TONDIARPET-2
2. 230KV-NCTPS-TONDIARPET-1
3. 230KV-NCTPS-SRIPERUMBADUR_TN-1

Station Connectivity/SLD during the event :

Analysis of the event :
There are eight Nos of outgoing feeders in NCTPS-1. the Grid feeders are tondairapet-1&2, Gummdipoondi and sriperumbudur. Remaining feeders are in Radial(Kilpauk, NCTPS Stage-3 and Athipathu-1&2).

The fault occurred due to the opening of the Basin Bridge SS take-off tower line. Consequently, for the B and C phase line fault in the [230](#) kV Tondiarpet feeder to Basin Bridge feeders, the Tondiarpet-1 feeder tripped at Zone-3 from the NCTPS-I end during this period. Relay indications are BC TRIP ABC ZONE-III IA-373A,IB-3.09KA,IC-2.75KA. Trip on 08-05-2026 at 03:30 Hrs and normalized on 08-05-2026 at 05:07 Hrs.

The fault occurred due to the opening of the Basin Bridge SS take-off tower line. Consequently, for the B and C phase line fault in the [230](#) kV Tondiarpet feeder to Basin Bridge feeders, the Tondiarpet-2 feeder tripped at Zone-3 from the NCTPS-I end during this period. Relay indications are TRIP B &C GROUP I PHASE OPERATED ZONE III.

Trip on 08-05-2026 at 03:30 Hrs and
normalized on 08-05-2026 at 04:36 Hrs.

For 230 kV NCTPS1 to Sriperumbudur feeder
The Y-phase jumper was cut at location No. 31.
Relay indications are ZONE I TRIP ABC IA-540A
IB-6.24KA IC-1.408KA CARRIER AIDED TRIP. Trip
on 08-05-2026 at 03:30 Hrs and normalized on
08-05-2026 at 14:30 Hrs.

For 230 kV NCTPS-1 to Gummdipoondi feeder.
Zone-3 operated at gummdipoondi end. Nctps-
1 end is holding. Trip on 08-05-2025 at 03:29
Hrs and restored at 08-05-2026 at 03:58 Hrs.

All radial feeders are Hand-tripped on
08.05.2026 at 03:33 Hrs(Kilpauk, Nctps Stage-
3,and athipathu-1&2).

Unit-I & Unit-III tripped on 08-05-2026 at 03:30
Hrs, Unit-II under House load tripped on 08-05-
2026 at 03:43 Hrs.

**Protection / Operational
Issues observed**

: No issues

Restoration Details

: 230kV Nctps-1 to Gummdipoondi feeder
normalized on 08.05.2025 at 03:58 Hrs.

230kV Nctps-1 to Station transformer-1
charged on 08.05.2025 at 04:00 Hrs.

230kV Nctps-1 to Station transformer-2
charged on 08.05.2025 at 04:01 Hrs.

230kV Nctps-1 to Kilpauk feeder normalized
on 08.05.2025 at 04:24 Hrs.

230kV Nctps-1 to Tondairpet-2 feeder
normalized on 08.05.2025 at 04:36 Hrs.

230kV Nctps-1 to Athipathu-1 feeder
normalized on 08.05.2025 at 04:41 Hrs.

230kV Nctps-1 to Athipathu-2 feeder
normalized on 08.05.2025 at 04:48 Hrs.

230kV Nctps-1 to Tondairpet-1 feeder
normalized on 08.05.2025 at 05:07 Hrs.

Unit-I synchronized on 08.05.2025 at 09:51
Hrs.

Unit-II synchronized on 08.05.2025 at 13:14
Hrs.

Unit-III synchronized on 08.05.2025 at 13:25
Hrs.

230kV Nctps-1 to Sriperumbudur feeder
normalized on 08.05.2025 at 14:30 Hrs.

DR Time synchronization issues observed (सुरक्षा/प्रचालन समस्या)	:	False
Remedial Measures Taken (सुधारात्मक सुझाव)	:	The above fault trip feeders line fault was attended.
Relay/PLCC Operation Details	:	
Control Panel Anunciation	:	Distance protection operated.
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	:	The above-mentioned line fault was attended and rectified

Attachments

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