

Detailed Report

Date of Submission : 17-06-2026 13:11

VATTEM - 400KV tripped at **24-05-2026 03:19** and restored at **24-05-2026 06:26**

Summary of Event (घटना का सारांश) :

- i. Prior to the tripping incident the connectivity are as follows
 - a. 400kV Vatterm-Udandapur-1 & 2 feeders are idle charged from Vatterm end only.
 - b. 400kV Yedula-Vatterm-2 feeder is in open condition at both ends.
 - c. 400kV Vatterm SS is radially fed from 400kV Yedula SS through Yedula-Vatterm-1 feeder.
- ii. On 24-05-2026 at 03:19Hrs, there was R-Phase to ground fault on 400KV Yedula-Vatterm-1 feeder for which Zone-2 initiated at Yedula end.
- iii. Distance protection did not pickup at 400/11kV SS Vatterm as 400kV Vatterm SS is in radial condition.
- iv. Due to dip in R-phase voltage, Over voltage stage-1 & 2 picked up in other two phases at Vatterm end and after time delay of 100msec, Over Voltage stage-2 protection operated and tripped the breaker at Vatterm end and Direct Trip was sent to Yedula end.
- v. Direct trip was received within Zone-2 time delay and breaker tripped at Yedula end
- vi. There were no LIS loads during the above tripping incident.

Time and Date of the event (घटना का समय और दिनांक) : 24-05-2026 03:19

Name of the Substation/Generating Station/Pooling Station : VATTEM - 400KV

affected (Along with Voltage level) :

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

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

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. 400KV-YEDULA-VATTEM-1 2. 400KV-VATTEM-UDDANDAPUR-1 3. 400KV-VATTEM-UDDANDAPUR-2	1. VATTEM-CONS - 400KV - Bus 1		

Station Connectivity / SLD during antecedent : Enclosed

Weather Conditions : Cloudy, Windy

Elements under outage prior to the event :

Other Information (Antecedent Cnditions) :

Renewable Energy Trip : False

Details of SPS Operation (if any): : False

Reason of tripping : Over Voltage Tripping

Voltage R - Phase (kV) : None

Voltage Y - Phase (kV) : 560.0

Voltage B - Phase (kV) : 560.0

DT Signal recieved at remote end : True

DT Signal sent to remote end : True

Load and Generation Loss :
(लोड और जेनरेशन हानि)

Total Generation Loss (MW)	Total Load Loss(MW)
0 MW	0.44 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. 400KV-YEDULA-VATTEM-1

Station Connectivity/SLD during the event : Enclosed

Analysis of the event :

- i. Prior to the tripping incident the connectivity are as follows
 - a. 400kV Vатtem-Udandapur-1 & 2 feeders are idle charged from Vатtem end only.
 - b. 400kV Yedula-Vатtem-2 feeder is in open condition at both ends.
 - c. 400kV Vатtem SS is radially fed from 400kV Yedula SS through Yedula-Vатtem-1 feeder.
- ii. On 24-05-2026 at 03:19Hrs, there was R-Phase to ground fault on 400KV Yedula-Vатtem-1 feeder for which Zone-2 initiated at Yedula end.
- iii. Distance protection did not pickup at 400/11kV SS Vатtem as 400kV Vатtem SS is in

radial condition.

iv. Due to dip in R-phase voltage, Over voltage stage-1 & 2 picked up in other two phases at Vatterm end and after time delay of 100msec, Over Voltage stage-2 protection operated and tripped the breaker at Vatterm end and Direct Trip was sent to Yedula end.

v. Direct trip was received within Zone-2 time delay and breaker tripped at Yedula end

vi. There were no LIS loads during the above tripping incident.

Protection / Operational Issues observed :

Restoration Details :

Sl. No.	Voltage Level (kV)	Name of the Element	Date of Restoration (DD-MM-YYYY)	Time of Restoration (Hrs)
1	400kV	Yedula-1	24-05-2026	06:26

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

Remedial Measures Taken (सुधारात्मक सुझाव) : i. Existing relays on 400kV Vatterm-Yedula-1&2 feeders are of LDPs. LDPs will be commissioned by availing Line Clearance.

Relay/PLCC Operation Details :

Control Panel Anunciation : Over voltage operated

Main I Relay Indications : Over voltage stage-2 protection operated

Main II Relay Indications : Over voltage stage-2 protection operated

Other Relay Indications :

PLCC Counter Increment I/T :

PLCC Counter Increment D/T : Yes

Fault Current Value (kAmp) : None

LA Counter :

Remarks :

Attachments : 1. [SLD/Connectivity Diagram](#)