North American Transmission FORUM

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NATF Redacted Operating Experience Report

Distribution Circuit Trips When Pulling 138 kV Conductor

About NATF Redacted Operating Experience (OE) Reports

North American Transmission Forum (NATF) operating experience reports highlight positive or negative transmission (reliability or resiliency) experiences worth sharing for learning opportunities or potential trending. The overall goal is to help each other learn without experiencing the same issues first-hand. This sharing originates confidentially within the NATF membership.

Redacted operating experience reports are posted on the NATF public website to allow the NATF and its members to more broadly share information, especially safety-related alerts and learnings, with contractors and other utilities to benefit the industry at large.

The NATF member company that submitted the initial restricted distribution OE report for this topic/event has approved the NATF to issue this redacted OE report.

Topic

Distribution Circuit Trips When Pulling 138 kV Conductor

Description

Crews were attempting to chase spider rope on a section of a 138 kV line. While crossing an intersection, the wind blew the rope away from two mobile guard structures causing two phases to contact with the slack span. This event impacted 1600 customers for a period of 33 minutes.

Sequence of Events

1. The 12 kV feeder was switched into a non-reclosing configuration.
2. The 12 kV feeder locked out.
3. Substation crews were dispatched, and the feeder was closed back in.

Cause of Event

1. High winds were the major contributor to this event.
2. The slack span was not covered. It was determined that having a cover on the slack span would have created more of a hazard on the line by causing the phases to slap together.

Positive Observations

1. The switching prevented the distribution circuit from reclosing.
2. There were no injuries.
3. No equipment was damaged.
4. The 12 kV feeder was restored quickly after crews arrived.

Reference: NATF-OER-549

Lessons Learned

Wind speed must be considered when pulling conductor from structure to structure.

Corrective Actions

- Delayed job until the wind calmed down.
- Changing approach for future work: will position a lineman in a bucket truck to pass spider rope over slack span.
- Sharing this report with appropriate personnel.

Extent of Condition

This scenario could exist any time conductors are being pulled during high winds.

Reference: NATF-OER-549