North American Transmission FORUM

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NATF Redacted Operating Experience Report

Safety – Concrete Pole Accident

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.

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Topic

Concrete Pole Accident

Description

A contractor was scheduled to relocate two 110-foot, 36,000-pound concrete poles from a project staging area onto a transport truck. A crawler crane was on-site and to be used for lifting the poles. A five-person crew was on-site on day one of the project. At that time, the foreman notified a mechanic of an operating issues with the crane. The crane was tagged out-of-service and was not to be used until the crane could be inspected. On day two, the crew arrived at the job site after the morning safety meeting. The foreman arrived at the job site a few minutes later and immediately started using the crane, which was still tagged out-of-service.

The crew reminded the foreman of the problem with the crane. However, the foreman stated he would load the poles and then place the crane out-of-service afterward. One of the poles was being partially lifted in the air by the crane. At that time, the foreman directed a crew member to retrieve and install a tag line. While the crew member was installing the tag line, the pole tilted and slipped. The crew member was caught between the two concrete poles. His leg was pinned and he encountered a severe injury. Emergency services were called. A second crew member was injured during rescue activities.

Lessons Learned

Multiple communication breakdowns and a failure to follow procedure resulted in a severe injury. The following represents the lessons learned:

1. Proper job planning did not occur.
2. Equipment, including cranes and rigging, was not inspected, prior to starting the job.
3. Appropriate rigging methods for the load were not used.
4. Tag lines were not installed prior to the initial lift.
5. Hazards in the work area were not identified and removed.
6. The “stop work activity” protocol, where hazards are not properly controlled, was not initiated.
7. All loads were not placed securely on the cribbing prior to personnel approaching.
8. A lack of awareness existed related to the location of the crew member installing the tag line.

Actions Taken

The following represents the actions taken:

1. Conducted a “stand down” on lifting and rigging with all applicable transmission personnel.
2. Developed and delivered field guides on:
    a. Lifting and rigging

   b. Barricading

   c. Line of Fire

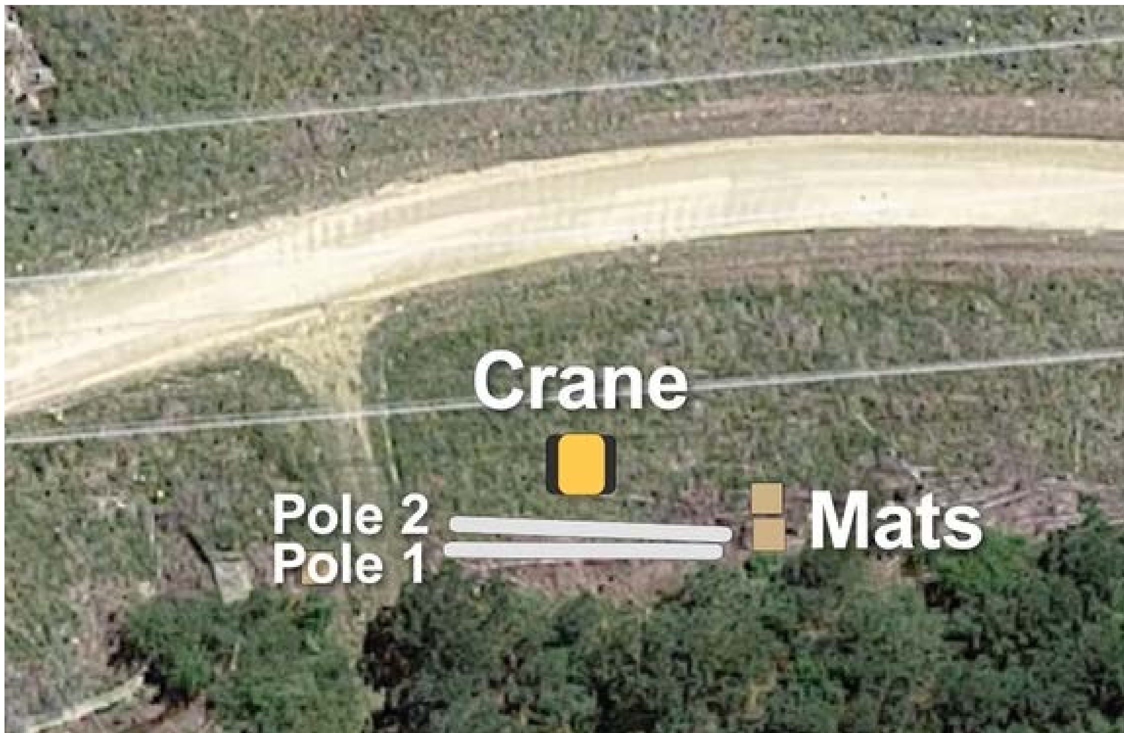
3. Conducted system-wide contractor safety observations focused on lifting and rigging.
4. Created lifting and rigging training module for new supervisors.
5. Implemented review of lifting and rigging training module by existing field leaders.
6. Conducted rigging overview training for field leaders (four skills courses with an assignment of one course per month).
7. Conducted effectiveness reviews.

Extent of Condition

Our company safety and operations leadership developed a safety alert and best practices presentation and distributed throughout all affected workgroups.

Accident Representation

The following pictures provide a representation of the accident.


Crane
Pole 2
Pole 1
Mats

DANGER
UNSAFE
DO NOT
USE

DANGER
UNSAFE
DO NOT
USE

911

was Called

Reference: NATF-OER-468