



Learning Event



OPERATING MOBILE PLANT

HAZARD

Electrical
(High Voltage -
overhead power line)

**Contact
With Electrified
Equipment**

CONSEQUENCES

Actual: A fatality
Potential: A fatality

WHAT ARE YOU DOING TO ENSURE SAFE OPERATION OF MOBILE PLANT WHEN WORKING NEAR OVERHEAD POWERLINES?

NOTE

This incident did not happen in Australia.

What Happened?

While respooling flexline, telehandler forks contacted a 3rd party 21.6kV power line, energising the telehandler and causing a fire. The telehandler operator exited uninjured. A second crew member approached with a fire extinguisher, which the operator took and used. The second crewmember moved to the energised telehandler, reached toward it, was knocked down and fatally injured.



See Toolbox for more info
about bypassed reclosers



Telehandler photo taken post incident

Why did it Happen?

The flexline was in a Right of Way (ROW) between two well pads to enable remote frac operation (i.e. frac equipment at one location while connected to wells elsewhere). 3 telehandlers were being used to re-spool the flexline. There was about 200m of flexline in the ROW. The ROW covered rough terrain with multiple elevation changes. There were flowlines and overhead powerlines in the ROW vicinity.

The procedure on lifting and rigging flexline respooling was unclear. A 6m strap tied in single choke used on the flexline end connection caused the boom to be raised higher to lift the hose off the ground.

The 3rd party power line did not have a neutral line. The reclosers were bypassed. A JSA requirement to de-energise the power line was not applied. The power line failed to trip and continued to arc until manually de-energised.

The risk assessment and pre-job walk through did not assess remote frac or ROW hazards and mitigations.

An exclusion zone was not established during emergency response.

IOGP Life Saving Rules

- ✓ Understand and use safety critical equipment and procedures which apply to the task
- ✓ Obtain authorisation before disabling or overriding safety equipment; deviating from procedures; crossing a barrier
- ✓ Identify all energy sources
- ✓ Confirm that the hazardous energy sources have been isolated, locked and tagged
- ✓ Check there is zero energy and test for residual or stored energy
- ✓ Establish and obey barriers and exclusion zones

What did they Learn?

- Ensure new processes or work methods trigger Management of Change (MOC) controls to identify work planning and execution updates.
- Reinforce client and contractor responsibilities at interfaces.
- Update powerline control requirements and ensure off pad work is fully included.
- Train and drill initial emergency response actions with frontline personnel.

Ask yourself or your Crew:

- Are your lifting and rigging procedures clear on what to do when working in the vicinity of overhead powerlines? How do you identify overhead line hazards? What are your required controls for working near overhead hazards?
- Do you use telehandlers or other mobile equipment? Do you conduct these activities in the vicinity of overhead power lines? What are your controls to prevent a fatality when contacting a live line?
- Do you always conduct a risk assessment and pre-job walk through? Do you engage contractors in work planning processes? How do you ensure that contractors have adequately identified hazards and implement controls?
- How do you resist the instinct to rush in during an emergency? Do you STOP, MUSTER, and ASSESS when failure occurs?



Further information:



SCAN ME

Onshore Safety Alliance -
Safety Alerts



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Safe Work Australia -
Electrical Safety
Overview

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