



Pole Fell from Hiab During Removal (LL265)

Incident		Description
Event Date: 15/11/2024	Time: 16:00 hours	Location: Arapuni – Hamilton - A0263
NP Reference / External Reference: OCC14661/INV1691 Maximo Incident 176448		

What happened?

The transmission crew, assisted by contracted Hiab, was replacing a single pole structure. The crew successfully installed the new pole and transferred the conductors. They then began removing the old pole, using an excavator to stabilize the base and a sling attached to the Hiab crane to lift the pole.

While the excavator and Hiab worked in tandem, with the excavator pulling the base backward and the Hiab lowering the top, the sling unexpectedly released from the Hiab's hook causing the pole to fall approximately 4 meters to the ground.

What could have happened?

If the drop zone procedure had not been followed and onsite personnel were working within this area, the potential consequences could have resulted in significant harm or fatality.

What did we find?

The contractor used a fixed hook for lifting the pole, which provided clearance to protect hydraulic hoses but introduced a risk of the strop rolling out. A 5-ton synthetic sling was used, exceeding the 1-ton load, but synthetic slings are not ideal for lifting wooden poles due to the risk of slipping or tearing on sharp edges. Steel chains are recommended as the safer alternative.

Northpower's pole replacement procedure lacks clear guidelines on sling selection, conflicting with best practices that favour steel chains. Additionally, wet conditions increased the likelihood of the synthetic sling slipping on the wooden pole surface.

Human factors contributed to the incident. The sling may not have been fully engaged in the hook, leading to partial engagement and potential release. Poor communication between the Hiab and excavator operators further heightened the risk of roll-out. Finally, the Hiab operator did not visually confirm the sling's security before or during the lift.



Actions:

- Fixed lifting hooks are **not** to be used when installing or removing poles.
- Steel chains are to be used for all wooden pole removals.
- Ensure clear communication protocols are established and followed between Hiab and Excavator operators.
- Visual check of the security of loads are to be made before and during the lifts.
- This event highlights the importance of implementing and maintaining an exclusion/drop zone where the risk of falling objects is identified.
- Northpower to review and update procedure to remove potential use of slings when removing wooden poles.



Supporting References:

Single Pole Installation & Replacement (PEW) Procedure

For more information:

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