

SIGNIFICANT INCIDENT ADVICE



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AURORA REFERENCE NO: IRIS 1851

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Brief description of incident:

Transmission linesmen were changing insulators on a strain tower on the Sheffield - George Town No.1 Transmission Line when a 6 tonne C&M chain lift failed under load. This caused the conductor to run back until the chain stop caught on the main body of the unit.

Extent of actual damage:

The chain stop prevented the conductor from completely falling but the damper on the line was bent and insulators were broken. The glass insulators were shattered and the glass scattered about. The chain lift was examined tested on 10/01/03.

Investigation findings:

The chain lift was removed from further use and tested. Under load the failure could not be reproduced, it was then stripped down. No components showed wear to indicate why the unit had failed. Further examination found that the lever arm of the chain lift had a slight bend towards the body of the unit. There was also some slogging wear that allowed the arm to move and contact the ratchet plunger. (See photo) It is now believed that while in use the lever arm was being pulled across the body of the unit and contacted the plunger at a critical instant holding the plunger out, allowing the chain to free run.

Local action to be taken to address any hazards:

All chain lifts of this type have been retested. This involved stripping the units down for a visual inspection as well as the standard load test. They were also checked for contact between the lever arm and ratchet plunger. One other unit was identified where the lever arm was found to be in contact when a sideways pull was applied.

Implications for other worksites:

Although this was an unusual occurrence future inspections will include a check for contact between the lever arm and the ratchet plunger.

FURTHER INFORMATION - CONTACT: Steve Dawes Safety Coordinator Aurora Energy Ph (03) 6271 7453

Photograph showing the contact point



**Contact between
the lever arm and
the ratchet plunger**