

INCIDENT TITLE: Importance of HUB Checks

TIME AND DATE OF INCIDENT:

13th June and 20th June 2018

INCIDENT DETAIL:

In the first incident a magnetic dial gauge was left in the hub and the turbine was returned to operation. This resulted in the gauge being thrown around like being inside a big washing machine inside the hub. Luckily no damage was caused to sensitive hub components. The gauge however was unrepairable.

The second event resulted in an approximately 3 kg hub hatch being found on the ground very close to the tower at West Wind. This hatch had become loose and fell to the ground from 70 meters.

INITIAL RESPONSE AND INVESTIGATION OUTCOMES:

In the first event the turbine was returned to operation and as the work party were leaving heard a rattle from hub. Upon inspection the gauge was found in pieces. Debris was cleaned up and the hub was inspected for further damage and put back into service

The hub hatch was found on the ground the day after a work party had visited the turbine. The turbine was inspected that day to ensure the other two hatches were engaged correctly and no further damage had occurred to the fibre glass covers.

LEARNINGS AND RECOMMENDATIONS FROM THIS INCIDENT:

As per the Competent/Authorised Technician (AT, CT) training and the AWP documentation clearance section we must ensure the hub is always checked and double checked before exiting. The clearance signature check point has been included so the AT is ultimately responsible for the turbine to be returned to service safely. In both events if this check had occurred it would have prevented these from occurring.

The hub hatches currently in use at 75% of WWD, 100% at Mill Creek and 100% at Te Uku are all of the similar 5 pin locking type. These hatches must be fully placed into the hatch opening, pushed down to squash the gasket in and the locking handle turned to fully engage the pins into the hub grove. The safety latch must also be fully engaged.

The most important thing to complete is the double handed pull check. Once the hatch is fully closed. Grip both plastic handles tightly and giving them a good tug therefore in theory trying to pull the hatch off. This final check ensures that all five pins are engaged and the hub hatch is secure.



The Corporate Safety and Health Team are currently working on systems to support the above learnings. If interested in viewing the full investigation report for this incident, it can be found in:



