

SAFETY ALERT

Shared Learning's

INCIDENT TITLE:

YAW Gear/Motor Failure Siemens 2.3-82 VS

TIME AND DATE OF INCIDENT:

25 January 2017

INCIDENT DETAIL :

During a fault finding visit to a Wind Turbine following an extreme high wind weather bomb, a Service Technician found a yaw motor broke apart resulting in throwing shrapnel throughout the nacelle.

Further inspection identified exposed wires where the yaw motor was terminated.

LEARNINGS AND RECOMMENDATIONS FROM THIS INCIDENT:

Post an extreme wind event, any one entering a nacelle to investigate a yaw fault should ensure that a manual stop has been applied and be extra cautious.

Extra control measures to protect from both sharp shrapnel and the possibility of exposed electrical wires should be considered.

It is recommended to change the fault finding Yaw error related documentation to ensure the new risk is identified and extra control measures are put in place.

Do not try and reset the Yaw error until the actual yaw system has been fully inspected.

The importance of stop take 5 has been reiterated by this event as new hazards can arise during fault finding.

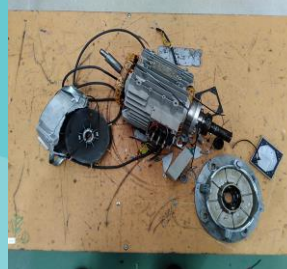
INITIAL RESPONSE AND INVESTIGATION OUTCOMES :

When the turbine faulted, the yaw motor circuit was in theory no longer live. This was treated as live until proved otherwise. Once this circuit was proved dead, the turbine was then made safe, locked, tagged out and an alert was placed on the turbine.

The investigation has identified the requirement of extra risk controls when dealing with Yaw faults after an extreme wind weather event.

PHOTO:

Photos of broke apart yaw motor and exposed wires



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:

For further information please contact Robert Ball, Wind Safety Specialist on 027 706 6308



meridian