

SAFETY ALERT

Shared Learning's

INCIDENT TITLE:

Live Stator Heater Chassis

TIME AND DATE OF INCIDENT:

29th October 2018, 11.30am

INCIDENT DETAIL :

An assessment of the OHA Unit 7 stator heaters condition and operation was carried out as part of the Refurbishment Project. Testing showed one of the 12 heaters showed a lower than expected resistance to earth.

On inspection it was found that the red phase conductor had been in contact with the metallic chassis of the heater. It appeared that the conductor had chafed on the rivet holding the metallic chassis in place allowing the contact to take place.

Additional it was found that the heater chassis was not earthed.

At some point in the past, the heater chassis would have been live at 230V AC and this could have provided an electric shock to someone who touched the heater chassis.

INITIAL RESPONSE AND INVESTIGATION OUTCOMES :

Unit 7 was under refurbishment and the individual heater circuits were isolated in order to carry out the inspection, removing any immediate risk to staff. A Safety Alert email was generated to the wider business.

On further investigation it was confirmed that there was no earth on the chassis of the Generator heater. Only the steel armouring of the cables (via many separate joins) would have provided a poor quality earth connection, this is non-compliant and not safe as it does not guarantee the correct operation of the electrical protection.

The remaining Unit 7 stator heaters have been inspected and no further damage to conductors was observed. None of the 12 heaters were earthed.

LEARNINGS AND RECOMMENDATIONS FROM THIS INCIDENT:

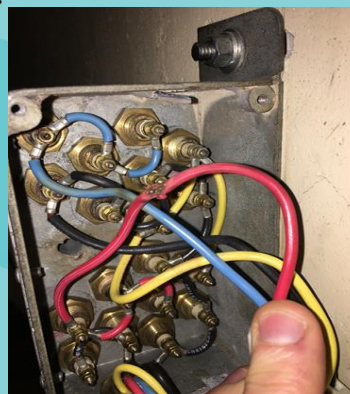
The stator heater chassis are not earthed and therefore are not compliant the current electrical regulations and this prevented the correct operation of the electrical protection of the circuit.

At the next available opportunity, the heaters in the remaining unit stators should be inspected by an electrician and where necessary the heater chassis will be bonded to the station earth.

If persons are removing the stator covers on other units before the heaters have been inspected and earth, the heaters should be isolated as the point of supply prior to the work.

Any similar industrial style bar heaters present across sites in areas such as storage or bathrooms should also be inspected as the wiring configuration is likely similar.

PHOTO:



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:

Safety Manager: Event 950613 or contact Holly Mason, Safety & Health Specialist Hydro



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