

Description of hazard or incident:

On 14th August 2014 at Holroyd Substation a TransGrid staff member was taking photos of condition monitoring equipment located inside Local Control Cubicles (LCC) in the 330kV GIS room. The TransGrid staff member brushed against the LCC heater and received an electric shock. Further investigation identified a voltage reading of 248V AC across the heat sink.

Measurements were then taken on other LCC heaters and voltages were present on the majority of the LCC heaters in the range of 60V - 70V AC. The heaters are standard **Rittal Cabinet Heaters Product Number SK3105-340**. These particular heaters are not earthed as they have a standoff plastic din rail mounting and no earthing cable is run to these heaters.

Extent of impact:

Staff member underwent a medical assessment following electric shock and has been cleared.

TransGrid has identified three substations on their network with Rittal Cabinet Heaters, with all heaters having been isolated and danger tagged until the fault is identified and rectified. The 240 V AC across the heat sink was only evident while the heaters were on.



Image: 248 volts measured on Rittal cabinet heater heat sink

Immediate action taken (or to be taken) to eliminate or control the hazard:

The incident was reported to the construction group who then immediately isolated and danger tagged all LCC AC Supplies at Holroyd substation. Similar heater arrangements are installed at Rookwood Rd 330kV & 132kV GIS with the same issue found. The LCC AC Supplies to these LCC's have also been isolated and danger tagged. The contractor Alstom Grid has been informed of the potentially dangerous issue and they are investigating and will provide a report with rectifications.

For further information contact your:

Team leader or Regional Manager

Issued by:	Safety Manager		
Approved by:	Manager Health Safety & Environment	Part B required:	YES

Meaning of Part A and Part B: Part A is the initial safety alert communicated within 48 hours of the incident. If required, a Part B will follow, should the incident be under investigation with outcomes requiring further communication.