

Electrical flash burns

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We have recently learned of this incident which occurred on an offshore installation.

What happened?

An electrician suffered superficial flash burns to his face, neck, ears and hands while operating a Merlin Gerin DA-type circuit breaker which was one of three incoming feeds to the platform 440v switchboard. The breaker was in the service position and attempts were being made to close the breaker and energise the switchboard. Difficulties had been experienced in closing the circuit breaker due to a defective component in the closing control circuit. This led to the use of an unapproved procedure, which had not been risk assessed.

The injured party had been standing at the circuit breaker with the panel door open and was using a tool to simultaneously overcome the defect while operating the 'close' push button on the front of the circuit breaker. While carrying out this action, the tool came into contact with live power circuit conductors which initiated an arcing fault and exposed the injured party to the dissipation of a high energy source.

Recommendations

The company involved has recommended to its personnel that:

1. Users review procedures to ensure that any undocumented operations that have become custom and practice are subjected to a risk assessment.
2. Users should ensure that all equipment malfunctions that require override procedures to obtain functionality are subjected to risk assessment.
3. All design safety features of equipment should be utilised.

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The effectiveness of the IMCA Safety Flash system depends on the industry sharing information and so avoiding repeat incidents. Incidents are classified according to IOGP's Life Saving Rules.

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