Safety Alert

Incident

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HS-SAL-25-007

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Security Class: PowerNet Employees Only

Network Temporary Earthing - Non-Visible Break

This alert serves as a critical reminder regarding the correct connection of Temporary Portable Earths (TPEs) to the integral earth of switch gear without a visible break.

SM-El Rules States

EE 5.2111 (3.602) - Where isolation is provided by a disconnector or by switchgear not having a visible break, earthing should be applied to the integral earth of that disconnector or the switchgear.



What is the Purpose of Connecting TPEs to the Integrated Earth of Switchgear

- 1. TPE's offer personal protection against the effects of inadvertent livening.
- 2. Application of TPE's at an equipment's integral earth will have lower impedance and therefore promote higher fault current than TPEs applied with a single driven earth stake.
- 3. TPE's connected to an integrated earth minimises the duration of potential exposure to personnel because a higher fault current will ensure faster circuit protection to operate.

What we must all do

- 1. Where an isolation point includes a switch with a non-visible break, Issuer applied TPEs shall be applied at that equipment.
- 2. Connect TPEs to the established earth of the switching apparatus. This may involve removing cable insulation of the integrated earth at the connection point.
- 3. Where this may not be possible, notify system control and determine suitable alternatives, which may include:
 - a. An established network earth between switchgear and the working position,
 - b. a single driven earth rod,
- 4. Ensure the integrated earth is left in a safe state once all works are completed and reinstate cable covering as required.

HSE Team have provided all identified external and internal interested parties with this Safety Alert.

NOTE: HSE Team are the only authority to release and circulate this Safety Alert.