

Southern Shield



Good/ Best Practice feedback

Nature of works	Accessing the Area Around HSS Lightning NDC Switchboards	
Date of good practice note	13 /11 /2018	

Staying Safe around HSS Switchboards



Description of the good practice

The HSS Operation & Maintenance Manual instructions specific to this equipment include the following statement “Access to the rear of live switchboards is not permitted as operators may be exposed to interruption products being vented from the circuit breaker compartments”. This situation can occur during fault clearance operations.

All HSS switchboards should have a physical barrier (often a plastic chain) installed between the rear of the equipment and the wall behind at both ends of the board intended to remind people of the perceived risk and to prevent access.

If access to this area is necessary, then the following protocol should be observed: -

- Arrange for the board to be made dead by opening all the circuit breakers.
- If this is not possible and access is only possible whilst the board is live & in operational service, then specific personnel protection will be required: -
 1. When planning your work, an arrangement should be made to test the effective operation of the ‘frame leakage protection’ prior to starting work.
 2. Operatives should be briefed so that they understand the circuit breakers can open at any time under fault conditions creating an unexpected, loud bang.
 3. The relevant ECR should be informed that work around the switchboard is being undertaken & if operational switching is required the operatives involved should be informed by the ECRO prior to this being carried out.
 4. Operatives should wear task specific ppe in addition to their standard issue flame retardant coveralls i.e. flame-retardant balaclava, helmet equipped with arc flash protective visor & cut 5, arc flash protective gauntlets – operatives shouldn’t have any areas of exposed skin.

What are the benefits?

- Site operatives are protected from the effects of interruption products on their skin whilst carrying out their duties.
- Due to operational restrictions, full isolation of d.c. traction supplies is often very difficult to achieve. The process described above may make it easier to arrange for work to proceed.

Are there any drawbacks?

By working behind live switchboards and wearing the task specific ppe, operatives dexterity may be limited and consideration should be given to limiting the working times of individual operatives.

Supporting Information

Extract from HSS Operation & Maintenance Manual:

Access covers are normally fitted at each end of the switchboard to prevent operators gaining access to the rear of the switchboard.

WARNING: Access to the rear of live switchboards is not permitted as operators may be exposed to interruption products being vented from the circuit breaker compartments.

