



## Schneider / Merlin Gerin ACB LV Board Failure

On 25<sup>th</sup> July 2019 a Schneider / Merlin Gerin Air Circuit Breaker (ACB) on a shielded-type wall-mounted LV Board disruptively failed at Whitby Grammar School substation in Ellesmere Port shortly after being operated. The ACB forms part of a “Type X” unit protected arrangement used predominately in SPM.

The Engineer had completed network checks and closed the LV ACB, after which the ACB began to show signs of distress and failed disruptively shortly afterwards. Fortunately the Engineer in attendance managed to exit the substation quickly and did not sustain any injuries.

An initial investigation is currently underway to determine the events and any contributing factors.

While this incident is under investigation, as an additional precaution the action points described below shall be implemented. These immediate precautions will be reviewed as the investigation progresses and additional information into the cause of the incident becomes available. At this point this Express shall be updated.

The photographs opposite show the type of equipment involved. Photographs shown are typical examples of Schneider shielded LV boards with an ACB.



Figure 1: Schneider Shielded LV Board



Figure 2: Schneider LV ACB

## Recommendations and action points

- In line with operational procedures on entering the substation the Operator shall carry out a visual inspection of the LV board to check for any signs of distress. Should any signs of distress be noticed, then the substation shall be evacuated immediately and OCC/NMC shall be informed.
- Prior to any operation of any LV ACB (regardless of manufacturer/model) the Operator shall notify OCC/NMC.
- All LV ACBs (regardless of manufacturer/model) which form part of a shielded LV wall-mounted board shall not be operated live.
- Note: LV ACBs on unshielded type LV boards are not affected by this restriction.