

ADAPTER

Customer : Electricity North West

Electricity North West is a UK electricity distribution network operator, responsible for the administration and maintenance of the network that distributes electricity to the North West of England.

Process:

ENW have a large installed base of Low Voltage Fuse Boards many of which are fitted with voltage monitoring terminals on the front panel. As these assets age, the plastic of the voltage monitoring terminals has degraded and weakened to the point that the plastic housing can break when an operator attempts to plug a test lead into them. This causes a live part to fall inside the equipment. An electrical fault inside the equipment is then likely to occur, potentially damaging the asset, or in the worst case, injuring the operator.

Electricity North West approached EPS to develop a safe solution to the problem.

Solution:

EPS developed an adapter terminal which screws into the panel. This component enabled the addition of a fuse to the test socket. This adaptor safely isolates the outgoing connection to the defective socket, which may then be disconnected or left in-situ and provides a fused connection through its internal socket.

This project was turned around quickly from concept to delivery. EPS used its' 3D printing capabilities to produce a functional prototype.

Summary:

EPS invested in new injection moulding to rapidly manufacture large quantities of adapters, which were colour-coded to enable the operator to identify quickly which phase was being tested. ENWL embarked on a phased installation plan starting in the summer of 2019.

