



1. SCOPE

This document details the application of SOP 2009/0359/00 (Applicable to L&C and successor companies T3GF3/T4GF3 RMU, GF3 and all variant fuse switches) issued by the Energy Networks Association.

2. ISSUE RECORD

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| Issue Date | Issue No | Author | Amendment Details |
|-------------------|-----------------|----------------|--------------------------|
| June 2009 | 1 | David Walker | |
| May 2010 | 2 | Alan MacGregor | Update – SOP withdrawn |

3. ISSUE AUTHORITY

| Author | Owner | Issue Authority |
|---------------------------------|---|--|
| Alan MacGregor Lead Engineer | Alastair Ferguson Technical Risk Manager | Pearse Murray Director of Asset Strategy & Network Programmes |

4. SOP DETAILS

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|---|--|
| EQUIPMENT TYPE: | L&C and successor companies T3GF3/T4GF3 RMU, GF3 and all variant fuse switches. |
| ORIGINATING DNO | United Utilities |
| DATE: | 09/03/2009 |
| NUMBER INSTALLED IN ENERGY NETWORKS NORTH: | TBC |
| NUMBER INSTALLED IN ENERGY NETWORKS SOUTH: | TBC |
| REASON: | <p>Disruptive failure of T4GF3 RMU. Following a fault on a transformer cable loop, resulting in operation of one HV fuse, all three fuses were replaced and the transformer re-energised from the fuse switch. Approximately 45 seconds after re-energisation disruptive failure occurred.</p> <p>Initial investigations indicate that the failure was associated with the FSW.</p> |
| STATUS IN INITIATING DNO: | <ol style="list-style-type: none">1. This restriction applies to the HV switchgear, following operation of the fuse switch on fault.2. In the event of the fuse switch operating on fault, then access to the substation with the HV switchgear live is prohibited other than that required to positively identify the site as defined under CP606 procedure S1.3. The affected HV switchgear shall be made “Not Live” remotely and shall not be re-energised until an internal inspection of the fuse switch contacts & mechanism has been conducted to ascertain if there are any signs of burning or arcing.4. If any damage is found the switch shall be maintained including an oil change. Following this the restriction can be removed.5. If the fuse switch is found to be in good condition, then the unit can be re-energised, operated normally and the SOP removed. <p>UPDATE: SOP withdrawn. Failure attributed to one-off human error.</p> |



SPEN APPLICATION: Following discussions with United Utilities and taking into consideration SPEN experience with Long & Crawford equipment, this failure is considered to be an isolated incident. This SOP will not be applied and is published for information only.

UPDATE: N/A

REMEDIAL ACTION: None required.