

# Estates and Facilities Alert



## IMMEDIATE ACTION

Ref: EFA/2011/006 Issued: 12<sup>th</sup> December 2011  
Gateway Reference: 17013

### Device

**High-Voltage (HV) 11kV (SIEMENS) - Reyrolle  
Circuit Breaker – Hadrian (SMV) 630A**

### Problem

- There is concern that a flashover could occur whilst isolating the circuit breaker.
- This would be as a result of the busbar shutters dropping down onto the exposed metal bushings whilst they are touching or in close proximity to the live busbar or feeder contacts.
- Potential fault with design of the four split pins which are located to hold the shutter mechanism in place.
- Any bus-section, bus-coupler and transformer circuit breakers have a different design of shutter mechanism, are not affected by this EFA.

### Action by

Managers and staff responsible for the procurement, supply, maintenance and asset management of the electrical High-Voltage (HV) infrastructure and the operating (switching) of electrical HV switchgear.

### Action

The appointed Authorised Person AP (HV) for the site should confirm if this notice is applicable to equipment installed and if confirmed ensure the following actions.

The circuit breaker identified in this alert should only be withdrawn from the service position when both the busbar and feeder contacts are confirmed as dead.

A check should be done to the circuit breaker in accordance to the manufactures recommendations and as detailed in the ENA SOP ref 2011/0375/01. (UPDATE) Dated 15<sup>th</sup> December 2011.

This check cannot be carried out without withdrawing the circuit breaker truck from the housing. Therefore busbar and circuit breaker must be isolated from a separate location before withdrawing the circuit breaker for inspection.

### Contact

Siemens Transmission & Distribution.  
(Acting on behalf of Reyrolle)  
Chris Hull  
Engineering Manager – Siemens Services.  
Phone: 0191 4015515  
[chris.hull@siemens.com](mailto:chris.hull@siemens.com)  
Address: North Farm Road, Hebburn, NE31 1LX

## Problem

1. An incident occurred involving a Reyrolle 11kV SMV Hadrian circuit breaker rated at 630A.
2. The issue is the potential that a flashover could occur while isolating the circuit breaker as a result of the busbar shutters dropping down onto the exposed metal bushings, whilst these are in contact or close proximity to the live busbar or feeder contacts.
3. Until the manufacturer's corrective action is carried out the circuit breaker shall not be manually operated without first being isolated from a separate location.
4. Under the Energy Network Association (ENA) NEDeR's notification scheme, Scottish Power issued a Dangerous Incident Notice (DIN) Ref. DIN 2011/0059/00 2011 and a Suspension of Operation Practice (SOP) Ref. SOP 2011/0375/01 (UPDATE) dated 15<sup>th</sup> of December 2011.

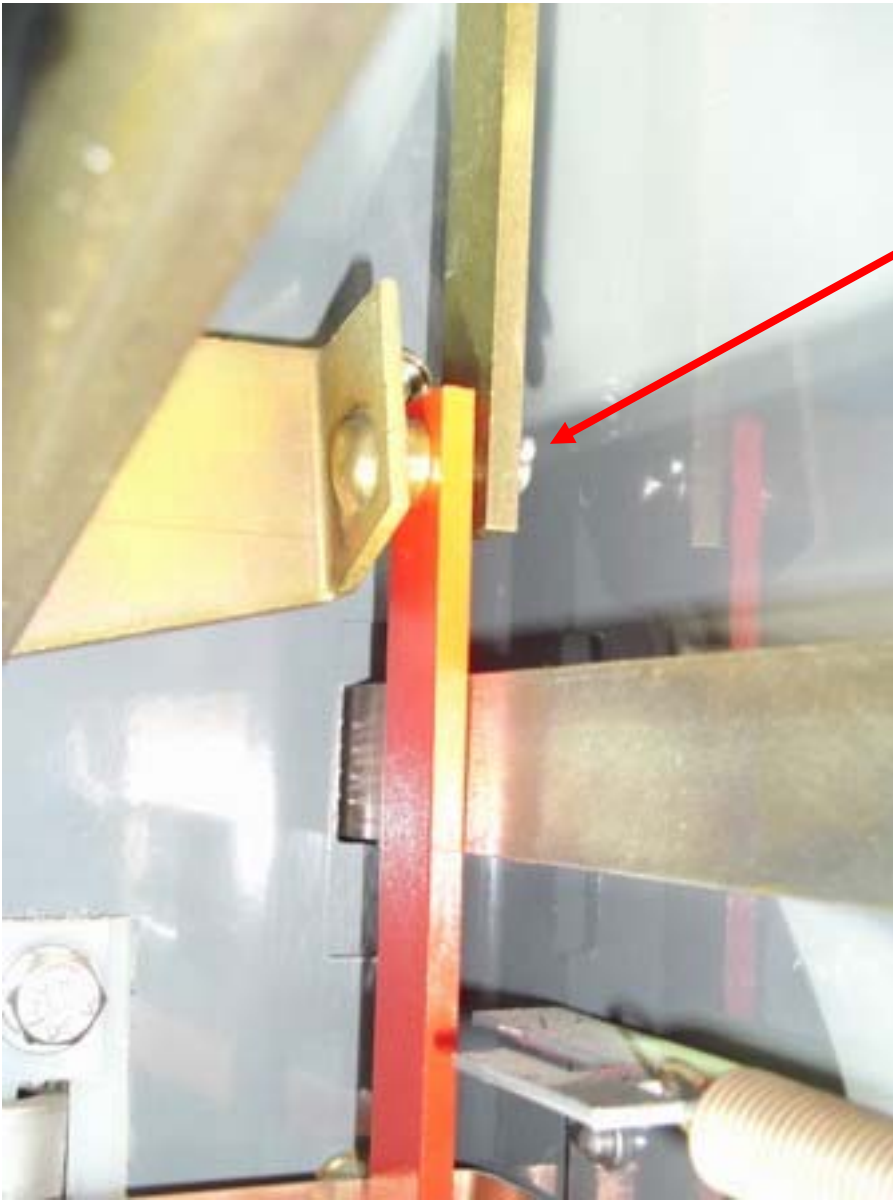
## Action

5. All appointed Authorised Persons (HV) and operators and service and maintenance providers should be made aware of this EFA and the Suspension of Operation Practice (SOP) Ref. SOP 2011/0375/00 dated 18<sup>th</sup> of November 2011 and SOP 2011/0375/01 (UPDATE) dated 15<sup>th</sup> of December 2011. A copy of these EFA SOP's can be obtained from Energy Network Association at <http://www.ena-eng.org/neders/>.
6. The appointed Authorised Person (HV) for the site should confirm if this notice is applicable to equipment installed and if confirmed ensure the following actions. These are in line with the revised operational practices imposed by Scottish Power in their Suspension of Operational Practice (SOP).
7. The operators, service and maintenance providers should
  - a. Ensure the Reyrolle SMV Hadrian Circuit breaker is only withdrawn from the service position when both the busbar and feeder contacts have been made dead from a separate location.
  - b. Ensure that a check is made (see photos below) on the four split pins which hold the busbar shutters in place as described in the ENA ref SOP 2011/0375/01 (UPDATE) dated 15<sup>th</sup> December 2011. If this is unclear then advice should be obtained from the manufacturer for more information.
  - c. Visually check all split pins and dowels on both ends of the feeder and busbar shutter mechanisms to ensure they are fully located in the hole in the dowel and the split pins are bent firmly round the dowel and they are orientated with the legs of the split pins in view.
8. The operators, service and maintenance providers should contact the manufacturer to seek advice on an individual case-by-case basis.

9. Once checks have been made on the four split pins and rectification completed (if required) then the Reyrolle SMV Hadrian Circuit breaker should be clearly marked as having been checked, with the date.



Split pins located here require checking to make sure legs are bent fully.



Lower split pin location for the busbar shutters.



Split pin locations for upper locations

## Suggested Onward Distribution

- Risk Manager
- Primary Care organisations
- HV service providers
- Those responsible for the provision of Estates and Facilities service,
- All Maintenance Estates Managers
- HV Authorising Engineers
- HV Authorised Persons (AP)
- Directors of Estates and Facilities

## Additional information for England

The above sections of this Alert were compiled by Department of Health.

Action required by this alert should be **underway by: 15<sup>th</sup> December 2011**

Action required by this alert should be **completed by: 13<sup>th</sup> January 2012**

Enquires should quote reference number EFA/2011/006 and be addressed to:

### **Defects & Failures**

Department of Health  
Estates & Facilities Division 3N09  
Quarry House,  
Quarry Hill,  
Leeds LS2 7UE

[Mb-defects&failures@dh.gsi.gov.uk](mailto:Mb-defects&failures@dh.gsi.gov.uk)

#### **HOW TO REPORT DEFECTS & FAILURES**

Defects and failures relating to non-medical equipment, plant and buildings should be reported to the Department as soon as possible. Advice on what needs to be report can be found in DH (2008) 01. Defect and failure reporting is an on-line only reporting facility, available on the NHS Information Centre website at [www.ic.nhs.uk](http://www.ic.nhs.uk)

This Alert can be found on the following websites  
<http://www.dh.gov.uk> and <https://www.cas.dh.gov.uk>

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