

1. SCOPE

This document details the application of SOP 393 as issued by the Energy Networks Association and is applicable within SPEN to 11kV and 6.6kV switchgear types GEC BVRP 500, GEC BVRP17 and GEC VMX forms A/B/C


2. ISSUE RECORD

This is a Reference document. The current versions of Reference documents are held on the Energy Networks Intranet Document Library.

It is your responsibility to ensure you work to the current version.

Issue Date	Issue No.	Author	Amendment Details
February 2014	1	Geoff Wood	Original Issue.

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
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4. REVIEW

This is a Reference document which has a 5 year retention period after which a reminder will be issued to review and extend retention or archive.

5. DISTRIBUTION

This document is not part of a Manual maintained by Document Control and does not have a maintained distribution list.

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7. SOP DETAILS

EQUIPMENT TYPE	GEC BVP500, BVRP17, VMX Forms A/B/C, fitted with Voltage Transformer
ORIGINATING COMPANY	ScottishPower
DATE	14 Feb 2014
NUMBER INSTALLED IN ENERGY NETWORKS NORTH	171
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH	478
REASON	Incomplete HV contact engagement of Voltage Transformer following return to service, leading to progressive partial discharge and disruptive failure of both VT and VT receptor.
STATUS IN INITIATING COMPANY	Following the isolation of the voltage transformer, and before it's return to service, the high voltage spring loaded plunger contacts in the bushings of the moving portion shall be checked for smooth operation throughout their full travel. Any lack of smooth operation, or plunger sticking, shall require the remedial and routine maintenance process detailed in SPEN document SWG-19-058 to be undertaken.
SPEN APPLICATION	As above
ADDITIONAL COMMENTS	Experience has shown that light corrosion of the HV contact plunger stem, the HV fuse caps and the contact pressure spring, often occurs due to low level PD within the VT bushing. This can cause the plunger to stick and result in incomplete contact pressure when the VT is returned to service following isolation. This may happen in all referenced GEC VTs, even when the painted end caps (see SOP 184), have been replaced. The restriction is applied for the remaining service life of the equipment, and is considered a simple and prudent check.

8. SOP HEADER.

Field Name	Field Value	Field Size
Name (SOPxxx) *	SOP0393 GEC BVRP500, GECBVRP17, GECVMX forms A/B/C	61
The reason for the Operational Restriction *	Poor contact of VT HV contacts	30
Nature of the Operational Restriction*	Check contact plunger for smooth operation	50
Comments*	Light corrosion of HV contact plunger due to PD causes plunger to stick. Check plunger for smooth operation full length before returning VT to service.	200
Restricted Access to Substation Flag*	No	1
Search Criteria*	Equipment type= BV500, BVRP500,BV17,BVRP17,VMX, VMXA,VMXB,VMXC	N/A

* This denotes a Mandatory Field

Notes:

1. The SOP name must adhere to the following convention: SOP followed by three digits with no space e.g. SOP024.