

1. SCOPE

This document details the application of SOP 157 (Hawker Siddeley Falcon Beta RMUs) issued by the Energy Networks Association.

2. ISSUE RECORD

This is a Reference document. The current version is held on the EN Document Library.

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

Issue Date	Issue No.	Author	Amendment Details
October 2000	1	Esther Stewart	Initial Issue in New Format: 2 Page Document
Nov 2023	2	Patrick Dolan	Addition of the Remedial Action Procedure

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. It is published on the SP Energy Networks website.

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7. SOP DETAILS

EQUIPMENT TYPE	Hawker Siddeley Falcon Beta RMU
ORIGINATING COMPANY	London Electricity
DATE	22 nd December 1995
NUMBER INSTALLED IN ENERGY NETWORKS NORTH	19
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH	0
REASON	Following an "open" operation, one phase of a ring switch was found to be still closed.
STATUS IN INITIATING COMPANY	Ban on live operation of ring switches
SPEN APPLICATION	Live RSW operation prohibited until test regime completed to confirm RSW correct operation
ADDITIONAL INFORMATION	
UPDATE	
REMEDIAL ACTION	SOP can be removed pending completion of the Test Regime detailed in Appendix 1 with satisfactory performance confirmed

8. SOP HEADER

Field Name	Field Value	Field Size
Name (SOPXXX) *	SOP157	6
The reason for the Operational Restriction *	Contact failure to move on Op	30
Nature of the Operational Restriction *	Live RSW op prohibited pending function tests	50
Comments *	Live Operation of the RSW prohibited until test regime completed successfully to confirm function.	200
Restricted Access to Substation Flag *	N	1
SOP Impact Code * (highlight or underline the appropriate code)	0 Temporary/Impact under assessment <u>1 Very minor operational/network impact</u> 2 Moderate operational/network impact 3 Significant impact on system perf./measurable business costs 4 Inoperable without intervention 5 Inoperable – no cost effective solution/must be replaced	N/A
SOP component type * (highlight or underline the appropriate code)	01 Bushing only 02 Circuit Breaker 03 Fixed Portion only 04 Moving Portion only 05 Switch <u>06 RMU</u> 07 Transformer only 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer	N/A
Search Criteria *	Manufacturer: "Hawker Siddeley" Text Model: *Falcon* Construction Year: Pre 1996 Restriction applied to RMU RSW operations	N/A

* This denotes a Mandatory Field

9. APPENDIX 1: TEST REGIME

The operational restriction associated with Falcon Beta RMU's - Ring Switch drive links can be removed by completing the following procedure subject to no defect detection.

Note: if any issues are found in the test regime, **suspend testing and inform Control**. SOP will be considered permanent on any RSW where issues are found and Live operations will continue to be prohibited until equipment is replaced. Re-energisation of the equipment is subject to confirmation that each phase switch blade position corresponds to the position indicated on the equipment.

Test Regime

1. Carry out remote switching, Isolate and Earth the RMU
2. Whilst the unit is isolated and earthed, carry out 30 full operations cycles on each RSW (ON – OFF – EARTH – OFF – ON)
3. Prove function of network facing RSWs first

For network facing RSWs;

- Issue a SFT to prove the function of each RSW
 - Using an insulation resistance tester, prove the RSW condition by testing from a remote substation
 - RSW ON – confirm flat down to a remote Earth
 - RSW OFF – test clear
 - RSW EARTH – confirm flat down to Earth
 - Cancel SFT when conditions confirmed for all network facing RSW are proven
4. Where applicable, Prove the function of transformer facing RSWs

For transformer facing RSW;

- Starting conditions: Any network facing RSW proven in previous step, and any transformer links should remain in the open position
 - Testing with aid of the VPIS is required
 - Open network facing CB and Transformer facing RSW
 - Close the network facing RSW
 - Energise the RMU through the closed RMU RSW from a remote substation
 - Check TX VPIS is not illuminated
 - De-energise RMU from a remote substation
 - Close the transformer facing RSW
 - Energise the RMU through the closed RMU RSW from a remote substation
 - Confirm VPIS is illuminated on all three phases on RMU TX RSW
 - If VPIS indications confirmed, Transformer LV Links can be closed to complete works
5. If all checks are completed successfully, **Inform Control that SOP can be removed.**