

1. SCOPE

This document details the application of SOP 69 (Applicable to Whipp & Bourne CV Circuit Breaker) 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 |
| August 2023 | 2 | Ryan Miller | Update to confirm SOP application |

3. ISSUE AUTHORITY

| Author | Owner | Issue Authority |
|---------------------------------|--|---|
| Ryan Miller Project Engineer | Jon Ruiz De Aguirre Substations Manager | Fraser Ainslie Head of Engineering Design and Standards |

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.

6. CONTENTS

| | |
|--------------------------|---|
| 1. SCOPE..... | 1 |
| 2. ISSUE RECORD..... | 1 |
| 3. ISSUE AUTHORITY | 1 |
| 4. REVIEW | 1 |
| 5. DISTRIBUTION..... | 1 |
| 6. CONTENTS | 2 |
| 7. SOP DETAILS | 3 |
| 8. SOP HEADER | 4 |

7. SOP DETAILS

| | |
|--|---|
| EQUIPMENT TYPE | Whipp & Bourne CV Circuit Breaker |
| ORIGINATING COMPANY | North of Scotland Hydro Electricity Board |
| DATE | 22 nd December 1988 |
| NUMBER INSTALLED IN ENERGY NETWORKS NORTH | 0 |
| NUMBER INSTALLED IN ENERGY NETWORKS SOUTH | 2 |
| REASON | <p>For maintenance purposes, the V.C.B's are supplied with a sheet steel barrier which can be inserted between the busbars and the busbar selector switch. The barrier access cover is interlocked to prevent the barrier being fitted, unless the selector switch is in the Earth position.</p> <p>The interlock is connected to the selector switch drive shaft via a bracket which is held in place by two M6 screws. During maintenance a bracket was found with one screw missing and the other one slack, allowing the interlock to come out of its guide. Another bracket was found with both screws slack but in place.</p> |
| STATUS IN INITIATING COMPANY | Live operation banned until modified. |
| SPEN APPLICATION | All operations with busbar or associated circuit live are prohibited. |
| ADDITIONAL INFORMATION | Only two units of this equipment type remain within SPEN at the time of writing this SOP. Concern on SPEN ability to support this product (lack of OEM support and SPEN expertise in the Product) is driving asset replacement priority on this equipment. |
| UPDATE | N/A |
| REMEDIAL ACTION | SOP is repairable with application of Loctite on associated screws that loosen during operation. |

8. SOP HEADER

| Field Name | Field Value | Field Size |
|--|---|------------|
| Name (SOPXXX) * | SOP069 | 6 |
| The reason for the Operational Restriction * | Parts can fall on BB during Op | 30 |
| Nature of the Operational Restriction * | All Ops with BB or CCT live prohibited | 50 |
| Comments * | Loose screws in busbar segregation barrier interlock mechanism can detect during operation into the busbar isolator contact | 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 <u>02 Circuit Breaker</u> 03 Fixed Portion only 04 Moving Portion only 05 Switch 06 RMU 07 Transformer only 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer | N/A |
| Search Criteria * | Manufacturer: Whipp and Borne Text Model: CV | N/A |

* This denotes a Mandatory Field