

1. SCOPE

This document details the application of SOP 1995/0153/00 (Applicable to Hawker Siddeley – HG36 SF6 Circuit breaker at system voltages of 33kV) issued by the Energy Networks Association.


2. ISSUE RECORD

This is a **Reference** document. The current version is held on the Energy Networks Intranet.

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

Issue Date	Issue No.	Author	Amendment Details
November 2011	1	Esther Stewart	Initial issue
July 2012	2	Mark Stewart	Removal of SOP153 following an investigation where route cause was one off failure of bushing.

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
Name: Mark Stewart Title: Lead Engineer Technical Risk	Name: Alastair Ferguson Title: Technical Risk Manager	Name: Jeff Hunt Title: Head of Asset Management.  Date:3 rd July 2012.....

4. REVIEW

This is a **Reference** document which has a 10-year retention period after which a reminder will be issued to either extend retention or archive.

5. DISTRIBUTION

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

6. CONTENTS

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

7. SOP DETAILS

EQUIPMENT TYPE: Hawker Siddeley – HG36 – SF6 Circuit Breaker

ORIGINATING COMPANY Southern Electric

DATE RAISED: 28th September 1995

NUMBER INSTALLED SPEN NORTH: 73

NUMBER INSTALLED SPEN SOUTH: 158

AFFECTED RANGE: All units.

NUMBER AFFECTED SPEN NORTH: 73

NUMBER AFFECTED SPEN SOUTH: 158

REASON: During routine switching operations an outdoor HG36 SF6 circuit breaker within Southern Electric manufactured during 1988 was found to be open circuit on one phase. Investigations in conjunction with HSS revealed one fractured support insulator and several other insulators showing signs of mechanical stress. A further unit within the same site has been examined and some similar insulators were found to exhibit early stages of mechanical failure. Southern Electric are working with HSS to determine the most likely cause of failure and to determine an appropriate solution. Until the results of this investigation are known the following restrictions are to be applied.

STATUS IN INITIATING COMPANY: Restriction can now be lifted permanently.

SPEN APPLICATION: Restriction can now be lifted permanently.

ADDITIONAL INFORMATION:

UPDATE: **UPDATE:**
8/11/95: Hawker Siddeley Switchgear is confident that the identified problem with the insulators is contained to the period of manufacture prior to a change of supplier in mid 1989. Records indicate that Manweb purchased two HG36 breakers prior to this date. Plant records indicate that the restriction imposed by SOP153 can be lifted on the following breakers;

Further Update 15/07/1996

We are advised that the above restriction has now been lifted. The cause of the failure was investigated by the manufacturer (Hawker Siddeley) and found to be a void in the insulator not detected during discharge tests. The Manufacturers have taken measures internally to modify their test procedures to prevent such a situation reoccurring. They believe this to be a one off incident.

REMEDIAL ACTION:

Following the last update on 15/07/1996 the restriction can now be lifted permanently.