

1. SCOPE

This document details the application of SOP 2010/0363/00 (Applicable to South Wales Switchgear type IF4X oil switches) issued by the Energy Networks Association.

2. ISSUE RECORD

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Issue Date	Issue No	Author	Amendment Details
May 2010	1	Alan MacGregor	
October 2010	2	Alan MacGregor	Remedial action update

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
Alan MacGregor Lead Engineer	Alastair Ferguson Technical Risk Manager	Jeff J Hunt Head of Asset Management

4. SOP DETAILS

EQUIPMENT TYPE:	South Wales Switchgear type IF4X oil switch
ORIGINATING DNO	CE Electric
DATE:	16/06/2009
NUMBER INSTALLED IN ENERGY NETWORKS NORTH:	172
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH:	0
REASON:	<p>Whilst carrying out routine maintenance, a fitter discovered that the oil switch contained approximately two inches of oil in the bottom of the tank. Further investigation showed that the oil had seeped past the Nebar gasket and O-ring where the drive shaft passes through the tank. The O-ring had probably perished due to its age and immersion in oil.</p> <p>A disruptive failure also occurred in SPEN due to low oil level.</p>
STATUS IN INITIATING DNO:	No live switching on this type of unit until it has been proved that the unit contains the recommended amount of oil.
SPEN APPLICATION:	No live switching on this type of unit.
UPDATE:	N/A
REMEDIAL ACTION:	IF4X units shall be maintained, replacing Permali bars and O-rings where found defective. The busbar chamber shall be inspected for signs of oil leak/migration via the bushings. Where no defects are found, the SOP will be suspended for a period of 2 years. Where defects are found and rectified, the SOP shall remain in place for a minimum period of 6 months and until another maintenance has been carried out and no defects found. Only then shall the

SOP be suspended for a period of 2 years.

A TLR shall be placed against the switchgear with the last maintained date suspending the SOP and the next SOP restoration date after 2 years.

Switching programmes should state “create TLR” in the schedule.

A switchgear replacement programme has been initiated.

5. SOP HEADER

Field Name	Field Value	
Name (SOP_{xxx})	SOP363 South Wales Switchgear type IF4X	
The reason for the Operational Restriction	Loss of oil–disruptive failure	
Nature of the Operational Restriction	Do NOT operate Live	
Comments	Oil level found low at maintenance and at a disruptive failure. No live switching.	
Restricted Access to Substation Flag	No	
	Switch type = IF4X	