OPSAF-16-427 Issue No. 1

1. SCOPE

This document details the application of SOP 427 (Applicable to Yorkshire Switchgear Type YSF6 11kV circuit-breakers) 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
14/04/22	1	Kevin Butter	Initial issue

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
Kevin Butter	Fraser Ainslie	Fraser Ainslie
Lead Engineer	Head of Engineering Design	Head of Engineering Design
Engineering Design & Standards	and Standards	and Standards
		Date: 15/04/2022

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 Yorkshire Switchgear YSF6 11 kV gas circuit-breaker

ORIGINATING COMPANY UKPN

DATE 12/04/22

NUMBER INSTALLED IN ENERGY NETWORKS NORTH

161

NUMBER INSTALLED IN ENERGY NETWORKS SOUTH

0

REASON

A Yorkshire Switchgear 11 kV YSF6 Grid Transformer incomer gas circuit breaker (GCB) failed catastrophically resulting in fire and smoke in the switch room. Following initiation of a "spring not charged" alarm, field operatives attempted to manually charge the springs. Upon a slight turn of the handle, the spring charging motor appeared to kick in. At this point, the field operatives exited the switch room as this outcome was unexpected. The GCB failure occurred shortly after. Investigation in progress and manufacturer has been informed.

STATUS IN INITIATING COMPANY

No operatives shall be present in a switch room containing Yorkshire Switchgear Type YSF6 GCBs being operated, including routine and fault switching.

If the Spring Charge Motor fails to charge/recharge after an operation, no attempt to manually recharge shall be made with the switchboard energised. The board and relevant incoming feeder shall be made dead.

SPEN APPLICATION

All Open and Close operations on YSF6 GCBs shall be carried out remotely using either remote control facilities or remotely on site via control panels (located in a separate switchroom) or using an Approved umbilical device.

Local Open and Close operations on YSF6 GCBs shall only be carried out after busbars and circuit have been made not Live. Local operations of YSF6 GCBs to apply or remove a Circuit Earth is permissible with busbars Live.

If the spring charging motor fails to charge after an operation, no attempt shall be made to manually charge the springs with the associated busbars or circuit Live.

For manual operated spring charging mechanisms, spring charging shall only be permitted with the GCB in the Open position. No attempt shall be made to manually charge springs with the GCB in Closed position.

ADDITIONAL INFORMATION

The SOP is applied to all variants of Yorkshire Switchgear Type YSF6 11 kV GCBs in SPEN regardless of current rating.



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This is to be reviewed pending outcome of UKPN investigation

UPDATE

REMEDIAL ACTION

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8. SOP HEADER

Field Name	Field Value		Field Size
Name (SOPXXX) *	SOPXXX) * SOP427		
The reason for the * Operational Restriction	Dis. failure due to mech issue	30	
Nature of the * Operational Restriction	No live manual op. Manual Spring charge restricted		50
Comments *	No live manual CB op. Op from outside the sw/room with egress route swgear permitted If Motor fails to charge spring after op, manual charge prohibited when BB/CCT live. Manual charge in open pos only		200
Restricted Access to * Substation Flag	Y	N	1
SOP Impact Code * (highlight or underline the appropriate code)	O Temporary/Impact under assessment 1 Very minor operational/network impact 2 Moderate operational/network impact 3 Significant impact on system perf.// 4 Inoperable without intervention 5 Inoperable – no cost effective solution.	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 06 RMU 07 Transformer only 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer	N/A	
Search Criteria *	*YSF6* All Ratings		N/A