

1. SCOPE

This document details the application of SOP 404 (Applicable to Pole mounted transformer - 11kV/200kVA - CG Power Systems) 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
December 2017	1	Patrick Dolan	Initial issue

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.

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7. SOP DETAILS

EQUIPMENT TYPE	Pole mounted transformer - 11kV/200kVA - CG Power Systems
ORIGINATING COMPANY	Western Power Distribution
DATE	04 November 2016
NUMBER INSTALLED IN ENERGY NETWORKS NORTH	>500
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH	>500
REASON	Early life failure.
STATUS IN INITIATING COMPANY	CG pole mounted transformers cannot be connected to the network by Live Line Techniques hot glove or hot stick. Use of drop down expulsion fuses on the same pole as the transformer are not to be used to make live, a 20m exclusion zone is to be in place while energising from a remote source and a 30 minute soak period needs to be observed before completing final commissioning checks.
SPEN APPLICATION	The same equipment is in use within SPEN and is likely used for identical applications.
ADDITIONAL INFORMATION	There have, to date, been a small percentage of reported failures within SPEN.
UPDATE	None.
REMEDIAL ACTION	SPEN have taken the decision not to apply a SOP to the installation of this equipment at this moment in time. A technical express has previously been issued to alert staff that all PM transformers can disruptively fail after energisation, to outline some limitations applicable to the Live Line connection of PM transformers and to issue guidance in the event that there is any evidence of equipment distress upon energisation of the assets. SP are unaffected by issues relating to tank defects experienced by other DNOs as SP units are supplied with different (Galvanised) tanks.

8. SOP HEADER

Field Name	Field Value	Field Size
Name (SOP 404) *	SOP 404 CG PM Transformers	61
The reason for the Operational Restriction *	SOP 404 is not applied in SPEN	30
Nature of the Operational Restriction *	Flashover due to tank compression	50
Comments *	SOP 404 is not applied in SPEN	200
Restricted Access to Substation Flag *	N	1
SOP Impact Code * <i>(highlight or underline the appropriate code)</i>	<u>0 Temporary/Impact under assessment</u> 1 Very minor operational/network impact 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 * <i>(highlight or underline the appropriate code)</i>	01 Bushing only 02 Circuit Breaker 03 Fixed Portion only 04 Moving Portion only 05 Switch 06 RMU <u>07 Transformer only</u> 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer	N/A
Search Criteria *	N/A	N/A

* This denotes a Mandatory Field