

1. SCOPE

This document details the application of SOP 287 (Applicable to 132kV Switching Isolator, type RVS 300) issued by the Energy Networks Association.

2. ISSUE RECORD

This is a Reference document. The current version is held on the EN Document Library.

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Issue Date	Issue No.	Author	Amendment Details
December 2001	1	Alastair Graham	Initial Issue
May 2023	2	Patrick Dolan	General update – Clarification that SOP is permanent

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
Patrick Dolan Lead 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.

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7. SOP DETAILS

EQUIPMENT TYPE	Switchgear & Equipment, 132kV Switching Isolator, type RVS 300
ORIGINATING COMPANY	SP Power Systems
DATE	7/12/2001
NUMBER INSTALLED IN ENERGY NETWORKS NORTH	0
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH	14
REASON	A Switchgear & Equipment (Brush), 132kV switching isolator failed disruptively at ICI Wade substation on the 28th of November 2001. This has been attributed to mechanical resistance.
STATUS IN INITIATING COMPANY	<p>The following restriction shall apply to all substations detailed in Appendix 1 containing live switchgear of the above type:</p> <ol style="list-style-type: none">1. Live operation of the Switching Isolators shall be permitted only by remote operation2. Automatic operation from protection equipment shall be rendered inoperable on all switching isolators (disconnectors) of this or similar type pending further detailed investigations
SPEN APPLICATION	<p>SPEN Application is updated from initial application as below:</p> <ol style="list-style-type: none">1. All live operation of the Switch Disconnectors is prohibited2. Automated operation is permitted only when the associated protection scheme is designed to operate the switch not live
ADDITIONAL INFORMATION	The devices described as 132kV Switching Isolators design function is that of a Switch Disconnector
UPDATE	Maintenance recommendations for associated equipment removed with all units targeted for replacement
REMEDIAL ACTION	The SOP will remain in force in all affected units until they are removed from the network

8. SOP HEADER

Field Name	Field Value	Field Size
Name (SOPXXX) *	SOP287	6
The reason for the Operational Restriction *	DISRUPTIVE FAILURE OF SWITCH	30
Nature of the Operational Restriction *	NO LIVE OPERATION OF SWITCH PERMITTED	50
Comments *	All live operation of the Switch Disconnectors is prohibited Automated operation is permitted only when the associated protection scheme is designed to operate the switch not live	200
Restricted Access to Substation Flag *	Y <u>N</u>	1
SOP Impact Code * (highlight or underline the appropriate code)	0 Temporary/Impact under assessment 1 Very minor operational/network impact <u>2 Moderate operational/network impact</u> 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 02 Circuit Breaker 03 Fixed Portion only 04 Moving Portion only <u>05 Switch</u> 06 RMU 07 Transformer only 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer	N/A
Search Criteria *	Search Text Model *RVS300* Affected units listed in Appendix 1	N/A

* This denotes a Mandatory Field

Appendix 1: Substation Sites with RVS300 Switching Disconnectors

Substation	Circuit	Nomenclature
Bootle	132/33kV Transformer T2A	'215A'
Brymbo	132/33kV Transformer T1C	'115C'
Dallam	132/33kV Transformer T1	'115'
Garston	132/33kV Transformer T2	'213'
Gateacre	Lister Drive (Via Edge Lane) / SpekeT3	'500'
I.C.I. Wade	132/33kV Transformer T1	'115'
I.C.I. Wade	132/33kV Transformer T2	'215'
Lister Drive	132/33kV Transformer T2	'215'
Paradise Street	132/33kV Transformer T1	'115'
Paradise Street	Lister Drive 405	'125'
Percival Lane	Salt Union	100'
Percival Lane	132/33kV Transformer T1	'115'
Prescot	132/33kV Transformer T1B	'115B'
Ravenhead	132/33kV Transformer T1A	'115A'