

1. SCOPE

This document details the application of SOP 441 (Applicable to Prysmian EVG1420/062 400kV Cable Terminations) 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
26/02/2025	1	Ross Tierney	Initial issue

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
Ross Tierney Principal Engineer (Cables)	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.

6. CONTENTS

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

7. SOP DETAILS

EQUIPMENT TYPE	Prysmian EVG1420/062 400kV Cable Terminations
ORIGINATING COMPANY	SP Energy Networks
DATE	26 th February 2025
NUMBER INSTALLED IN ENERGY NETWORKS NORTH	33
NUMBER INSTALLED IN ENERGY NETWORKS SOUTH	0
REASON	Failure of Prysmian EVG1420/062 400kV Cable Terminations
STATUS IN INITIATING COMPANY	<p>SPEN experienced a failure of a Prysmian EVG1420/062 400kV GIS cable termination in July 2023 at Hunterston Converter Station. (Ref: DIN 2023/0027/00)</p> <p>There has been a subsequent failure in January 2025 again at Hunterston Converter Station. (Ref: NEDER 2025/1049/00)</p> <p>Investigation into the root causes of both are still ongoing, however early indications show a contributing factor may be related to past installation works on this specific site. On completion of both investigations an update will follow.</p> <p>Considering the second failure, SPEN have reviewed our ALARP Risk Assessment which has deemed the risk level to personnel as currently unacceptable. SPEN have taken the decision to introduce a Risk Management Zone (RMZ). No personnel are to be within a minimum distance of 25m around all matching cable termination types. Where work is required within 25m of the affected terminations, protective measures can be deployed to protect personnel.</p> <p>The SPEN exposure to this asset type is as follows: Hunterston Converter Station: 27 off Hunterston East: 6 off</p>
SPEN APPLICATION	As detailed above
ADDITIONAL INFORMATION	Nil
UPDATE	N/A
REMEDIAL ACTION	<p>SP Transmission to install signage communicating RMZ to all personnel</p> <p>Screens are to be erected to protect personnel where work is required within 25 metres from the affected terminations</p> <p>The investigation to determine the root cause and repairs are ongoing. A further update will follow in due course.</p>

8. SOP HEADER

Field Name	Field Value	Field Size
Name (SOPXXX) *	SOP441	6
The reason for the Operational Restriction *	400kV Termination Failure	30
Nature of the Operational Restriction *	No access within the 25m Risk Management Zone	50
Comments *	Screens are to be erected to protect personnel where work is required within 25 metres from the affected terminations	200
Restricted Access to Substation Flag *	Y	1
SOP Impact Code * <i>(highlight or underline the appropriate code)</i>	0 Temporary/Impact under assessment 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 07 Transformer only 08 Tap Changer only 09 Transformer & Bushing 10 Transformer & Tap Changer	N/A
Search Criteria *	Prysmian EVG1420/062 400kV Cable Terminations, Hunterston East, Terminations, HUNE, Hunterston Converter Station, HUCS	N/A

* This denotes a Mandatory Field