

## 1. SCOPE

This is the index for the Virtual Live Working Manual. The hyperlinks in Section 6 of this index will take you to the documents published on the EN Document Library which is only accessible to Energy Networks staff. However, these documents are also published externally to the [SP Energy Networks website](#).

## 2. ISSUE RECORD

This is an Index. 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
28th May 2019	9	Dave Naylor	Update to: OPSAF-12-004 (LWM 2.2) Issue 7
30/12/2019	10	Dave Naylor	Update to: OPSAF-12-011 (LWM 4.1) Issue 7 OPSAF-12-022 (LWM 7.1) Issue 4 OPSAF-12-023 (LWM 7.2) Issue 5 Withdrawal of WL1.16 from the Short Guide to <b>LV</b> Live Working Authorisation categories at the back of this Index per OPSAF-12-011 Issue 7
28/04/2020	11	Dave Naylor	Withdrawal of: OPSAF-12-026 LWM 8.3 Issue 3 - Portable Electrical Apparatus. <i>Information now available in SMS-11-027 Issue 5</i>
07/07/2020	12	Joanne Douglas	Hyperlinks updated

## 3. ISSUE AUTHORITY

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## 4. REVIEW

This is an Index which has a 5 year retention period after which a reminder will be issued to review and extend retention or archive.

## 5. DISTRIBUTION

This Index is the Virtual Live Working Manual. The documents contained within are no longer distributed as paper versions by EN Document Control and as such do not have a maintained distribution list.

6. INDEX

Document Reference	Section	Document Title	Issue No.	Doc Date
<a href="#">OPSAF-01-003</a>		<b>FOREWORD</b>	3	Nov 08
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<a href="#">OPSAF-01-001</a>	1.1	Policy for Live Work on System	4	Oct 07
<a href="#">OPSAF-12-002</a>	1.3	Access to Energy Networks Live Working Manual	5	Mar 18
<a href="#">OPSAF-13-002</a>	1.4	Training and Authorisation for Operations, Work or Testing on or near Live Apparatus	5	Mar 18
	<b>2</b>	<b>OPERATIONS AND TESTING</b>		
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<a href="#">OPSAF-12-004</a>	2.2	Operation of the HV AC System up to and including 33kV	7	May 19
<a href="#">OPSAF-12-005</a>	2.3	Use of Approved HV Voltage Indicators and Phasing-out Devices	3	Jul 18
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	<b>4</b>	<b>WORK ON CABLES &amp; LINK BOXES</b>		
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<a href="#">OPSAF-12-014</a>	5.2	Work on Overhead Lines – The Hot Stick Method	4	Feb 04
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<a href="#">OPSAF-12-016</a>	5.4	HV Long Stick Working	3	Jul 18
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<a href="#">OPSAF-12-018</a>	5.6	Working on Trees Adjacent to Live Overhead Lines	4	Dec 02
<a href="#">OPSAF-12-019</a>	5.7	Mirror Inspection Procedure Short Stick Method for Live HV Overhead Lines	2	Jun 04
<a href="#">OPSAF-12-020</a>	5.8	Testing PTE Earthing	2	Jun 04
	<b>6</b>	<b>SERVICE TERMINATIONS</b>		
<a href="#">OPSAF-12-021</a>	6.1	Work on Service Terminations	4	Apr 13
	<b>7</b>	<b>WORK ON LV METERING</b>		
<a href="#">OPSAF-12-022</a>	7.1	Single Phase Meter Change	4	July 19
<a href="#">OPSAF-12-023</a>	7.2	Current Transformers (CT) Operated Meter Changes	5	July 19

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Document Reference	Section	Document Title	Issue No.	Doc Date
	<b>8</b>	<b>TOOLS &amp; EQUIPMENT</b>		
<a href="#">OPSAF-12-024</a>	8.1	Approval of Equipment for Live Working or Testing	7	Jun 13
<a href="#">OPSAF-12-025</a>	8.2	Insulated Gloves for Electrical Purposes other than HV Rubber Glove Working	6	Feb 19
<a href="#">OPSAF-12-027</a>	8.4	Approved Equipment for HV Rubber Glove Working	1	May 01
<a href="#">OPSAF-12-028</a>	8.5	Inspecting and Testing of Insulated Rods	2	Dec 02

Short Guide to **LV** Live Working Authorisation categories, where to find them, and which work activity they may relate to.

<b>Category</b>	<b>Description</b>	<b>LWM</b>
WL-1.01	Cleaning Substation Distribution Boards and Network Pillars	3.1
WL-1.02	Dressing Contacts on Substation Boards and Network Pillars	3.1
WL-1.03	Removing and Replacing Circuit Labels	3.1
WL-1.05	Temporary Connection of Approved Test Equipment/Instruments	3.1
WL-1.06	Work on Substation Batteries	3.2
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WL-1.08	Electro Technical Work in Control and Protection Panels	3.3
WL-1.09	Installation of LV Multicore Cable to Cannon Veam Style Snaplock System	3.1
WL-1.10	Making Straight Joints or Loop Joints (Waveform, Districable, PILC)	4.1
WL-1.11	Making Breech Joints or Three Loose End Joints (Waveform, Districable, PILC)	4.1
WL-1.12	Making Service Joints	4.1
WL-1.13	Making Service Cable Straight Joints	4.1
WL-1.14	Making Pot Ends (Waveform, Districable, Concentric, PILC, Service Cables)	4.1
WL-1.18	Maintenance of LV Air Circuit Breakers Associated with Substation Distribution Boards	3.1
WL-1.19	Making, Breaking Down and Remaking Temporary Resin Filled Joints	4.1
WL-1.20	Jumper Removal	5.1
WL-1.21	Jumper Connection	5.1
WL-1.22	Service Span Disconnection	5.1
WL-1.23	Service Span Connection	5.1
WL-1.24	Replacement or Repositioning of Pole Mounted LV Fuse Units	5.1
WL-1.25	Erection and Connection of LV Cable Termination	5.1
WL-1.26	Disconnection and Removal of LV Cable Termination	5.1
WL-1.28	Testing PTE Earthing	5.8
WL-1.29	Tree Cutting and Limbing (LV)	5.6
WL-1.31	Pole Erection using 180°/360° Excavator/Loader and Pole Handling Attachment	5.5
WL-1.32	Pole Erection using 180°/360° Excavator/Loader (Sling Method)	5.5
WL-1.33	Pole Erection using a Vehicle Mounted Loader and Sling	5.5
WL 1.41	Changing Busbar and Feeder Contacts and Changing or Installing Cable Terminations on either Open Style or Shielded Pattern LV Boards	3.1
WL-1.50	Changing Insulated Cut-Outs on Plastic Cables	6.1
WL-1.51	Changing Cut-Outs on PILC Cable	6.1
WL-1.52	Changing Single-Phase ISCO Style Metal-Clad Cut-Outs	6.1
WL-1.53	Fitting Mechanical Earth Bonds on PILC Service Cables	6.1
WL-1.59	Installation of Temporary Service Loop between Cut-Outs	6.1
WL-1.60	Changing Single Phase Meter	7.1
WL-1.61	Changing CT Operated Meters	7.2
WL-1.70	Connection of LV Generator with Automatic Synchronisation	2.4
WL-1.71	Connection of LV Generator with Manual Synchronisation	2.4
WL-1.72	Disconnection of LV Generators from the System (Synchronising off the System)	2.4