

1 SCOPE

This procedure details the methods to be followed in order to achieve **Safety from the System** when carrying out Mirror Inspection of **Live HV Apparatus**

2 ISSUE RECORD

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3 ISSUE AUTHORITY

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5 DANGERS

The main **Dangers** to personnel carrying out Short Stick procedures are electric shock, burns or falling, arising from:

- (i) Infringing **Safety Distances**.
- (ii) Incorrect application of equipment or shrouding.
- (iii) Insecure hand or footholds.
- (iv) Failure to make proper use of fall arrest equipment and other safety equipment.

6 DEFINITIONS

Terms printed in **bold type** are as defined in the ScottishPower Safety Rules (Electrical and Mechanical) 4th Edition.

For the purposes of this section of the PSLWM, the following additional definitions apply:

6.1 *HV Live Working*

The carrying out of work of any kind on **Live High Voltage** overhead lines, using **Approved** tools and equipment.

6.2 *HV Short Stick Working*

The carrying out of work on **Live HV** overhead lines from the pole, **Approved** Insulated Scaffold, **Approved** Pole Platform or **Approved** Insulated Aerial Device (IAD) using tools and equipment **Approved** for the purpose, including this Mirror Inspection Procedure.

6.3 *HV Rubber Glove Working*

The carrying out of work, including the application and removal of **Approved** protective equipment, on **Live High Voltage** overhead lines from an **Approved** Insulated Aerial Device (IAD) or **Approved** Pole Platform, while wearing **Approved** protective rubber gloves and sleeves.

7 GENERAL

The use of this Mirror Inspection Procedure is intended to allow close examination of **Live HV** overhead conductors, connections, fittings and **Apparatus** up to and including 33kV, in order to assess their integrity and general condition without the need to interrupt supply.

This Mirror Inspection Procedure may also be used to assist in the application of other **Approved HV Short Stick Working** procedures and **HV Rubber Glove Working** procedures.

8 APPLICATION

All work involving Mirror Inspection shall be subject to the same Assessment Routine; Application of **Safety Rules** and **General Safety**; Training and Authorisation of Staff; Organisation, Control and Operation; and Use of **Approved** Tools and Equipment. All as detailed in OPSAF-12-014 (**HV OVERHEAD LINES – THE SHORT STICK METHOD**)

9 PROCEDURE

9.1 Procedure WL 1.102 – Mirror Inspection

9.1.1 Scope of Procedure

This Procedure covers the precautions to be taken and methods to be followed, when carrying out a climbing examination (or examination from an Insulated Aerial Device, Insulated Scaffold or Insulated Pole Platform) of **Live HV** overhead lines and associated **Apparatus** up to and including 33kV.

The Procedure shall be carried out by a minimum of two suitably trained and **Authorised** linesmen.

9.1.2 Approved tools and equipment

2 x 8ft Universal sticks
1 x Clear Vision Mirror as per Drawing No. ScottishPower HQST-0230
or other **Approved** mirror
1 x **Approved** Sash Line
1 x Red pole marker band
1 x Protective carrying container for equipment

9.1.3 Risk Assessment

Where this mirror inspection procedure is not part of an ongoing **Approved HV Short Stick Working** or **HV Rubber Glove Working** procedure, a full risk assessment shall be carried out in accordance with OPSAF-12-014 also taking into consideration the following:

- (i) Condition of conductors, insulators, cables, connections and **Apparatus**
- (ii) Integrity of wood pole and pole foundations
- (iii) Integrity of steelwork and supports
- (iv) Continuity and integrity of earthing
- (v) Condition of equipment and validity of test date where applicable

9.1.4 Procedure

- (i) Notify the **Control Person** of the **Location** and nature of the work immediately before commencement.

Note: Where the work is solely for Mirror Inspection, it is not required to set any auto-reclose feature to “One Trip to Lockout”. (“Live Line Mode” in Manweb)

- (ii) Use **Approved** tester to check earthing and steelwork for leakage.
- (iii) Fit red warning band to pole or structure 0.8m below lowest **Live** point.
- (iv) Using the Universal Sticks fitted with an **Approved** mirror and maintaining **Safety Distance** at all times, carry out a visual inspection of the overhead line and associated **Apparatus** as required, recording any abnormalities or signs of damage or deterioration.
- (v) On completion of the inspection, remove the red warning band, all equipment, and personnel from the pole or structure.
- (vi) Notify the **Control Person** as soon as practicable that the inspection is complete and that all personnel have been withdrawn.