

**Stage 1**

## Initial supply restoration steps

(OpenLV Substation **XXXXXX** – in commissioning stage 1 with LV NOP OPEN)

**NOTE: the ALVIN devices fitted at this substation are inhibited from automatically reclosing after a fault.**

1. Confirm if any of the individual phase supplies to this feeder have tripped:



On any of the three single phase ALVIN units:

- Busbar voltage detected;
- ALVIN circuit breaker is OPEN;
- Fault passage indicator is lit;
- Red LED indicating 'No Voltage' detected on feeder cable.

2. Attempt to reclose the ALVIN circuit breaker on each phase that is tripped – see quick start guide:
  - a) If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
  - b) If any phase/ALVIN device closes, but no cable voltage is indicated, re-open the Alvin device, check the ALVIN in-line fuse and replace if necessary.
  - c) If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this feeder:
    - i. Open ALVIN Control Isolation Switch; and
    - ii. Commence standard fault finding procedures (including removal of the ALVIN units).



ALVIN Reclose™ Isolation Switch

3. Once all repairs have been completed and all supplies restored, please contact the OpenLV project team to arrange return to project operating state.

**If you are in any doubt, contact** \_\_\_\_\_ ( \_\_\_\_\_ )

# Stage 2

*(To be completed on-site  
once site allocations are  
determined.)*

## Initial supply restoration steps at

(OpenLV Substation \_\_\_\_\_ – in commissioning stage 2 with LV NOP CLOSED and LV Feeder \_\_\_\_ from this substation and LV Feeder \_\_\_\_ at substation \_\_\_\_\_ both supplied from substation \_\_\_\_\_.)

**NOTE: the ALVIN devices fitted at this substation are inhibited from automatically reclosing after a fault.**

1. If no-supplies are reported associated with this feeder, confirm if any of the individual phase supplies to this feeder have tripped:



On any of the three single phase ALVIN units:

- Busbar voltage detected;
- ALVIN circuit breaker is OPEN;
- Fault passage indicator is lit; and
- Red LED indicating 'No Voltage' detected on feeder cable.

2. Attempt to reclose the ALVIN circuit breaker on each phase that is tripped – see quick start guide:
  - a) If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
  - b) If any phase/ALVIN device closes, but no cable voltage is indicated, re-open the Alvin device, check the ALVIN in-line fuse and replace if necessary.
  - c) If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this interconnected LV feeder:
    - i. Follow standard procedures to open links at NOP (\_\_\_\_\_).
    - ii. Return to this substation (\_\_\_\_\_) and attempt to close ALVIN devices to restore supplies:
      - If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
      - If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this feeder:
        - Switch ALVIN Control Isolation Switch to OFF position;
        - Commence standard fault finding procedures (including removal of the ALVIN units).
    - iii. Proceed to link box (location) and verify status, then go to substation \_\_\_\_\_ and attempt to close ALVIN devices to restore supplies to \_\_\_\_\_ Feeder \_\_\_\_\_, following the instructions at that site.



ALVIN Reclose™ Isolation Switch

3. Once all repairs have been completed and all supplies restored, please contact **local team representative** to confirm the state equipment should be felt in.

**If you are in any doubt, contact** \_\_\_\_\_ ( \_\_\_\_\_ )

## Initial supply restoration steps at \_\_\_\_\_

(OpenLV Substation \_\_\_\_\_ – in commissioning stage 2 with LV NOP CLOSED and LV Feeder \_\_\_\_\_ from this substation

and LV Feeder \_\_\_\_\_ at substation \_\_\_\_\_ both supplied from \_\_\_\_\_.)

**NOTE: the ALVIN devices fitted at this substation are inhibited from automatically reclosing after a fault.**

1. This feeder is connected to \_\_\_\_\_ Feeder \_\_\_\_\_ via closed LV NOP (\_\_\_\_\_). The ALVIN devices here (\_\_\_\_\_) are expected to be OPEN. If the NOP (\_\_\_\_\_) is open, the jump to step 4.
2. If no-supplies are reported associated with this feeder, one or more ALVIN devices may show no cable voltage detected.



On any of the three single-phase ALVIN units:

- ALVIN circuit breaker is OPEN; and
- Red LED indicating 'No Voltage' detected on feeder cable.

3. Go to substation \_\_\_\_\_ and follow initial restoration steps at that site.
4. If restoration has been attempted at \_\_\_\_\_, AND links are removed at NOP (\_\_\_\_\_) then attempt to close ALVIN devices at this substation (\_\_\_\_\_) to restore supplies.
  - i. If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
  - ii. If any phase/ALVIN device closes, but no cable voltage is indicated, re-open the Alvin device, check the ALVIN in-line fuse and replace if necessary.
  - iii. If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this feeder:

- Switch ALVIN Control Isolation Switch to OFF position;
- Commence standard fault finding procedures (including removal of the ALVIN units).



ALVIN Reclose™ Isolation Switch

5. Once all repairs have been completed and all supplies restored, please contact **local team representative** to confirm the state equipment should be felt in.

**If you are in any doubt, contact \_\_\_\_\_ (\_\_\_\_\_)**

# Stage 3

*(To be completed on-site  
once site allocations are  
determined.)*



## Initial supply restoration steps at

(OpenLV Substation \_\_\_\_\_ – in Automatic Operation State with LV NOP CLOSED. The interconnected LV feeders may be supplied from \_\_\_\_\_ only, or from \_\_\_\_\_ AND \_\_\_\_\_)

**NOTE: the ALVIN devices fitted at this substation are inhibited from automatically reclosing after a fault.**

1. If no-supplies are reported associated with this feeder, confirm if any of the individual phase supplies to this feeder have tripped:



On any of the three single-phase ALVIN units:

- ALVIN circuit breaker is OPEN;
- Fault passage indicator is lit; and
- Red LED indicating 'No Voltage' detected on feeder cable.

2. Attempt to reclose the ALVIN circuit breaker on each phase that is tripped – see quick start guide:
  - a) If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
  - b) If any phase/ALVIN device closes, but no cable voltage is indicated, re-open the Alvin device, check the ALVIN in-line fuse and replace if necessary.
  - c) If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this interconnected LV feeder:
    - i. Open ALVIN Control Isolation Switch...
    - ii. Follow standard procedures to open links at NOP (\_\_\_\_\_).

- iii. Return to this substation (\_\_\_\_\_) and attempt to close ALVIN devices to restore supplies:

- If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
- If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this feeder:
  - Switch ALVIN Control Isolation Switch to OFF position;
  - Commence standard fault finding procedures (including removal of the ALVIN units).



ALVIN Reclose™ Isolation Switch

- iv. Proceed to link box (\_\_\_\_\_) and verify status, then go to substation \_\_\_\_\_ and attempt to close ALVIN devices to restore supplies to \_\_\_\_\_ Feeder \_\_\_\_, following the instructions at that site.

3. Once all repairs have been completed and all supplies restored, please contact **local team representative** to confirm the state equipment should be felt in. NOTE: the ALVIN Control must remain isolated while the NOP is in an OPEN state.

**If you are in any doubt, contact \_\_\_\_\_ (\_\_\_\_\_)**

## Initial supply restoration steps at \_\_\_\_\_

(OpenLV Substation \_\_\_\_\_ – in Automatic Operation State with LV NOP CLOSED. The interconnected LV feeders may be supplied from \_\_\_\_\_ only, or from \_\_\_\_\_ AND \_\_\_\_\_)

**NOTE: the ALVIN devices fitted at this substation are inhibited from automatically reclosing after a fault.**

1. This feeder is connected to \_\_\_\_\_ Feeder \_\_\_\_ via closed LV NOP (link box location). The ALVIN devices here (\_\_\_\_\_) may be either OPEN or CLOSED in automated operation. If the NOP (\_\_\_\_\_) is open, then jump to step 5.
2. If no-supplies are reported associated with this feeder, one or more ALVIN devices may show no cable voltage detected OR may show cable no-voltage indication AND fault passage indicator.



On any of the three single phase ALVIN units:

- ALVIN circuit breaker is OPEN;
- Fault passage indicator is lit;
- Red LED indicating 'No Voltage' detected on feeder cable.

3. Go to substation \_\_\_\_\_ and follow initial restoration steps at that site.
4. If restoration has been successfully attempted at \_\_\_\_\_ with LV NOP CLOSED (\_\_\_\_\_), follow standard procedures to confirm successful restoration has occurred.
5. If restoration has been attempted at \_\_\_\_\_, AND links have been removed at NOP (\_\_\_\_\_) then:
  - i. Switch ALVIN Control Isolation Switch to OFF position
  - ii. Attempt to close ALVIN devices at this substation (\_\_\_\_\_) to restore supplies
  - iii. If all phases successfully close AND cable voltages are indicated, follow standard procedures to confirm successful restoration.
  - iv. If any phase/ALVIN device closes, but no cable voltage is indicated, re-open the Alvin device, check the ALVIN in-line fuse and replace if necessary.
  - v. If any phase/ALVIN device does not successfully reclose after fuse-check/replacement, this indicates an active fault remains on this feeder:
    - Confirm ALVIN Control Isolation Switch is in the OFF position;
    - Commence standard fault finding procedures (including removal of the ALVIN units).



ALVIN Reclose™ Isolation Switch

6. Once all repairs have been completed and all supplies restored, please contact **local team representative** to confirm the state equipment should be felt in. NOTE: the ALVIN Control must remain isolated while the NOP is in an OPEN state.

**If you are in any doubt, contact \_\_\_\_\_ (\_\_\_\_\_)**