



Live Line Workshops

Wellington, 14th September 2017
Christchurch, 20th September 2017



Introductions - Peter Berry

- Welcome and introduction
- Housekeeping
- Programme overview



Programme

- 10.00 – 10.10 Introduction & housekeeping Peter Berry
- 10.10 – 11.00 Live work update Bob Taylor
 - Update on regulatory issues and impact of HSAWA
 - NCLW – ToR, new membership and work programme
- 11.00 – 11.30 International Conference on Live Maintenance Report Bob Taylor



Programme

- 11.30 – 12.30 HV Work Selection

Peter Berry

Syndicate work:

- Network Risk Assessment Criteria

Bob Taylor

- “Exclusion list” -

Assets/situations where live work should not be carried out

Filipe Vulano (14th)

Phil Johnson (20th)



Programme

- 13.15 – 13.45 HV Work Selection continued
- 13.45 – 14.15 ECP 46 Practice Note
 - » Background
 - » General provisions
 - » Work methods
- 14.15 – 14.25 Auditing/EEA Auditing Guide

Peter Berry/Bob Taylor

Bob Taylor
Charlie Dixon (14th)
Phil Johnson (20th)



Programme

- 14.25 – 14.45 LV work Bob Taylor
- 14.45 -14.55 EEA Supervision for H&S Guide Peter Berry
- 14.55 -15.00 Closing remarks Peter Berry





National Committee for Live Work (NCLW)
Bob Taylor, NCLW



NCLW

THE ROLE

- To act as the authoritative industry body for discussion and resolution of national issues affecting HV and LV live work in the electricity supply industry.

SCOPE

- Issues relating to and affecting the planning, development of work methods and carrying out of live work at all voltages on electrical equipment including stick, barehand, glove and barrier or any other live work method including testing.



NCLW- Membership

- Bob Taylor Consultant (Chair)
- Graeme Johnson Electrix
- Phil Johnson Powernet
- Mike Burke BETAA
- John Dixon Northpower
- Charles Kaka Unison
- Filipe Vulaono WEL
- Geoff Thorburn Wellington Electricity
- Peter Coyle EEA (Secretary/Project Manager)
- Others to be confirmed



NCLW- Work programme

High Voltage

- **Implementation**
 - Guide for HV Work Selection
 - EEA Practice Note on ECP 46
- Monitor and liaise with international Live Line Forums to ensure NZ aligned with industry best practice for live work
- Standardised procedures

Low Voltage

- Guide for Work Method Selection
- LV Work Control Methods
- Live LV 'Practice' Guide

Quality Management - QMS and standards for training

Testing Standards and requirements – LV and HV equipment

Audit – Guidance on audit frameworks for live LV, HV and test





HV Work selection
Introduction – Peter Berry, EEA

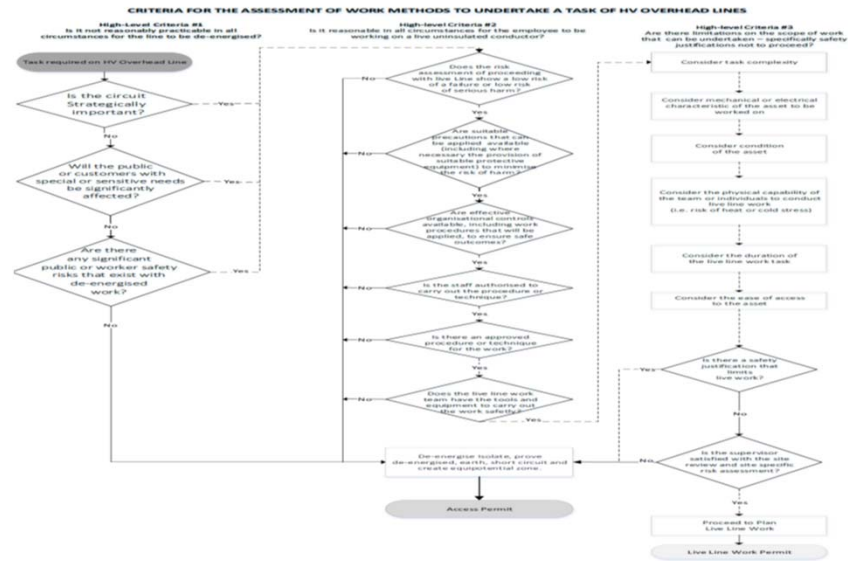


HV Work Selection – Syndicate Work

1. Network Risk Assessment: Criteria where it may be unreasonable to work de-energised
2. Exclusion list: Assets/situations where live work should not be carried out



HV Work Selection – Syndicate Work



HV Work Selection – Risk Assessment

Examples

- Is the circuit of strategic importance in terms of overall system security or public safety?
- Are there any limitations on undertaking the work de-energised?
- Will the public, domestic, commercial or industrial customers having special or sensitive safety, social or economic needs be affected?
- Would de-energised work require a major outage based on the number/complexity of switching operations, the time to carry out switching and the associated risk of driving, walking, working alone, working at height and operating the switchgear to undertake the work?



HV Work Selection – Risk Assessment

Examples (Cont'd)

- Are there inherent hazards and risk of serious harm from electric charges on the line that occur despite the line being isolated?
- Would programmed work require repeated interruption of supply extending over several days?
- Time of the day/week/year
- Significant economic impact to a single or group of commercial or industrial customers
- Planned remedial work on circuits that have historically been subject to a large number of faults and interruptions to supply



HV Live Work – Exclusion List

- Complexity of the task
- Mechanical and/or electrical characteristics of the asset
- Asset condition
- Physical demands on work team
- Duration
- Ease of access to the asset
- Location



HV Live Work – Exclusion List

- What are your current HV Live Work exclusions?
Breakout groups -
 - 25 mins - Consider LV network justifications?
 - 10 mins - Report back





Auditing

Peter Berry, EEA




Auditing

- EEA Guide to Field Auditing of Live Line Work (April 2014)
 - To support auditing of safety practices to show they are reliably carried out in worksites.

- What are companies doing?

Phil Johnson (Powernet) /Charlie Dixon
(Northpower)





Low Voltage (LV) Work - Introduction
Bob Taylor, NCLW



LV Work Method Selection

- Live LV work is governed by Rule 3.717 (added in 2015)
- Work procedures are set out in the EEA Guide to Live LV Electrical Work (2017)
- As for HV live work - LV work should only be undertaken if a risk assessment shows that there is justification
- Note - live work on 'Installations' is no longer permitted
- EEA Guide (Work Planning – Hazard Identification and Controls. Equipment for Safety, General Requirements, Live Work on Overhead Conductors, Work on Live Cables, Work on other Live Equipment and Testing and Fault Finding)



LV Work Method Selection

- What are current practices?

Breakout groups -

- 10 mins - Consider LV network justifications?
- 10 mins - Consider LV live work limitations ?





EEA Supervision Guide

Peter Berry, EEA



EEA Supervision for H&S Guide



GUIDE TO SUPERVISION FOR HEALTH AND SAFETY

FIRST PUBLISHED 2006
1ST REVISION DECEMBER 2012
DRAFT FOR CONSULTATION – JULY 2017



EEA Supervision for H&S Guide

PURPOSE

- To provide guidance on the requirements for supervision for the health and safety of employees/workers undertaking work within the Electricity Supply Industry (ESI), and the obligations of all persons who make decisions that directly or indirectly affect the supervision for health and safety of employees/workers.
- Relevance to HV/LV Live Work
- Already consulted with industry
- To be issued as an 'Interim Guide' for feedback on implementation



EEA Supervision for H&S Guide

- Guide supports SM-EI Part 1 section 4 requirements;
- Supervision is critical for delivery of safety; it always has been and always will be;
- The 'supervisor' is the representative of the business at the worksite;
- Supervision is complex and requires attention to detail;
- Supervision applies to all work situations at all times, often in different ways;
- Supervision is essential to safety but may also include quality, cost, timeliness etc;



EEA Supervision for H&S Guide

- Amendments to the Guide since 2012 include;
 - Substantive amendment has been made, and it cannot all be explained in the Preface.
 - Introduction of the HSW Act, including adding requirements for overlapping duties and S161 duties (attribution)
 - Introduction of 'responsible employee (safety)' requirements in SM-EI.
 - Guide is structured into Parts 1 & 2. Part 1 addresses legislative and similar requirements and provides background to supervision requirements, and Part 2 sets out industry guidance.
 - Guide is to be published as an interim document, to be reviewed in April 2018. Comments for consideration in the next review are requested.



EEA Supervision for H&S Guide

Questions?



Live Line Workshops - 2017

Closing Remarks

Peter Berry

