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HEALTH & SAFETY
2017

Live Line Forum

Christchurch, 5th September 2018

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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.

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NCLW- Membership

- | | | | |
|------------------|------------------------|---------------|----------|
| ▪ Bob Taylor | Consultant (Chair) | Frank Skinner | Horizon |
| ▪ Graeme Johnson | Electrix | Derek Kooman | Electrix |
| ▪ Phil Johnson | Powernet | Phil Johnson | Powernet |
| ▪ Mike Burke | BETAA | Peter Berry | EEA |
| ▪ John Dixon | Northpower | | |
| ▪ Charles Kaka | Unison | | |
| ▪ Filipe Vulaono | WEL | | |
| ▪ Geoff Thorburn | Wellington Electricity | | |
| ▪ Dave Smith | Scanpower | | |
| ▪ Shane Watson | Orion | | |
| ▪ Haki Rameka | Unison | | |



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

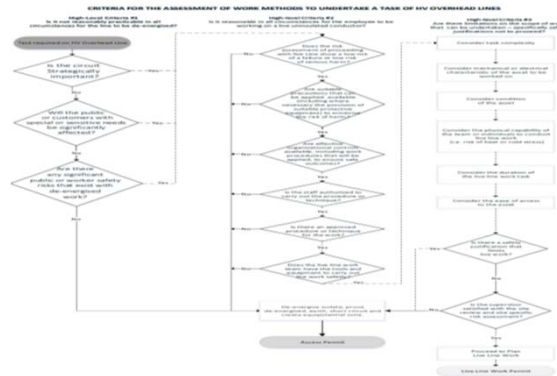
Quality Management - QMS and standards for training

Testing Standards and requirements – LV and HV equipment

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



HV Work Selection



HV Work Selection – Justification

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 – Justification

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 – Limitations

- 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
- What are your current HV Live Work exclusions?




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Auditing


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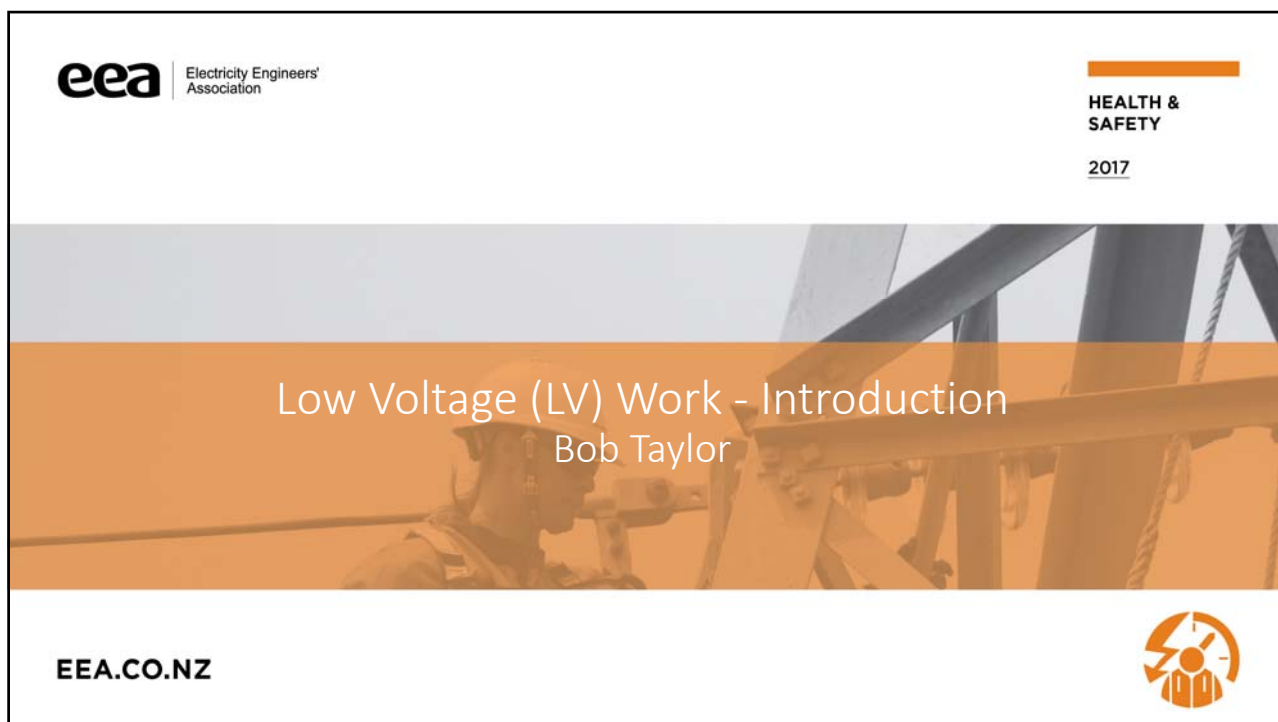


Auditing

- 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?

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Low Voltage (LV) Work - Introduction
Bob Taylor

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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?

