

When to undertake live work – a New Zealand case study on a structured
approach to balancing risk.

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Presentation Overview

- Background to Live Line Work in New Zealand
- Regulatory Environment
- Industry Leadership
- Development of a Guide to HV Overhead Work Method Selection
- Implementation and next steps



Background to Live Line Work in New Zealand

- HV Live Line Work 1920's
- Work practice recognized under New Zealand Electricity Legislation
- Work practice governed by an Electricity Code Of Practice ECP46
- Work practice based on European methods
- ECP 46 governs work practice on Barehand, Glove and Barrier and Stick methods
- ECP46 is closely aligned to the Australian Standard AS5804 High Voltage Live Working
- Industry does not have a Standard or Guide for the selection of live work methods



Regulatory Environment

- Electricity Act, Electricity Regulations govern the operation of Electricity Networks
- Electricity Authority and Commerce Commission set specific reliability and economic performance standards (SAIDI, SAIFI). 'Lights On'
- Health and Safety in Employment Act and Regulations. 'Lights Off'
- Pike River mine accident 2010
- New Health and Safety at Work Act 2015 and WorkSafe
- Duties of Officers holding responsibility for PCBU's
- Absolute requirement to take all 'Reasonably Practicable' steps to protect workers by eliminating or minimizing risks



Industry Leadership

- Those who create risk must manage it
- Strong focus on maintaining the confidence of our Regulators and self regulation, but challenged by 29 Network Companies
- Review of ECP46
- EEA led work to develop a Standard/Guide on the selection of work method for work on HV overhead lines
- Industry engagement with WorkSafe
- Proactive consultation with all stakeholders
- Member of the Australian Live Work forum, goal to develop a joint Australian/New Zealand Standard for Live Work



Development of a Guide to HV Overhead Work Method Selection

- International research
- Over reaching requirement to de-energize, given the reasonably practical test
- Network justification (unreasonable to de-energize)
 - Strategic importance
 - Balance of risk
 - Significant economic impact
- Work methods and controls (reasonable for an employee to work on bare live conductors)
- Inherent risk of equipment failure or environmental risk



Implementation and next steps

- EEA facilitated workshops to develop specific criteria
- Specific criteria being developed and implemented by the companies (Network and Contractors in consultation)
- Network justification (unreasonable to de-energize)
- Work procedures, resources and controls
- Live work limitations
- Work methods and controls, move back to centralized procedure for development, approval and monitoring of live work procedures
- Review and implementation of auditing standards and quality management systems for training



Thank you

- Paper published
- Contact admin@eea.co.nz

