


energy safe
VICTORIA
Creating a
safer state with
electricity and gas

Regulation of HV Live Work in Victoria

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VICTORIA
State
Government

Contents

- Introduction of Energy Safe Victoria
- My sections role
- The Victorian safety framework
- Electrical Safety Management Scheme (ESMS)
- ESMS validation
- ESV field observations of Work crews
- Example auditing tool (Windows Based)
- Victorian HV Live Work trends
- Questions?

Energy Safe Victoria (ESV)

ESV was created on 10 August 2005

- Office of Chief Electrical Inspector (OCEI) and Office of Gas Safety (OGS) combined
- Independent technical regulator responsible for electricity, gas and pipeline safety in Victoria
- Investigate gas and electrical safety issues across Victoria
- Community safety education programs
- Licence Electricians and register Lineworkers & Spotters
- Audit safety systems (Energy Companies)



The Safety Framework in Victoria

Victorian Workcover Authority (the OH&S regulator)

Workplace safety



Electrical Regulation (ESV)

Electricity Safety Act 2009

Electricity Safety (Installations) Regulations

Electricity Safety (Management) Regulations

- Safety Case / ESMS – Major Electricity Companies (MEC)
- AS/NZS and other Standards
- Industry Standards - Victorian Electrical Supply Industry (VESI)
- Company policies and procedures



What is an ESMS?

A documented proposition by an MEC to ESV for acceptance of how it safely manages the risks of Bushfire, Public (harm & property damage) & Supply Reliability.

Elements covered include:

- Design
- Construct
- Inspect
- Maintain
- Operate
- Training and Competency
- Assess and manage risk
- Emergency management
- Vegetation management.

Resubmitted every five years.

How is the ESMS Validated

Intensive desk top audits at the auditee's offices:

- Explain / Show me how
- Show me where it is documented
- Provide evidence it is conducted as documented.

Pre-prepared questions are provided to the business before audit

Based on ISO 9001 audit principles.

Once accepted the ESMS is continually reviewed via field audits (Work Practice Observations) and office based systems audits.

Regulatory Assurance

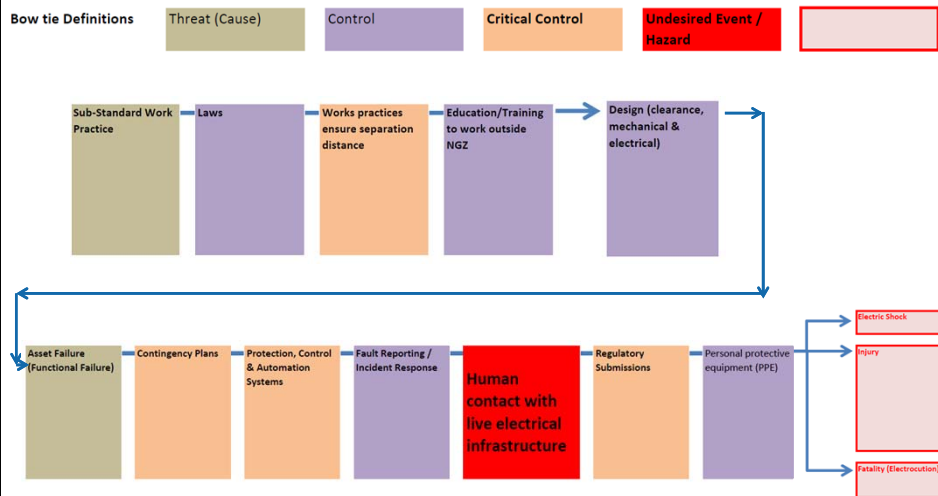
The role of our team is to ensure that persons responsible for electricity infrastructure operate their assets/networks safely. We provide stakeholders with technical information and regulatory advice.



Three streams:

- Safety Systems intelligence: Risk Modeling (2)
- Safety Systems assurance: Process and Procedures (5)
- Outcome assurance: Validation of what is actually done (6)

Bow Tie Methodology



Safety Systems Assurance & Intelligence groups

This team conducts:

- In depth office audits
- For compliance to the accepted ESMS
- Assess, test & challenge asset management & risk practices
- Review of Procedures and Policies

Field Auditing (Outcomes)

Work Practice Observations

- Continuous improvement program
- Follow work from the start of the day with the crew
- Engaged in Job Safety Assessment processes (JSA)
- Measure against documented ESMS and electrical safety codes/rules
- Industry principles
- Company procedures.

Written reports provided with the following four categories:

- Non Conformance, Minor Non Conformance, Opportunity For Improvement.

Auditing Tool

[Link to XL sheet.](#)

HV Live Work (General + Stick)		
Feeder Protection	AR suppression/LLS	Feeder
Minimum Approach Distances (MAD) not breached.		
MAD correctly selected		
Body positioning for task adequate		
EWP/Platform placement adequate		
Mobile plant used not breaching MAD		
Covering used on conductors and structures		
Live Work Rope Management.		
Inspection of rope for problems.		
Correct knotting used.		
Insulators used in taglines/head ropes.		
Dry ropes used.		
Live Ropes tested and tagged where applicable		
Stick work		
Use of insulated conductor support sticks		
Clean/prepare for use		
Inspect sticks and brackets for problems.		
Check within test.		
Setting of MAD markers.		
Check operation of conductor support brackets		
Load taken on insulating sticks correctly.		
Calculation of conductor load		
SWL of support sticks/rig not exceeded		
Correctly rigged as per manuals/manufactures procedures		
G&B Work		
Use of insulating barriers and covers		
Clean/prepare for use		
Inspect insulation for damage.		
<small>Check within test date</small>		

HV Live work insights

Issues

- Cleaning/inspection of insulating gear and equipment (G&B)
- Conductor weight/tension assessment.
- Maintaining clearance between structure and EWP's
- Documenting the risk controls
- Drop zone management
- Documenting changes in work once the task is under way, most crews document any change that they have discussed
- Inadequate covering and ensuring that second point of contact are covered
- Wet testing of EWP's
- Planning of Work.

Benefits

Why it works so well!

Pro active approach

Field experienced /industry personnel conducting audits

No alliance to any company

Common industry guidelines, Victorian Electrical supply Industry (VESI)

Audit Findings are explained prior to leaving site

Open communication between the regulator and workers

Best practice can be shared across companies

Audits identify industry trends.

Questions ?