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Voluntary Electricity Safety Management Scheme (VESMS) Preparation and Submission Guideline

Electrical Installation Safety

VICTORIA State Government

Contents

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Introduction

Purpose

This guide is not to be used by Major Electricity Companies (MECs). This guide is for voluntary applicants and operators only.

The purpose of this guideline is to assist potential applicants and existing scheme operators with the preparation and submission or renewal of a Voluntary Electricity Safety Management Scheme (VESMS). This guideline applies to Employers of Electrical Workers, Occupiers of Specified Premises or Owners of Complex Electrical Installations (Refer Part 10 Division 3 of the *Electricity Safety Act 1998*).

An applicant must submit a VESMS to ESV for acceptance in accordance with the requirements of Part 10 Division 3 of the Act and the Electricity Safety (Management) Regulations 2019 (the ESMR).

Background

ESV is the independent technical and safety regulator responsible for electricity, gas and pipeline safety in Victoria. ESV was created under the *Energy Safe Victoria Act 2005*, and has objectives, functions and responsibilities conferred on it under this Act and the *Electricity Safety Act 1998* (the Act), *Gas Safety Act 1997* and *Pipelines Act 2005*. One of the objectives of ESV is to ensure the electrical safety of electrical generation, transmission and distributions systems, electrical installations and electrical equipment. One of the functions of ESV is to encourage and monitor the use of Electricity Safety Management Schemes (ESMS).

What is an ESMS

The Act allows employers of electrical workers, occupiers of specified premises and owners of complex electrical installations to operate electrical installations or conduct electrical work under a tailored safety management approach that suits their business. This is achieved by seeking exemptions from prescriptive requirements that they would otherwise be required to comply with. Refer to the Act, Part 10, Division 3, sections 114, 115 and 116. These are Voluntary Electricity Safety Management Schemes (VESMS).

A VESMS is a documented and evidenced argument, made by a regulated entity to the regulator, that proposes how specified safety outcomes established in the ESA will be achieved through a combination of technical and management system measures and risk controls.

Entities seeking acceptance of their VESMS must specify the systems that they will follow to address substantial and diverse risks, and the systems they will follow to ensure they have sufficient capability to effectively assess risks and develop tailored solutions to mitigate risks under their control.

The ESMR require a VESMS to include a Safety Management System (SMS). An SMS must include the information specified in Divisions 1, 2 and 3 of the ESMR, including specifying how it will ensure safety in relation to the proposed arrangement as well as the reporting of electricity incidents, emergency preparedness, and competence and training of staff.

The ESA allows employers of electrical workers, occupiers of specified premises and owners of complex electrical installations, to submit a VESMS case that applies to their respective arrangements under sections 114, 115 and 116 of the Act.

Regulations applying to VESMSs submitted under those sections require the development of:

- a Formal Safety Assessment (FSA) that describes the methodology and risks to be managed to the standard required; and
- a SMS that explains how the VESMS will be implemented.

The ESMR are based on the concept that an entity submitting a VESMS under these sections will explain how risks are managed to meet the required general duty under sections 120D, 120E or 120F of the Act, depending on the entity.

Scope and Statutory Duties

Scope

This guideline only applies to applicants and operators of VESMSs with reference to the Act Part 10, Division 3, sections 114, 115 and 116.

Statutory Duties

Part 10, Division 3 of the Act provides for the application for a VESMS. A VESMS can provide for alternative means of compliance with relevant requirements of the ESA and subordinate regulations such as the Electricity Safety (General) Regulations 2019. There are three defined categories in the Act under which an applicant can apply:

- Section 114- An employer of electrical workers
- Section 115- An occupier of a specified premises
- Section 116- An owner of a complex electrical installation.

Sections 100 to 104 of Part 10, Division 2 of the ESA also apply to all categories of VESMS. These sections relate to the validation, additional information, acceptance, provisional acceptance and non-acceptance of a VESMS. Section 100 allows ESV to require an independent validation of a VESMS by a competent third party prior to submission (see page 21).

Section 118 requires the operator of a VESMS to comply with the accepted VESMS.

Sections 119 to 120 C provide for the revision of a VESMS.

Sections 120 D and 120 E requires that operators of a VESMS for employers of electrical workers (s.114) and occupiers of specified premises (s.115), respectively, minimise as far as practicable:

- hazards and risks to safety of any person arising from electricity
- hazards and risks to any property arising from electricity

Section 120 F requires that operators of a VESMS for complex electrical installations (s.116) minimise as far as practicable:

- hazards and risk to the safety of any person arising from the complex electrical installation
- hazards and risk of damage to property of any person arising from the complex electrical installation

As Far As Practicable (AFAP) is the established in the energy safety acts as the test to be applied in a VESMS or Safety Case to show that the risk control efforts made by the VESMS operator or applicant are adequate for meeting its statutory general duties and obligations.

Practicable, from the Act definitions, means having regard to:

- the severity of the hazard or risk in question
- the state of knowledge about the hazard or risk and any ways of removing or mitigating the hazard or risk
- the availability and suitability of ways to remove or mitigate the hazard or risk
- the cost of removing or mitigating the hazard or risk

This requires all reasonable measures to be implemented to remove or reduce risk, and so that cost impacts are not given excessive emphasis.

The VESMS shall demonstrate that all practicable controls have been considered and implemented.

Sections 120 H and 120 I provide for the requirements for independent audits of accepted VESMS.

Section 120 J provides for annual fees.

VESMS operators and applicants must demonstrate three critical risk controls, around the access authority system, control procedures and the competency management system.

Exemptions

Section 117 of Part 10, Division 3 of the ESA provides for an application for exemption to relevant sections of the Act. These sections are relevant to certification and inspection of electrical work. Only the sections of the Act referenced in section 117 can be exempted under the VESMS. Exemption to relevant subordinate regulations is provided for in the ESMR.

Elements of an VESMS

Background

The ESMR specify the requirements of the VESMS.

A foundation requirement is to provide a formal safety assessment. The formal safety assessment must be in relation to:

- the carrying out of electrical work for the employer operator (s. 114 and s. 115 applications); or
- the complex electrical installation owned or operated by the asset operator (s.116 applications).

Further the formal safety assessment must be consistent with the scheme description and must provide:

- an explanation of how the applicant or operator will meet its duties under sections 120D, 120E or 120F as relevant
- a description of the methodology used and investigations undertaken for the formal safety assessment
- an identification of hazards and risks that have the potential to cause a serious electrical incident
- a systematic assessment of the risks associated with any of the following, as the case requires, including but not limited to the likelihood and consequences of a serious electrical incident-
  - the electrical work that is carried out in relation to an electrical installation or electrical equipment; or
  - the complex electrical installation.

The ESMR, r. 14 requires a VESMS to specify a Safety Management System.

The Safety Management System must:

- comply with division 2 of the ESMR
- contain a description of how the SMS will identify the hazards and risks and how those hazards and risks will be managed. The SMS must also demonstrate how the hazards and risks are to be removed or reduced.

VESMS Content

Section 1 Introduction

This guidance document has paraphrased some content of the referred regulations in some instances for simplification.

The following regulation requirements refer to the ESMR. This document should be read in conjunction with the relevant sections of the Act and ESMR.

Please answer all relevant sections.

ESMR Significant Definitions

Asset Operator means the owner of a complex electrical installation who submits an ESMS under s.116 of the Act

Employer Operator means-

a. an employer of electrical workers who submits an ESMS under s. 114 of the Act: and
b. an occupier of specified premises who submits an ESMS under s. 115 of the Act

Section 1.1 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 7 Specification of Australian Company Number or Australian Business Number

An electricity safety management scheme must specify the ACN or, if the scheme operator does not have an ACN, the ABN.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

An ACN or ABN enables ESV to identify the legal entity that is submitting an VESMS.

Section 1.2 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 8 Person responsible for carrying out of electrical work (employer of electrical workers or operator of specified premises) or complex electrical installation

A VESMS must specify-

a. in the case of an employer operator (s.114 and 115 applicants) the name, title and the business address of the person who has ultimate responsibility for the management, control and safe carrying out of electrical work.
b. in the case of an asset operator (s.116) the name, title and business address of the person who is responsible for the management, control and safe operation of the complex electrical installation.
c. the name, title and business address of the person who has authorised the VESMS.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

This section requires:

a. Senior management details such as the CEO who has ultimate responsibility for the electrical installation and/or electrical work, and
b. Management details such as the General Manager who has authorised the ESMS.

The person responsible for the electrical installation and/or electrical work must have sufficient control to ensure that the VESMS is implemented, maintained and complied with.

Section 1.3 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 9 Person responsible for electricity safety management scheme

A VESMS must specify the title of the position of the person who is responsible for preparing, submitting and updating of the scheme.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

This section requires details of the person who prepared, submitted and updated the VESMS. If this is more than one person then the VESMS should name the senior person who is responsible for the preparation of the VESMS.

Section 2 VESMS requirements

Section 2.1 (Relevant to s.114 and s.115 VESMS applicants)

Regulation Requirement

Regulation 10 Scheme description—Employer Operators

An ESMS submitted by an Employer Operator (includes Specified Premises) must contain a description of the electrical work and the electrical installation or electrical equipment that the electrical work is carried out on.

The description must provide sufficient information to enable Energy Safe Victoria to identify the location, extent and scope of the electrical installation or electrical equipment in relation to which the electrical work is or will be carried out. The description will also describe the risks associated with the safety of the electrical installation or electrical equipment.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The facility description should provide a high-level business description of the applicants/operator's operation and function.

The description needs to provide enough information to enable the assessment of the extent and scope of the facility by ESV.

The description could also include physical boundaries and a line diagram of the overall installation.

Section 2.2 (Relevant to s.116 VESMS applicants)

Regulation Requirement

Regulation 11 Scheme description—Asset Operators

An ESMS submitted by an Asset Operator (Complex Electrical Installation) must contain a description of the design, construction, operation and maintenance of the complex electrical installation.

The description must provide sufficient information to enable ESV to identify the location, extent and scope of the complex electrical installation to which the VESMS relates. The description will also describe the risks associated with the safety of the complex electrical installation.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The facility description should provide a high-level business description of the applicant/operator's operation and function.

The description needs to provide enough information to enable the assessment of the extent and scope of the facility by ESV.

The facility description, which also defines the scope of the FSA:

- identifies physical assets and their condition
- shows interfaces with networks and other companies
- defines generation and/or load information

The description could also include physical boundaries and a line diagram of the overall installation.

Section 2.3 (Relevant to all VESMS applicant types ((s.114, 115 or 116))

Regulation Requirement

Regulation 12 Formal Safety Assessment

A VESMS submitted must contain a formal safety assessment relating to the carrying out of electrical work for the employer operator or the complex electrical installation for the asset operator.

The formal safety assessment (FSA) must be consistent with the scheme description and must provide:

- a description of the methodology used and investigation undertaken for the FSA; and
- an identification of hazards having the potential to cause a serious electrical incident; and
- a systematic assessment of risks associated with any of the following, as the case requires, including but not limited to the likelihood and consequences of a serious electrical incident-
  - the electrical work that is carried out in relation to the electrical installation or electrical equipment or
  - the complex electrical installation; and
- a description of the technical and other measures undertaken to reduce those risks as far as practicable for the purposes of sections 120D, 120E and 120F of the Act as relevant.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The VESMS is to provide the Formal Safety Assessment (FSA) process and explain the logic (case) behind the applicant's decision to implement a specified level of risk control. The FSA section must clearly explain how the adopted risk control approach is appropriate to each risk, is practicable, and how it meets the statutory general duties of the Act. This section provides the applicant's case that risk has been minimised AFAP.

An acceptable FSA will contain a clear description of the FSA methodology and decisions and the adopted risk control approach, including the:

- personnel involved (position/title, expertise if relevant)
- data and information used to identify hazards and assess risks (including incidents)
- relevant standards used in the FSA process
- definitions of likelihood and consequence
- a risk framework to show the outcome of a likelihood and consequence and actions arising from the outcome
- definition of AFAP, including AFAP decision criteria, including details on the use of disproportionate factors
- a description of risk controls adopted to minimise risk AFAP
- how risks have been reduced AFAP, and why risk controls available - but not adopted - are not practicable.

Section 2.4 (Relevant to all VESMS applicant types ((s.114, 115 or 116))

Regulation Requirement

(The following is not a direct quote of the regulation. This document should be read in conjunction with the ESMR and the Act)

Regulation 13 Exemptions to be specified

For the purposes of section 117 of the Act, an VESMS submitted under Division 3 of Part 10 of the Act must specify-

a. Any provisions of the regulations relating to the following from which the scheme operator is to be exempt-
   i. The installation and operation of electrical installations;
   ii. Supply networks; and

b. In the case of a scheme under which a person authorised under the scheme to carry out a class or type of electrical work is to be exempt from compliance with any of the following regulations or provisions, those regulations and provisions from which the person is to be exempt-
   i. Regulations relating to the carrying out of electrical work;
   ii. Provisions referred to in section 117 (1) of the Act; and

c. In the case of a scheme under which a person carrying out a specified class or type of electrical work on the specified premises to which the scheme applies is to be exempt from compliance with any of the following regulations or provisions, those regulations and provisions from which the person is to be exempt-
   i. regulations relating to the carrying out of that class or type of work; or
   ii. provisions referred to in section 117(2) of the Act; and

d. in the case of a scheme under which the owner of a complex electrical installation is to be exempt from compliance with any of the following regulations or provisions, those regulations and provisions from which the owner is to be exempt –

i. regulations relating to the operation, maintenance and decommissioning of the complex electrical installation; or
ii. provisions referred to in section 117(2A) of the Act.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

Regulation 13 relates to any relevant exemptions that an applicant or operator may apply for within the VESMS.

R. 13 (a) is relevant to all applicant and operator types (s. 114, 115 and 116).

R. 13 (b) is relevant to the Act s.114 applicants and operators.

R. 13 (c) is relevant to the Act s. 115 applicants and operators.

R. 13 (d) is relevant to s.116 applicants and operators.

R.13 (a) relates to potential exemptions within the Electricity Safety (General) Regulations or other relevant regulations and in turn relevant technical standards for all applicant types.

R.13 (b) and (c) relates to potential exemptions from relevant section the Electricity Safety (Registration and Licensing) Regulations and the sections of the Act relating to certification and inspection.

R.13 (d) relates to potential exemptions from relevant regulations in relation to operating, maintenance and decommissioning of the complex electrical installation and the section of the Act relating to certification and inspection.

Section 3 VESMS Safety Management Systems

Section 3.1 (Relevant to all VESMS applicant types ((s.114, 115 or 116))

Regulation Requirement

Regulation 14 Safety Management System

A safety management system specified in a VESMS submitted by an employer operator or asset operator must comply with this Division in relation to the safety of, as the case requires—

a. the electrical work carried out or to be carried out by the persons authorised by the employer operator; or
b. the design, construction, operation, maintenance and decommissioning of the complex electrical installation owned or operated by the asset operator.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The SMS must comply with Division 2 in relation to safety of electrical work, design, construction, operation, maintenance and decommissioning**.**

The SMS must comply with Division 2 of the ESMR which includes sections 15 to 25.

The SMS may be incorporated and/or detailed into an operations or VESMS manual.

Section 3.2 (Relevant to s.116 VESMS applicants)

Regulation Requirement

Regulation 15 Standards for work on complex electrical installations- published technical standards

1. This regulation applies if there are published technical standards that relate to the design, construction, commissioning, installation, operation, maintenance and decommissioning of a complex electrical installation owned or operated by an asset operator.
2. A safety management system in respect of the complex electrical installation must—
   a. list all of the published technical standards that the asset operator will comply with when designing, constructing, commissioning, installing, operating, maintaining and decommissioning the complex electrical installation; and
   b. if the asset operator chooses not to comply with a particular published technical standard, specify requirements for the design, construction, commissioning, installation, operation, maintenance and decommissioning of the complex electrical installation —
      i. that will ensure a level of safety in relation to those activities that is at least equal to or greater than the level of safety that would ensue from compliance with that standard; and
      ii. that the asset operator will comply with when carrying out those activities.
3. If the safety management system specifies requirements under sub regulation (2)(b), the safety management system must also include an explanation as to why the asset operator chose not to comply with the relevant published technical standard.

Guidance

This regulation requires the listing of all published relevant standards such as AS/NZS 3000 or an international standard etc. It further requires justification if relevant published standards are not going to be followed. If the latter is the case an exemption would also be relevant in section 2.3 (r.13). It is also relevant to refer to parts of standards if applicable.

Section 3.3 (Relevant to s.116 VESMS applicants)

Regulation Requirement

Regulation 16 Standards for work on complex electrical installations- no published technical standards

1. This regulation applies if there are no published technical standards that relate to the design, construction, commissioning, installation, operation, maintenance and decommissioning of a complex electrical installation owned or operated by an asset operator.
2. A safety management system in respect of the complex electrical installation must specify requirements for the design, construction, commissioning, installation, operation, maintenance and decommissioning of the complex electrical installation —
   a. that will ensure the requisite level of safety as described in sub-regulation (3); and
   b. that the asset operator will comply with when carrying out those activities.
3. The requisite level of safety is that the design, construction, commissioning, installation, operation, maintenance and decommissioning of the complex electrical installation —
   a. is adequate to ensure the safety of the public; and
   b. is adequate to minimise the risk of damage to another person's property; and
   c. s adequate to ensure the safety and safe operation of the complex electrical installation; and
   d. provides an adequate means of automatically isolating the complex electrical installation or any part of the installation in the event of an emergency; and
   e. provides an adequate means of preventing unauthorised access to the complex electrical installation by a member of the public.

Guidance

This regulation requires the level of safety in sub-regulation (3) to be met and complied with. The response to this regulation would usually refer to non-published standards such as manufacturers requirements for installation, operation and maintenance etc.

A description of the emergency automatic isolation of the installation and the description of the prevention of unauthorised entry is also required.

Section 3.4 (Relevant to s.114 and s.115 VESMS applicants)

Regulation Requirement

Regulation 17 Technical standards for electrical work

1. A safety management system in respect of electrical work carried out or to be carried out by persons authorised by an employer operator must—
   a. list every published technical standard that applies to the electrical work; and
   b. If the employer operator chooses not to comply with a particular published technical standard, specify requirements in relation to the carrying out of the electrical work that will ensure a level of safety in the carrying out of the work that is at least equal to or greater than the level of safety that would ensue from compliance with that standard.
2. If the safety management system specifies requirements under sub-regulation (1)(b), the safety management system must also include an explanation as to why the employer operator chose not to comply with the relevant published technical standard.

Guidance

This regulation requires the listing of published technical standards such as AS/NZS 4836. If a relevant standard is not going to be complied with, a justification needs to be made that outlines that equivalent safety outcomes are met. If the latter is the case an exemption needs to be applied for in section 2.3 (r.13).

Section 3.5 (Relevant to s.116 VESMS applicants)

Regulation Requirement

Regulation 18 Complex electrical installations—design, construction, installation, operation, maintenance and modification

A safety management system in respect of a complex electrical installation must specify the means by which an asset operator will ensure that the design, construction, commissioning, installation, operation, maintenance and decommissioning of the installation and any modification of the installation-

a. Is adequate to ensure the safety of the public; and
b. Is adequate to minimise the risk of damage to another person's property; and
c. Is adequate to ensure the safety and safe operation of the complex electrical installation and the safe carrying out of electrical work on the installation; and
d. Takes into account the results of the formal safety assessment under regulations 12; and
e. Meets-
   i. Any published technical standards listed in the safety management system under regulation 15 (2)(a); or
   ii. Any requirements specified in the safety management system under regulation (15)(2)(b) or 16(2); and
f. Provide adequate means of automatically isolating the complex electrical installation or any part of the installation in the event of an emergency; and
g. Provide adequate means of preventing unauthorised access to the installation; and
h. Is adequate for monitoring and maintaining the integrity of the installation taking into account the expected operational life of the installation.

Guidance

This requirement shall ensure the safety of the electrical work carried out on the complex electrical installation.

Any electrical work on the complex installation must be performed safely and to the relevant standards. The installation must have adequate means of auto isolating in an emergency and the installation will be secured from the public.

Section 3.6 (Relevant to s.114 and s.115 VESMS applicants)

Regulation Requirement

Regulation 19 Requirements in relation to electrical work

1. A safety management system in respect of the carrying out of electrical work must specify the means by which an employer operator will ensure that the electrical work—
   a. is adequate for the safe operation of the electrical installation or electrical equipment in relation to which electrical work is carried out and the safe carrying out of that work; and
   b. takes into account the results of the formal safety assessment for the scheme; and
   c. meets—
      i. any published technical standards listed in the safety management system under regulation 17(1)(a); or
      ii. any requirements specified in the safety management system under regulation 17(1)(b); and
   d. is carried out by the persons authorised to carry out the work.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

This requirement shall ensure the safety of the electrical work carried out and the competency of those carrying out the work.

Section 3.7 (Relevant to s.115 and s.116 VESMS applicants)

Regulation Requirement

Regulation 20 Access authority system

1. The safety management system specified in an VESMS submitted by an asset operator must specify—
   a. the complex electrical installation or part of the installation for which an access authority system must be established; and
   b. the access authority system that is to apply in respect of—
      i. the operation or maintenance of the complex electrical installation or part of the installation; or
      ii. work that is to be carried out on or near the complex electrical installation or part of the installation.
2. The safety management system specified in an VESMS submitted under section 115 of the Act must specify—
   a. the electrical work carried out or to be carried out on or near an electrical installation or electrical equipment at the premises in respect of which the scheme is submitted for which an access authority system needs to be established; and
   b. the access authority system that is to apply to that work.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The access authority system would typically incorporate a permit system and the competencies of those authorised to be part of that permit system or to carry out electrical work.

An access authority system has the following risk control function:

- ensures that only competent and authorised people are able to access high voltage equipment/areas, and access is only in a defined and controlled way
- ensures that the access to high voltage areas is done safety
- ensures that the workers are able to ask the questions around the isolation and earthing to allow safe access

The worker needs to understand the hazards and/or limitations specific to the job at the time:

- defined safe zones
- awareness of location of HV hazards

Supervision and oversight:

the control is effective if there is adequate oversight by management.

Access control procedures have the following risk control function:

There are three critical control procedures that must be in place and effective within a high energy installation:

- access procedures – These detail how to achieve safe access around a high energy installation to prevent electric shock or arc flash events
- management of change (MoC) – these procedures ensure that:
  - installation configuration records remain current/accurate, so that hazards/risks are known and can be addressed in work safety analyses (SWMSs/JSAs, etc.) and HV access authority/permit systems
  - no new faults or hazards are introduced into the installation, so that it will be safe in the future for others to work on or in the vicinity of the installation
- switching and racking; earthing and isolation procedures – these procedures:
  - are based on electrical hazard studies (principally arc flash hazard studies), manufacturers' requirements, and facility specific requirements/configurations/conditions/hazards/risks
  - ensure that safe clearances are maintained, and that work on or in the vicinity of the installation will not cause an incident and will not introduce a fault or damage that will be hazardous

The function of control procedures is to:

- remove hazards (i.e. through establishing safe clearances)
- mitigate electrical hazards through establishing safe clearances
- ensure that new (unknown) electrical hazards/risks are not introduced or identified.

Section 3.8 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 21 Emergency Preparedness

1. A safety management system must specify a response plan designed to address all reasonably foreseeable emergencies that have been identified through the formal safety assessment under regulation 12.
2. The response plan must—
   a. ensure the safety of the public; and
   b. minimise the risk of damage to another person's property; and
   c. specify a system for communications between the scheme operator and any other person who may be affected by an emergency identified through the formal safety assessment; and
   d. in the case of an asset operator, specify the means by which the asset operator will ensure the continued safety of the complex electrical installation and its operation; and
   e. in the case of an employer operator, specify the means by which the employer operator will ensure the continued safety of electrical work being carried out on electrical installations and electrical equipment.

Guidance

The VESMS should contain clear steps of action to mitigate and recover from the consequences of all reasonably foreseeable emergencies and incidents.

Details should cover the following.

Emergency roles and responsibilities:

- a general emergency response overview, which may include details about the:
  - isolation of supply
  - emergency control centre
  - restriction of supply process
  - remediation process following an incident
- stakeholder communication protocols
- emergency response personnel training and competency
- specification of the emergency response exercises and training to be undertaken each year
- the triggers for an emergency management plan review.

Section 3.9 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 22 Internal monitoring, auditing and reviewing

1. A safety management system must specify the means by which an asset operator or employer operator will—
   a. monitor and audit the implementation of the safety policies and procedures specified in the safety management system; and
   b. review the adequacy of those policies and procedures.
2. A safety management system must specify the means to be used to ensure—
   a. regular and systematic identification of deficiencies in those policies and procedures and in their implementation; and
   b. systematic improvement in those policies and procedures and in their implementation.

Guidance

The SMS must specify how and how frequently audits are to be undertaken to ensure the adequacy of the policy and procedures.

Section 3.10 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 23 Key performance indicators

A safety management system must specify—

a. the key performance indicators to be used to determine an asset operator's or employer operator's level of compliance with the VESMS, the relevant provisions of the Act and regulations made under the Act; and

b. the process to be adopted to analyse the key performance indicators and to ensure that appropriate action is taken to improve compliance if required.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Addition VESMS Requirement

ESV will provide a template for KPIs required to be submitted twice a year, however the template KPIs are for ESV's purposes and do not meet the requirements of this regulation.

Guidance

KPIs used to determine compliance should be measured against sections 120D, 120E and 120F of the Act as relevant.

Section 3.11 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 24 Incident recording, investigation and reviewing

A safety management system must specify—

a. the means to be used for recording and investigating serious electrical incidents involving, as the case requires—

i. an asset operator's complex electrical installation; or

ii. electrical work carried out by an electrical worker employed or engaged by an employer operator; and

b. the management systems to be used for reviewing and taking action on the information so recorded or arising from those investigations.

Guidance

This does not mitigate the requirement to report serious electrical incidents as referred to in the Act and regulations. Electrical incidents shall also be recorded in the KPI template provided by ESV as referenced in section 3.10 r. 23.

Section 3.12 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 25 Competence and Training

1. The safety management system specified in a VESMS submitted by an asset operator must specify the work and staffing systems required for the safe design, construction, operation, maintenance and decommissioning of the complex electrical installation to ensure that—

a. the minimum level of qualifications, skill and competence that is required to perform those activities is established; and

b. only persons with the appropriate qualifications, skills and competence are assigned to perform those activities; and

c. any training necessary for persons assigned to perform those activities is provided.

2. The safety management system specified in a VESMS submitted by an employer operator must specify the work and staffing systems used in carrying out the electrical work to which the scheme relates to ensure that—

a. the minimum level of qualifications, skill and competence that is required for the carrying out of the electrical work is established; and

b. only persons with the qualifications, skills and competence appropriate to the work are assigned to carry out that work; and

c. any training necessary for persons assigned to carry out the work is provided.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The VESMS should specify and identify:

- the training systems to be used
- how contractor competencies are identified and evaluated
- minimum qualifications, skills and competencies required
- the mechanisms in place to:
  - ensure that only persons with the qualifications, skills and competencies appropriate to a given type of work are assigned to carry out that work
  - provide the necessary training for persons assigned to carry out work
- the frequency of retraining and requalification

Section 4 VESMS Records and Reporting

Section 4.1 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 27 Records

1. An accepted VESMS operator must, in accordance with this regulation, establish and maintain a system for keeping records relating to its accepted VESMS.
2. The accepted VESMS operator must keep the following records—
   a. the accepted VESMS;
   b. any revisions of the accepted VESMS;
   c. any written audit reports of the accepted VESMS;
   d. any reports of investigations of incidents involving—
      i. if the accepted VESMS operator is an employer operator, the carrying out of electrical work;
      ii. if the accepted VESMS operator is an asset operator, the operator's complex electrical installation;
   e. a copy of each report given by the accepted VESMS operator to Energy Safe Victoria;
   f. if the accepted VESMS operator is an employer operator or an asset operator, a register of the names and qualifications of persons nominated to carry out electrical work under the accepted VESMS.
3. The accepted VESMS operator must keep records under sub-regulation (2)—

a. at the address nominated by the accepted VESMS operator in the accepted VESMS; and
b. in a manner that makes their retrieval reasonably practicable; and
c. in a secure manner; and
d. for the period of 7 years after their creation.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

The VESMS shall have details and processes that establish and maintain a system for keeping records.

Section 5 VESMS Exemptions

Section 5.1 Relevant to all VESMS applicant types (s.114, 115 or 116)

Regulation Requirement

Regulation 32 Exemptions from regulation requirements

1. Energy Safe Victoria may, on the application of a scheme operator, exempt a VESMS from any of the requirements of these Regulations.
2. An application for the purposes of sub-regulation (1) must be in writing and state—
   a. the name, address and telephone number of the applicant; and
   b. the regulation in relation to which the exemption is requested; and
   c. the reasons the applicant is applying for the exemption.
3. An exemption under sub-regulation (1) may be subject to conditions specified by Energy Safe Victoria.
4. A scheme operator to whom an exemption is granted under sub-regulation (1) must comply with the conditions (if any) of the exemption.

(This is not a direct quote of the regulation. This guidance document should be read in conjunction with the ESMR and the Act)

Guidance

This regulation applies to exemptions from the ESMR. The VESMS shall contain a copy of all current exemptions granted by ESV.

Any exemption requested but yet to be granted shall be described with details of the regulation for which exemption is sought, when it was sought, reasons for exemption, justification for exemption and risk analysis of proposed exemption.

Validation, Review and Revision of an ESMS

VESMS Validation Relevant to all VESMS applicant types (s.114, 115 or 116)

The Act Requirement

Sections 114, 115 and 116 or the Act state that sections 100 to 104 apply to VESMS as if-

(For s. 114 applicants)

i. A reference to a supply network were a reference to electrical work carried out by electrical workers; and
ii. A reference to a major electricity company were a reference to the employer of electrical workers carrying out electrical work; and
iii. A reference to the design, construction, operation and maintenance and decommissioning of the supply network were a reference to the carrying out of electrical work by electrical workers; and
iv. A reference to the safe operation of the supply network were a reference to the safe carrying out of electrical work by electrical workers;

(For s.115 applicants)

i. A reference to a supply network were a reference to electrical work carried out at a specified premises; and
ii. A reference to a major electricity company were a reference to the occupier of a specified premises at which electrical work is carried out; and
iii. A reference to the design, construction, operation and maintenance and decommissioning of the supply network were a reference to the carrying out of electrical work at the specified premises; and
iv. A reference to the safe operation of the supply network were a reference to the safe carrying out of electrical work at the specified premises;

(For s.116 applicants)

i. Any reference to a major electricity company were a reference to the owner or operator of a complex electrical installation; and
ii. Any reference to a supply network were a reference to a complex electrical installation;

The Act section 100 Validation of a VESMS for an Employer Operator or a Specified Premises or a Complex Electrical Installation

1. If a VESMS has been submitted for a type s.114, 115 or 116 applicant, ESV may require the applicant to obtain an independent validation of the VESMS or any part of that VESMS.
2. ESV may require the validation to assess the design, construction, operation, maintenance and decommissioning of the VESMS electrical installation.
3. The applicant must establish to the satisfaction of ESV that each person undertaking the validation has the necessary competence and ability and access to information to arrive at an independent opinion on the matter.
4. If ESV requires the applicant to provide an independent validation of an VESMS, the costs of that validation must be borne by the VESMS applicant.
5. ESV is not required to proceed with the consideration of a VESMS until the independent validation is provided.

Guidance

It is typical for ESV to require a VESMS to be validated. The validator should provide the VESMS applicant with a detailed report. The validator must state their details, independence and that the VESMS meet all requirements of the ESMR and the relevant sections of the Act and subordinate regulations and/or where necessary where rectifications of the VESMS need to be made.

VESMS Validation Relevant to all VESMS applicant types (s.114, 115 or 116)

The Act Requirement

Section 101 of the Act provides for ESV to obtain any additional information required.

Section 102 of the Act states that ESV must consider a VESMS submitted and accept a VESMS if satisfied of its appropriateness and compliance.

Section 103 of the Act provides for ESV to provisionally accept a VESMS.

Section 104 of the Act provides for ESV to not accept a VESMS and require modification.

Guidance

Typical ESV will provide provisional acceptance of a VESMS prior to a site visit to assess for full acceptance.