

GOUVERNEMENT DE LA REPUBLIQUE DU VANUATU

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GOVERNMENT OF THE REPUBLIC OF VANUATU

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Electricity Safety Standards

Safety Standards in relation to the safety of a regulated service

The Authority's Electricity Safety Standards summarise the total set of issues that shall be considered by regulated utilities when developing site and activity Health and Safety management plans. They cover all aspects of Health and Safety management that apply to the regulated industry's operations to ensure the health and safety of its employees and contractors, our community and to protect property. Each Standard has specific performance requirements that must be met to manage Health and Safety issues effectively. A guideline is provided with each standard to assist regulated utilities in understanding and complying with the requirements.

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1. INTRODUCTION

1.1. Background

The Utilities Regulatory Authority (the Authority) is Vanuatu's economic regulator of electricity and water services throughout Vanuatu. The Government of Vanuatu established the Authority on 11 February 2008 under the *Utilities Regulatory Authority Act No. 11 of 2007* (the Act).

The Authority is responsible for the regulation of the electricity and water sectors. Our role differs in each regulated industry but generally involves regulating prices, service standards, and market conduct and consumer protection. We also investigate and advise the Government on regulatory matters that affect Vanuatu's regulated utilities.

The Act states that our primary objective is to regulate these utilities to ensure the provision of safe, reliable and affordable regulated services and maximize access to regulated services throughout Vanuatu.

1.2. Issue of Safety Standards

In accordance with Division 2 – Safety standards, orders, inspection and reliability standards, section 14, the Authority may issue safety standards in relation to the safety of a regulated service throughout Vanuatu.

In determining whether to issue any safety standard, the Authority must have regard to the cost and convenience of compliance with the safety standard and the nature and importance of the safety issue that is addressed.

The Electricity Safety Standards are issued by the Authority as guidelines for electricity utilities to ensure that electricity is generated and distributed safely to the consumers.

They cover all aspects involved with providing safe electricity to ensure that the public including the personnel within the respective utilities as well as facilities involved in providing electricity are protected.

Each Standard has specific performance requirements that must be met to manage Health and Safety issues effectively. A guideline is provided with each standard to assist regulated utilities in understanding and complying with the requirements.

A safety standard issued by the Authority comes into force on the day on which it is published in the Gazette.

2. RESPONSIBILITIES

Generally, responsibilities for compliance with the electricity safety standards are:

- General Managers shall be accountable for ensuring the requirements of Standards are complied with;
- Managers and Supervisors shall be responsible for implementing the requirements of Standards; and
- Employees and Contractors shall comply with the requirements of Standards.

3. PERFORMANCE REQUIREMENT

The following general performance requirements apply to and form part of all Health and Safety Standards:

- Systems shall be established and maintained to effectively deal with instances of non-compliance with the requirements of the Electricity Safety Standards, by applying corrective action to address the cause of the non-compliance.
- Corrective actions shall be considered, prioritized, recorded and tracked to completion with recorded evidence.
- Systems shall be established and maintained for the effective control of all documents that relate to the requirements of each Safety Standards. This shall include formal review and authorization, identification, registration and revision control, ensuring that only the current version of documents is available to all personnel who need them and ensuring that superseded documents are withdrawn and are not used by personnel.
- Systems shall be established and maintained for the identification and maintenance of documentation and records, as required by legislation and in addition, sufficient to demonstrate compliance with such legislation and this Safety Standard.
- Systems shall be established and maintained to facilitate on-going improvement of system processes, procedures, equipment and materials. This shall be done by the pro-active identification of hazards and the application of effective controls and preventative action.

4. SUMMARY OF SAFETY STANDARDS

	Standard	Purpose
1	UTILITY COMMITMENT	To ensure that Utility Directors, managers, employees and contractors understand their legal obligations and commitment towards providing safe electricity services to the public.
2	UTILITY REGULATION COMPLIANCE	To ensure that Utilities identify and understand the safety requirements specified by the Utilities Regulatory Authority under the Utilities Regulatory Authority Act.
3	SAFETY MANAGEMENT	To ensure that safety and monitoring strategies are developed by the utility to minimize safety risk exposure of the public to an acceptable level
4	RISK MANAGEMENT	To ensure that possible hazards that may be incurred as a result of the direct interaction by the public and the services provided by the utility are monitored accordingly by the utility.
5	SAFETY INSPECTION	To ensure that the various technical infrastructures within the utility that contribute towards providing the regulated service are technically operational and safe.
6	INTERNAL SAFETY STANDARDS	To ensure that Utilities have more detailed safety standards that they derive to best suit their operations
7	QUALITY ASSURANCE	To ensure that a body is set up by the utility to manage the utility's compliance to the Safety Standards developed by the Authority
8	CERTIFICATION	To ensure that documents, reports and data produced by the utility are certified and valid
9	REPORTING REQUIREMENT	To maintain a Safety Standard reporting strategy that is annually updated and consistent with the requirement of the government through the Authority

5. The Standards

5.1. UTILITY COMMITMENT

5.1.1 Purpose

To ensure that Utility Directors, managers, employees and contractors understand their legal obligations and commitment towards providing safer service to the public.

5.1.2 Standard

- Review safety and leadership performance regularly as required;
- Safety obligations to be defined clearly and understood by managers ,employees and contractors;
- Managers to develop and demonstrate standard of behavior to all employees; and
- Safety assessment should be incorporated into performance review of managers and employees.

5.2. UTILITY REGULATION COMPLIANCE

5.2.1 Purpose

To ensure that Utilities identify and understand the safety requirements specified by the Utilities Regulatory Authority under the Utilities Regulatory Authority Act.

5.2.2 Standard

- Safety requirements that are set by Acts ,Regulation and Codes of Practice are to be applied by the utility
- The utility is to review the regulated safety requirements every year and update its safety documents to avoid unintended use of obsolete documentation
- Safety records shall be controlled in conjunction with the requirement of the utility and retain to meet regulatory requirements

5.3. SAFETY MANAGEMENT

5.3.1. Purpose

To ensure that safety and monitoring strategies are developed by the utility to minimize safety risk exposure of the public to an acceptable level

5.3.2. Standard

- Safety Standards are to be integrated into the Business Plan of the utility:
 - Safety targets and measurable Key Performance Indicators (KPIs) are to be integrated into the Business plan;
 - The safety standard integration into the business plan is to be reviewed regularly to satisfy the utility's requirement and also the requirement of the Authority; and
 - The data collected is to be analyzed and used to refine the safety targets and KPIs as required.

5.4. RISK MANAGEMENT

5.4.1. Purpose

To ensure that possible hazards that may be incurred as a result of the direct interaction by the public and the services provided by the utility are monitored accordingly by the utility.

5.4.2. Standard

- Strategies shall be established and implemented by the Utility to ensure that the possible public hazards are:
 - identified and their associated risks are assessed; and
 - monitored and the control measures reviewed regularly to maintain effective response to hazards.
- Reporting systems on hazards shall be derived by the Utility and managed. These systems are to be updated to ensure that they reflect the current risks involved with the existing utility services
- Any hazards and risks associated with the service provided by the Utility must be clearly identified and documented with public awareness programs implemented

- A Utility must manage hazards that may result from direct interactions between the assets it manages and operate and external events

5.5. SAFETY INSPECTION

5.5.1. Purpose

To ensure that the various technical infrastructures within the utility that contribute towards providing the regulated service are technically operational and safe.

5.5.2. Standard

- The utility shall assign a body(s) to accompany the Authority's appointed safety inspector for safety inspection of its plant, premises and equipments that contribute towards the regulated service.
- The inspection is to be done in a manner that allows the inspector to have complete visibility of the item being inspected except for items that are encased in a sealed compartment.
- When an inspection reveals hazardous condition it is the responsibility of the utility to ensure that the condition is repaired and eliminated.
- Any documented deficiencies in the item inspected should be presented to the inspector prior to inspection.
- Safety Inspections on all electric facility of the utility shall be done at least every five years.
- A utility is to develop an inspection program that coincides with the safety standards.
- The inspection should not be a substitution of the utility inspection program
- Deficiencies identified during the inspection should be prioritized according to the duration of the repair taking into account the safety and operational effects that may arise if the utility fails to resolve the deficiency.
- It is the responsibility of the utility to permanently repair identified deficiencies within the expected time period depending on the category of the deficiency.
- Temporary repairs that are identified during the inspection or made by the utility are to be made permanent within 90 days. Temporary repairs that surpass the 90 day duration must be justified and a repair forecast plan developed and implemented.

- The utility is to produce an inspection report by 31 December of each year, which coincides with the inspection program and the safety standards.

5.6. QUALITY ASSURANCE

5.6.1. Purpose

To ensure that a body is set up by the utility to manage the utility's compliance to the Safety Standards developed by the Authority.

5.6.2. Standard

- The utility is to assign a body(s) within its organization to develop an assurance program. The body will be responsible for :
 - developing a quality assurance program that ensures timely and proper compliance with the safety standards;
 - monitoring and recording the safety performance of the utility in accordance with the KPIs stated in section 5.3;
 - ensuring that inspections are performed on all facilities and identified faults are prioritized accordingly for repair; and
 - forecasting future plans to improving safety in the workplace where necessary.

5.7. INTERNAL SAFETY STANDARDS

5.7.1. Purpose

To ensure that Utilities have more detailed safety standards that they derive to best suit their operations.

5.7.2. Standard

- A utility is obliged to have a set of safety standards accustomed to its operations and facilities that can be of local or international origin.
- The utility is to present to the Authority updated version of internal safety standards it currently implements.
- The internal safety standards are to be maintained by the utility within the Authority electricity safety standards.
- The well being and safety of utility managers, supervisors, employees and contractors should be accounted for in the internal safety standards.

5.8. CERTIFICATION

5.8.1. Purpose

To ensure that documents, reports and data produced by the utility are certified and valid.

5.8.2. Standard

- Certifications of reports and documents are to be done in accordance with utility policy and safety standards referred to in 5.7.
- Certification of written documents should be done by an appropriate utility employee.
- The Chief Technical Officer or the officer directly responsible for safety inspections should produce by 31 December of each year, inspection reports with attached certificates validating the results of the inspection.
- Unsafe conditions shall be identified and certified.
- The utility shall maintain written proof of its certified reports on tests and inspections at its corporate office located within the concession area. No condition is to apply to public request for viewing certified reports.

5.9. REPORTING REQUIREMENT

5.9.1. Purpose

To maintain a Safety Standard reporting strategy that is annually updated and consistent with the requirement of the government through the Authority

5.9.2. Standards

The Utility shall compile annually a report by the 31 December that:

- Clearly define and evaluate the measurable KPIs integrated into the operation of the utility during the business year.
- Details potential hazards and strategic plans implemented by the utility to minimizing the occurrence of these hazards.
- Contains the details of the inspection report stated in Section 9 stating inspected faults and the timelines to alleviate them.

- Reviews and analyses the inspection results stated in Section 9 and recommend remedial actions to resolve the inadequacies in current programs or assets.
- Detail safety audits certified by respective auditors accustomed to the utility.
- A breakdown on all incidents that resulted in casualties and accidents and actions taken by the Utility to resolve these incidents with the intention of minimal reoccurrence.
- Addresses the quality assurance program.
- Details of updated internal safety standards.

Reports should be submitted to the Authority in English and French.

Appendix A – Definitions

Consultation: shall mean the timely exchange of relevant information and ideas in such a manner that the parties have the actual and genuine opportunity to influence the outcome.

External Events: This can be thunderstorms, lightning, vandalism, earthquakes, fire, cyclones or any other events of an unpredictable nature.

External Parties: include service providers, government agencies, other organisations, neighbours and community and public.

Hazards: an unavoidable danger or risk, even though often foreseeable

Inspection: to look carefully at or view closely and critically

Legal obligations: laws or contractual terms defining the obligations of individual parties to a contractual arrangement or agreement

Obsolete document: document that is not up to date with the very process, item, procedure or event that it defines.

Regulated Service: As defined in the *Utilities Regulatory Authority Act No.11 of 2007*.

Reporting Period: The period commencing 1 January through to 31 December inclusive in any given year.

Testing: The use of logical methodology or test instruments or test equipment by a competent person.

Utility: As defined in the *Utilities Regulatory Authority Act No.11 of 2007*.

Works: Of electricity utility, means the electrical equipment, and electric line associated equipment, controlled or operated by the utility to generate, transform, transmit, distribute or supply electricity

Appendix B - References

Relevant Acts, Regulations, Codes and Orders

- Health and Safety at Work Act
- Health Committees Act
- Environmental Management and Conservation Act
- Electricity Cable Act
- Utilities Regulatory Authority Act No. 11 of 2007.
- Electricity Supply Act
- Leadership Code
- Port Vila Electrical Supply Act
- Road Traffic (Control) Act
- Restriction of Offensive Weapons Act
- Supply of Electricity (Districts) Act
- Water Supply Act
- Workmen's Compensation Act
- Water resources Management Act
- World health Organization Framework Convention on Tobacco Control (Ratification)

Utilities Regulatory Authority Policies and Procedures

- Utilities Regulatory Authority Charter of Consultation and Regulatory Practice
- Utilities Regulatory Authority Risk Management Policy and Procedure

Concession Agreements

- Convention relating to the Concession for the Generation and Public Supply of Electric Power in Port Vila.
- Amendment No.1 to the Convention dated 15th August 1986 relating to the Concession for the generation and Public Supply of Electric Power in Port Vila.
- Amendment No.2 to the Convention dated 15th August 1986 relating to the Concession for the generation and Public Supply of Electric Power in Port Vila.

- Agreement varying Concession between the Government of the Republic of Vanuatu and the Honorable Minister of Lands, Geology, Mines, Energy and Rural Water Supply and Union Electrique du Vanuatu Limited.
- Specifications relating to the Concession for the Generation and Public Supply of Electric Power in Port Vila.
- Convention relating to the Concession for the Generation and Public Supply of Electric Power in Luganville.
- Specifications relating to the Concession for the Generation and Public Supply of Electrics Power in Luganville.
- Addendum to the Contract of Concession for the Generation and Public Supply of Electric Power in Luganville between the Government of Vanuatu and Union Electrique du Vanuatu Limited.
- Further Addendum to the Contract of Concession for the Generation and Public Supply of Electric Power in Luganville between the Government of Vanuatu and Union Electrique du Vanuatu Limited relating to the Sarakata Hydroelectric Power Station – Release of Funds from Sarakata Renewal Fund for Land Lease Acquisition Purposes.
- Addendum to the Contract of Concession for the Generation and Public Supply of Electric Power in Luganville between the Government of Vanuatu and UNELCO Vanuatu Limited Relating to the Handing over of the Sarakata Hydroelectric Power Station.
- Concession contract for the Generation and Public Supply of Electric Power in Tanna Island, Vanuatu.
- Concession contract for the Generation and Public Supply of Electric Power in Malekula Island, Vanuatu.

Other related documents

- AS/NZS 4360 –1999 Risk Management

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You can access the Electricity Safety Standards by referring to our website www.ura.gov.vu, contacting us by telephone (+678) 24945, fax (+678) 2308, email: rmarum@vanuatu.gov.vu or writing to us at the Office of Utilities Regulatory Authority, PMB 9093 Port Vila, Vanuatu.