

DEPARTMENT OF
THE ATTORNEY-GENERAL AND JUSTICE

Electricity Safety Regulator

Annual Report
2020-2021

NTWork**Safe**



Contents

Role and Responsibilities of the Electricity Safety Regulator	3
Electricity Reform (Safety and Technical) Regulations	3
Work Health and Safety Legislation.....	5
Public Awareness and Advice.....	5
Safety Alerts.....	5
Bulletins	6
Activities of the Electricity Safety Regulator for 2020-2021	7

Role and Responsibilities of the Electricity Safety Regulator

The role of the Electricity Safety Regulator was established by the introduction of the *Electricity Reform Act 2000* (the Act), which came into force on 1 April 2000.

The functions of the Electricity Safety Regulator are to monitor and regulate safety and technical standards with respect to electrical installations (excluding electrical infrastructure owned and operated by an electricity entity, and wires, fittings, equipment or accessories connected to and beyond an electrical outlet at which fixed wiring terminates).

The Electricity Safety Regulator has the power to do all things that are necessary or convenient to be done for or in connection with or incidental to the performance those functions, which includes:

- Inspections, site visits, and investigations;
- The provision of electrical safety advice and information;
- Advice in relation to national performance standards for appliances and electrical equipment;
- Input into training courses involving the regulation and standards for electrical work; and
- Representation on the Electrical Regulatory Authorities Council.

Electricity Reform (Safety and Technical) Regulations

The Electricity Reform (Safety and Technical) Regulations (the Regulations) provide for the installation, testing and certification of electrical work carried out.

The Regulations include safe work practices to assist employers and safeguard electrical workers. Additionally, provisions are made for other persons to work or operate safely in proximity to electrical infrastructure.

In 2017-18, the Government established a tri-partite Electrical Safety and Licensing Reference Group to examine the Act and the *Electrical Workers and Contractors Act 1978*. The purpose of the review was to examine and provide direction to the Northern Territory Government about what amendments are necessary to address concerns in

relation to electrical safety and electrical licensing. NT WorkSafe is participating in this review.

The Electrical Safety and Licensing Reference Group has completed their report in December 2019. The report has 37 recommendations with the main recommendation being that a single piece of legislation should be created that amalgamates and modernises the Electrical Workers and Contractors Act 1978 and the electrical safety provisions of the Electricity Reform Act 2000.

The group recognises that such a piece of work will take some time and will require extensive consultation. However the group identified a number of issues that require urgent rectification. The group recommended legislative amendments as soon as possible to:

- Expand the coverage of the safety provisions of the Electricity Reform Act 2000 to electrical systems that involve renewable energy sources and energy storage systems;
- Expand the coverage of the safety provisions of the Electricity Reform Act 2000 to include electrical appliances;
- Simplify and clarify the appointment of inspectors under the Electrical Workers and Contractors Act 1978 and the Electricity Reform Act 2000 and create a single inspectorate;
- Create reasonable periods of time during which rectification works can be ordered and enforcement options utilised; and
- Increase the number and effectiveness of enforcement tools available to electrical safety inspectors and clarify what is an offence under the two Acts and who may commence a prosecution.

It is expected that work on implementing these recommendations will commence in late 2020.

Work Health and Safety Legislation

On 1 January 2012, the *Work Health and Safety (National Uniform Legislation) Act 2011* (WHS Act) and Regulations commenced in the Northern Territory. Part 4.7 of the Regulations – General electrical safety in workplaces and energised electrical work, addresses electrical safety in the workplace.

Public Awareness and Advice

The Electricity Safety Regulator publishes Safety Alerts and Information Bulletins on the NT WorkSafe website as a means of providing information and advice. The following information products were available in 2020-2021.

Safety Alerts

- Christmas lights – electrical safety
- Damaged, defective or degraded overhead electrical infrastructure
- DC Solar isolator fire
- Electric shock hazards associated with excessive sweating whilst using mains powered tools
- Electrical power tools on board fishing vessels (re-issued)
- Electrical safety risks in ceiling spaces
- Electrocution risk for home DIY repairs
- Fire risk in older Polycom conference phone
- Incorrect installation of thermal insulation around electrical equipment and accessories
- Isolation of solar from backup generators
- Power off switchboards before entering ceiling space
- Product Safety Recall - ESS Home Energy Storage System Batteries
- Risk of fire in old power factor correction assemblies
- Solar panel DC isolator fire risk
- Use of 240 volt submersible pumps

- Using back-up generators with Solar PV installations
- Working at height around live electrical installations
- Working near energised high voltage cables
- Working with energised electrical lines

Bulletins

- Certificate of Compliance (CoC) Electrical Safety
- Certification requirements for installing Photo Voltaic (PV) Panels on buildings
- Competent persons
- Electrical Contractor Information – Connection of New Installations
- Electrical Equipment and Gas Installations at Markets and Shows
- Electrical Hazards Associated with Underground Cables
- Electrical Installation Work on Mine Sites
- Electrical safety - Cleaning split system air-conditioners
- Electrical Safety – Notice of Non-compliance
- Electrical Safety in the Construction of Showers and Bathrooms
- Electrical Switchboard Panels and Meter Panels Containing Asbestos
- Equipotential Bonding for Pools and Spas
- Exemptions from the Wiring Rules or *Electricity Reform Act 2000* and Regulations
- Grid protection requirements for Solar PV installations over 30 Kilowatts
- Ground mounted solar Photovoltaic arrays
- Importation of electrical and electronic products
- Installation of Thermal Insulation Around Electrical Equipment and Accessories
- Installation of Vertical Earth (Stake) Electrodes in the NT
- Main Switches in CT metered installations
- Managing Foil Ceiling Insulation Electrical Safety Risks – Householders & Tradespersons
- Relocatable Dwellings – Electrical Safety
- Replacing Consumer Switchboards in Existing Installations

- Residual Current Devices (Safety Switches)
- Safe use of extension cords
- Safety Inspection and Testing of Electrical Equipment on Construction Sites
- Safety requirement for roof top solar on commercial buildings and unit complexes
- Solar PV Batteries – Information for home and business owners
- Test and Tag of Electrical Equipment
- Use of standby power systems in domestic situations
- Voltmeter Measurements – Testing Foil Insulation in Domestic Dwellings
- Work health and safety requirements for Solar PV installers
- Working Close to Overhead Power Lines

Activities of the Electricity Safety Regulator for 2020-2021

Part 5 of the Act outlines the safety responsibilities and technical requirements which are monitored by the Electricity Safety Regulator. Below are some of the activities undertaken by the Electricity Safety Regulator under Part 5.

Regulatory Requirement	No	Description
Certificates of Compliance audited as per sections 67 and 68 of the Act.	674	Inspections and site visits
Complaints Investigated as per sections 67 and 68 of the Act.	52	Complaints
Report of accidents involving electric shock as per section 71 of the Act.	64	Electric Shocks

In previous years auditing inspections were carried out by TechSafe, an independent electrical inspection company. These inspections were prescribed inspections carried out in the Northern Territory on new electrical installations and solar inspections. Due to the ongoing lockdowns Techsafe was not engaged to conduct audit inspections in the Northern Territory for the 2020 -2021 financial year.

Part 6 of the Act provides for specific enforcement powers. A summary of enforcement powers exercised by the Electricity Safety Regulator and authorised officers in 2020-2021 is provided in the following table.

Regulatory Requirement	No	Description
Exercise of specific powers under section 10 of the Act – Require Information	0	
Exercise of specific powers under section 11 of the Act – Disclose Information	11	Fire Investigation Reports
Exercise of specific powers under section 70 of the Act – Rectification by Direction	33	Owner/Operator Non-compliance
Exercise of specific powers under section 70 of the Act – Rectification by Direction	88	Contractor Non-compliance
Exercise of specific powers under section 78, 79 and 80 of the Act – Disconnection	3	Installations disconnected 2 x Rural Properties 1 x Community House

Part 7 of the Act provides for reviews and appeals. There were no applications for review made in the 2019-2020 financial year.

Regulatory Requirement	No	Description
Review of decisions as per section 83 of the Act – Review by Regulator	0	
Review of decisions as per section 84 of the Act – Appeals	0	
Review of decisions as per section 85 of the Act – Ministerial Intervention	0	
Dispensations as per section 87(4) of the Act	0	

The Electrical Safety Unit of NT WorkSafe continued engagement throughout 2020-2021 with Northern Territory electrical contractors regarding implementation of emerging clean and renewable energy technologies.