



Department of Consumer
and Employment Protection
Government of Western Australia

EnergySafety

ENERGYSAFETY – OUTLINE OF ROLE, FUNCTIONS AND OPERATIONS

Introduction

EnergySafety (sometimes also referred to as EnergySafety WA) is responsible for the technical and safety regulation of all the electrical industry and most of the gas industry in Western Australia.

Background

EnergySafety's functions date back to the State Electricity Commission of Western Australia, which from the late 1940's held both electricity and gas utility and regulatory functions. In 1975 this State Government body was reformed to become the State Energy Commission of WA ("SECWA").

On 1 January 1995, SECWA ceased and its utility business was split into two separate, corporatised entities, Western Power and AlintaGas (the latter has since been privatised).

Concurrently, the electrical and gas technical and safety regulatory functions of SECWA were vested in the role of the Director of Energy Safety, a statutory position created by the *Energy Coordination Act 1994*. This position was administratively located within the Office of Energy, a new department also created on 1 January 1995. The Director headed the Technical & Safety Division (TSD) of that Office.

The Director has independent statutory powers subject only to direction by the Minister and any such direction is required to be reported to Parliament.

On July 1, 2002 the Director and all of TSD transferred from the Office of Energy to the Department of Consumer and Employment Protection (DOCEP), as part of restructuring of the Public Service of WA.

The role and functions of the Director and staff did not change. However, the organisation unit became known as EnergySafety, a Division of DOCEP (and as head of the Division, the Director of Energy Safety is internally known as the Executive Director, EnergySafety). DOCEP has four other regulatory functions, each handled by a separate division: Consumer Protection, Labour Relations, Resources Safety (the State's resources industry OSH regulator) and WorkSafe (the State's general OSH regulator).

Overview of Role

The EnergySafety Division, through the statutory functions of the Director of Energy Safety¹, is the State's energy industry technical and safety regulator.

The Director has independent statutory powers subject only to direction by the Minister and any such direction is required to be reported to Parliament.

EnergySafety administers the energy industry regulatory framework to achieve:

- the safety of people (public, consumers, workers) and property in respect of electricity generation, transmission and distribution;
- the safety of people (public, consumers, workers) and property in respect of gas distribution systems (operating at up to 1.9 mega Pascals)² and gas production plants connected to such systems;
- the protection of consumers (all types) through the need for electricity/gas supplies to comply with minimum standards and metering accuracy requirements;
- the safety of all consumers' electrical/gas installations (including all types of equipment and appliances); and
- the efficient use of energy (eg. the star rating scheme for electrical appliances).

EnergySafety also:

- promotes electricity/gas safety to the public, consumers and workers (particularly energy industry workers) in a variety of ways;
- assists the Economic Regulation Authority (ERA) and the Ombudsman's office in the enforcement of prescribed standards for electricity supply reliability and quality; and
- promotes energy infrastructure security and represents the WA Government on the national Energy Infrastructure Assurance Advisory Group (EIAAG).

Legislation administered by EnergySafety

- *Energy Safety Act 2006 (and Energy Safety Levy Act 2006)*
- *Energy Safety Regulations 2006*

- *Energy Coordination Act 1994 (Parts 2 and 3)*
- *Energy Coordination (Inspectors and Infringement Notices) Regulations 1995*

- *Electricity Act 1945*
- *Electricity (Licensing) Regulations 1991*
- *Electricity Regulations 1947*
- *Electricity (Supply Standards and System Safety) Regulations 2001*

- *Gas Standards Act 1972*
- *Gas Standards (Gasfitting and Consumer Gas Installations) 1999*

¹ Within DOCEP the position is known as 'Executive Director Energy Safety' and it incorporates the statutory office titled 'Director of Energy Safety'. The latter title is used in the remainder of this document.

² Safety regulation of gas transmission (at 1.9 mega Pascals or above) and upstream gas production is administered by the Resources Safety Division of DOCEP

- *Gas Standards (Gas Supply and System Safety) Regulations 2000*
- *Gas Standards (Infringement Notices) Regulations 2007.*

EnergySafety's Work and Responsibilities

EnergySafety has both policy work and operational responsibilities in respect of technical and safety regulation of the State's energy industry.

Operational responsibilities

In respect of operational work, the legislation provides for EnergySafety, to:

- Ensure the safety and energy efficiency of consumers' electrical installations and appliances, by:
 - licensing electrical workers and electrical contractors (through the functions of the associated Electrical Licensing Board), and enforcing prescribed technical standards for electrical installing work;
 - requiring electricity network operators to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - conducting safety inspections of consumers' electrical installations that are not connected to utility networks; and
 - auditing electrical appliances and equipment being offered for sale, to check compliance with prescribed safety and energy efficiency requirements (such as the star rating labelling scheme and MEPS).
- Ensure the safety of consumers' gas installations and appliances (including industrial gas appliances), by:
 - licensing gas fitters and enforcing prescribed technical standards for gasfitting work;
 - requiring gas network operators, gas pipeline licensees and LPG cylinder distributors to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - overseeing the work of external inspectors approving industrial gas appliances;
 - conducting safety inspections of consumers' gas installations that are not connected to utility networks or are not supplied with LPG directly from a gas distributor; and
 - auditing gas appliances and equipment being offered for sale, to check compliance with prescribed safety and efficiency requirements.
- Ensure the safety and acceptable performance of electricity transmission and distribution infrastructure by:
 - auditing electricity network operators' design standards and constructed networks for compliance with prescribed safety requirements;
 - monitoring the safe work practices of network operators' employees and contractors, including attendance to incidents;

- investigating consumers' unsatisfied complaints about unacceptable electricity supply reliability and quality, when referred by the ERA or Ombudsman; and
 - auditing network operators' compliance with their approved meter management plans, to ensure acceptable meter accuracy.
- Ensure the safety and acceptable performance of gas distribution infrastructure by:
 - auditing gas network operators' design standards and constructed networks for compliance with prescribed safety requirements;
 - monitoring the safe work practices of network operators' employees and contractors, including attendance to incidents;
 - monitoring the quality of gas provided to consumers generally, for compliance with prescribed requirements;
 - investigating consumers' unsatisfied complaints about gas supply reliability and quality; and
 - auditing network operators' compliance with prescribed meter management requirements, to ensure acceptable meter accuracy.
 - Appoint and oversee all inspectors in the State (including those of network operators).
 - Ensure the safety of electrical and gas workers by enforcing prescribed safety requirements and providing guidance in respect of safe work practices.
 - Issue exemptions or variations to certain regulatory requirements (electrical and gas).
 - Investigate electrical and gas safety incidents (although incidents associated with electricity or gas utilities supply systems, or their customers, are usually inspected first by the utilities' inspectors).
 - Enforce statutory requirements through advice, warnings, prosecutions, and in the case of licence holders, also through disciplinary action.
 - Respond to consumer concerns generally, regarding electrical and gas technical and safety matters.

| Furthermore *EnergySafety* –

- promotes electricity and gas safety to both the public and industry operatives;
- promotes electricity/gas safety to the public, consumers and workers (particularly energy industry workers) in a variety of ways; and
- assists the Economic Regulation Authority (ERA) and the Ombudsman's office in the enforcement of prescribed standards for electricity supply reliability and quality, in accordance with the provisions of the following legislation:
 - *Electricity Industry (Licence Conditions) Regulations 2005*
 - *Electricity Industry (Ombudsman Scheme) Regulations 2005*
 - *Electricity Industry (Network Quality and Reliability of Supply) Code 2005.*

Policy Work Responsibilities

EnergySafety provides wide-ranging energy related policy advice and support to the Minister for Energy (who has portfolio responsibility for EnergySafety's statutory functions), the Minister for Employment Protection (who has administrative responsibility for DOCEP as a department and thus also EnergySafety), Government and DOCEP's Director General.

Policy Projects

These are a major part of EnergySafety's work. Policy projects typically involve the amendment of existing regulatory legislation or the development of industry guidelines so as to deal with new safety issues, changes in national technical standards that are referenced, improved enforcement powers, fees and funding for licensing and regulatory work, as well as accommodating energy industry reforms or reforms within government.

Most policy work involves extensive industry consultation including liaison with other regulators of other jurisdictions and hence these projects usually run over considerable timeframes. The following is a list of significant projects at March 2007:

- To further reduce the incidence of serious electrical accidents amongst electricians, a completely new Part IX to the *Electricity Regulations 1947* is proposed, so as to set out minimum standards for safe electrical work practices by electricians, particularly when proposing to work on or near live parts of a consumer's installation.
- To make major improvements to the energy efficiency of gas appliances and equipment, it is planned (as part of national changes) to regulate gas use efficiency through major changes to the *Gas Standards Act 1972* and related regulations.
- The entry of additional gas suppliers' gases into the Perth gas distribution system has resulted in a need to protect consumers in regard to how the heating value of commingled gases is determined for consumer billing purposes, and this requires a new scheme and new regulations under the *Gas Standards Act 1972*.
- There is a need to replace the simplistic and no longer deemed relevant provisions of section 54 of the *Energy Operators (Powers) Act 1979* (which deals with the control of vegetation near power lines) with a new regulatory regime under the *Electricity Act 1945* that provides a more balanced approach to responsibilities for ensuring that vegetation is kept safely clear of power lines by land occupiers and electricity network operators.
- It is evident, following experience gained, particularly through electricity network safety performance shortcomings (clashing conductors, pole top fires, unsafe service cables etc), that the larger electricity and gas networks should be operating under a "safety case" (or "safety and technical management plan") framework rather than simply be required to comply with existing regulations. It is therefore intended to change the existing regulations under the *Electricity Act 1945* and the *Gas Standards Act 1972* to provide for the mandatory application of such safety cases for the larger energy networks.
- There is a need to review Australia's regulatory regime for the safety of electrical equipment and appliances. EnergySafety will be participating with other regulators in a national review designed to ensure the regimes operated by each jurisdiction are as harmonised as possible and capable of dealing with the challenges offered through global manufacturing, given the volume of product

now being imported. The outcomes of the review will be presented to a Ministerial Council for endorsement.

- The COAG Working Group on licensing regimes has actively involved the regulators in identifying means to improve mutual recognition arrangements so as to facilitate the easier movement of workers such as electricians. As a follow-on to this work ERAC (the Electrical Regulatory Authorities Council, which is a national committee of jurisdictional regulators such as EnergySafety), has agreed to review the existing policy framework for the issuing and use of restricted electrical licences with a view to achieving a much higher level of uniformity between jurisdictions. EnergySafety is expected to make a significant contribution to this review, the outcomes of which are planned to be provided to a Ministerial Council for endorsement.
- It is expected that during 2007 the Legislative Council will pass the *Gas and Electricity Safety Legislation Amendment Bill 2006*³ which will provide EnergySafety with substantially improved powers to enforce regulatory requirements, especially in respect of electricity and gas networks. The full implementation of these provisions will however require a number of important new regulations and regulation amendments to be drafted.

Ongoing Policy Work:

As the State's technical and safety energy industry regulator EnergySafety participates in important policy coordination and development work through a number of WA and national bodies covering electricity regulation, gas regulation, emergency management and technical standards, including:

- National Regulatory Coordination Bodies
 - Electrical Regulatory Authorities Council (ERAC)
 - Gas Technical Regulators' Committee (GTRC)
 - National Appliance and Equipment Energy Efficiency Committee (NAEEEC)
- National Infrastructure Security Management Bodies
 - Energy Industry Assurance Advisory Group (EIAAG)
- National Standards Councils, Boards and Committees
 - Council of Standards Australia (representing the Government of WA)
 - Electrotechnology Sector Standards Policy Board
 - AG6 Gas Installations
 - AG9 Natural Gas Vehicle Technical Standards
 - AG8 Gas Distribution Standards
 - AG10 Specification For Natural Gas Quality
 - AG11 Gas Component & Industrial Equipment Standards Committee
 - CH-038 Liquefied Petroleum Gas
 - EL1 Wiring Rules and related sub-committees
 - EL2 Electrical Appliance Safety
 - EL4 Electrical Accessory Safety
 - EL11 Electricity Metering
 - EL42 Renewable Energy Power Supply Systems
 - EL43 High Voltage Electrical Installations
 - ME46 Gas Fuel Systems for Vehicle Engines

³ This took place on April 2007

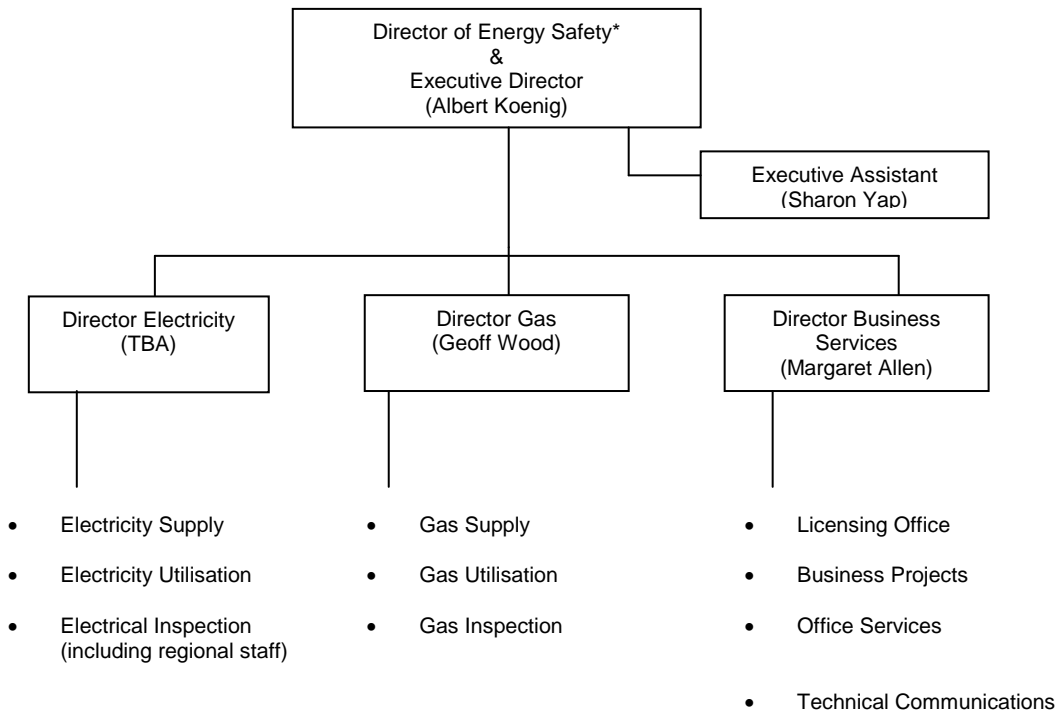
This participation provides valuable input into national technical standards and regulatory policies, many of which are referenced or used in local energy legislation.

Participation also provides important opportunities for industry consultation on a wide range of topical issues, at the national level.

EnergySafety's Organisational Framework

The Executive Director EnergySafety heads the Division and by design the incumbent also holds the statutory office of Director of Energy Safety.

The desire to become more efficient due to workload pressures and at the same time retain and develop critical technical expertise relevant to each sector caused a review in 2003 that resulted in the restructure of the Division into 3 Directorates shown below.



* denotes a statutory position

Electricity Directorate

This Directorate is headed by the Director Electricity and is responsible for –

- All electricity related technical and safety policy work including ministerial advice, new legislation, regulatory reform proposals, technical standards development, industry liaison and assessment of requests for variations to regulatory requirements; and
- All electricity related operational work.

The following two Branches:

- ❖ The Electricity Supply Branch, headed by a Principal Engineer; and
- ❖ The Electricity Utilisation Branch, also headed by a Principal Engineer;

each deal with policy work including ministerial advice, new legislation, regulatory reform proposals, technical standards development, industry liaison and requests for variations to regulatory requirements. They also provide specialist direction and assistance to the Electrical Inspection Branch, when the latter is carrying out complex investigations (such as those dealing with electricity industry work practices, or complaints about electricity supply standards) and corporate compliance audits of electricity utilities (e.g. Western Power) and licensed contractors, as well as enforcement activities.

The Electrical Inspection Branch, headed by the Chief Electrical Inspector is responsible for the following key activities:

- Conducting corporate compliance audits of electricity suppliers in relation to network safety and supply standards;
- Guiding and approving electricity supplier “Inspection Plans”, which set out electricity consumer installation practices and commitments, and conducting audits to ensure compliance;
- Inspecting electricity consumers’ installations in remote locations (not serviced by utilities);
- Conducting compliance audits of electrical equipment retailers, in relation to safety and energy efficiency (labelling and MEPS) requirements;
- Appointing all electrical inspectors in the State, maintaining codes of conduct, monitoring compliance;
- Carrying out investigations into serious accidents (injury and damage) and incidents (supply interruptions), and recommending safety promotion, warnings, prosecutions, disciplinary actions etc, as appropriate.
- Advising consumers and industry operatives in relation to energy safety and compliance matters;
- Technical and investigative support to the Electrical Licensing Board and the Licensing Office;
- Monitoring safe work practices used in industry;
- Participating in industry safety promotion campaigns (e.g. regional presentations); and
- Assisting the Director of Energy Safety with appeals against external inspectors’ rulings.

The Electricity Directorate is based at West Leederville, but also has senior electrical inspectors based at Karratha, Geraldton, Kalgoorlie and Bunbury. The branch operates on a 24/7 basis in response to the reporting of electrical incidents (fires, injury, major electricity supply interruptions etc).

Gas Directorate

This Directorate is headed by the Director Gas and is responsible for –

- All gas related technical and safety policy work including ministerial advice, new legislation, regulatory reform proposals, technical standards development, industry liaison and assessment of requests for variations to regulatory requirements;
- All gas related operational work;

The following two Branches:

- ❖ The Gas Supply Branch, headed by a Principal Engineer; and
- ❖ The Gas Utilisation Branch, also headed by a Principal Engineer;

each deal with gas industry policy work, including ministerial advice, new legislation, national policy issues, regulatory reform proposals, and requests for variations to regulatory requirements.

They also provide specialist direction and assistance to the Gas Inspection Branch, when the latter is carrying out complex investigations and corporate compliance audits of gas utilities (e.g. Alinta) and licensed gasfitting contractors, as well as enforcement activities;

The Gas Inspection Branch, headed by the Chief Gas Inspector is responsible for the following key activities:

- Conducting corporate compliance audits of gas suppliers in relation to network safety and quality (composition) of NG and LPG supplied;
- Guiding and approving gas supplier “Inspection Plans,” which set out gas consumer installation practices and commitments, and conducting audits to ensure compliance;
- Inspecting gas consumers’ installations in remote locations (not serviced by utilities), with special focus on industrial installations such as mine sites with industrial gas appliances;
- Conducting compliance audits of gas appliance retailers, and gas appliance re-conditioners, in relation to safety requirements;
- Appointing all gas inspectors in the State, maintaining codes of conduct, monitoring compliance, especially in relation to the approval of industrial gas appliances;
- Carrying out investigations into serious accidents (injury and damage) and incidents (supply interruptions), and recommending safety promotion, warnings, prosecutions, disciplinary actions etc, as appropriate;
- Advising consumers and industry operatives in relation to energy safety and compliance matters;
- Technical and investigative support to the Gas Licensing Committee and the Licensing Office;
- Monitoring safe work practices used in industry;
- Participating in industry safety promotion campaigns (e.g. regional presentations); and
- Assisting the Director of Energy Safety with appeals against external inspectors’ rulings and requests for variations from prescribed requirements.

The Directorate is based at the West Leederville Office. Support is provided from senior electrical inspectors at country locations, where practicable.

The branch operates on a 24/7 basis in response to the reporting of gas incidents (fires, injury, major gas supply interruptions, etc).

Business Services Directorate

This Directorate is headed by the Director Business Services and in brief, is responsible for the operation of the Licensing Office, the development and maintenance of electrical and gas licensing policies, support to the statutory Electrical Licensing Board and the Gas Licensing Committee, especially for dealing with disciplinary proceedings against licence holders, the operation of EnergySafety's administrative and office systems, the provision of a wide range of business planning, business performance measurement, financial planning and management accounting functions, plus communication with industry.

The Directorate has 4 Branches, as follows:

- ❖ Licensing Office
- ❖ Business Projects
- ❖ Technical Communications
- ❖ Office Services

These Branches deal with the following key activities, as relevant:

- the development and maintenance of licensing policies covering the licensing of electrical contractors, electricians, restricted electrical workers and the various types of gas fitters;
- administering the Licensing Office, which deals with all electrical and gas licensing enquiries, applications, renewals, and manages the licence holder databases and related applications;
- supporting the Electrical Licensing Board in the discharge of its statutory functions (including provision of Executive Officer);
- supporting the Gas Licensing Committee in its discharge of the statutory functions delegated by the Director (the Director Business Services is chair);
- managing formal disciplinary proceedings in respect of electrical operatives for the Electrical Licensing Board, and in respect of gas fitting operatives, for the Director of Energy Safety, the more serious proceedings being forwarded to the State Administrative Tribunal;
- administration of the Division's industry levy scheme including data collection and modelling;
- electrical and gas operative licence revenue forecasting;
- overseeing the development of the annual expenditure budget, development of the annual Business Plan, and development and maintenance of the Division's Operational Plan;
- representing EnergySafety's needs in relation to various corporate and central agency activities, including internal audit, expenditure tracking and projection, performance indicator development and progress monitoring;
- overseeing and coordinating office services including records management, FOI, IT services, building services, fleet management; finance and administration services (as provided by Corporate Services Division); and
- industry technical (regulatory) communication, annual reporting and safety promotion generally.