



Government of West
Department of Commerce
Energy Safety

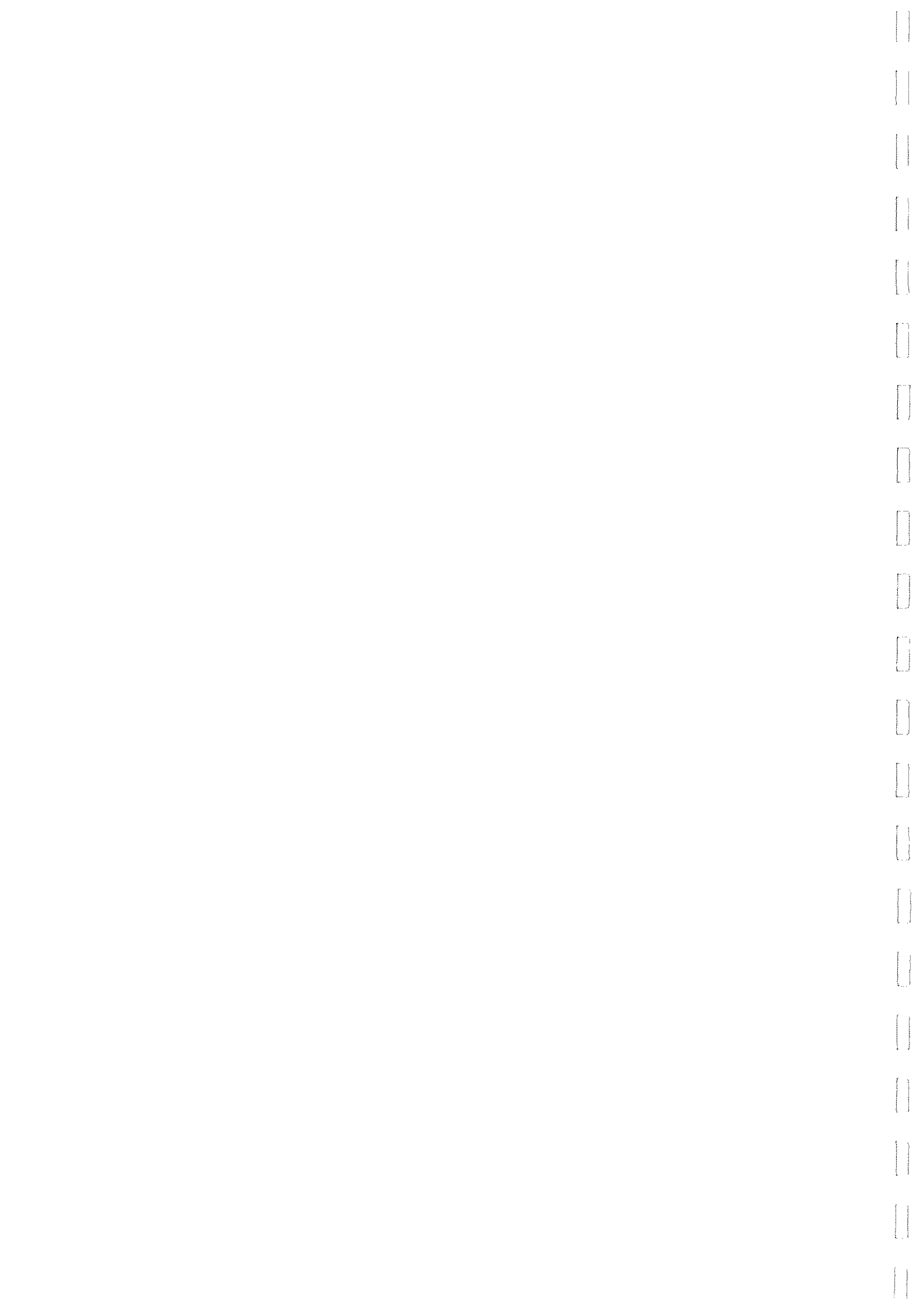
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ENERGYSAFETY DIVISION BUSINESS PLAN 2013/14

December 2012

This Business Plan was approved under
Part 2 of the *Energy Safety Act 2006* by
the Hon Simon O'Brien MLC
Minister for Commerce
on 14 January 2013





ENERGYSAFETY DIVISION
BUSINESS PLAN 2013/14
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LEGISLATIVE COUNCIL OF WA

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A brief outline of the 2011/12 year outcomes (the sixth complete year of the Industry funding scheme), for information purposes only.

FOREWORD

This document sets out the Business Plan 2013/14 for the EnergySafety Division (EnergySafety), Department of Commerce.

EnergySafety is Western Australia's technical and safety regulator for the electricity industry and most of the gas industry. Its principal functions are:

- administering electricity and gas technical and safety legislation;
- providing policy and legislative advice to the Minister for Commerce;
- setting and enforcing minimum safety standards for electricity and gas networks;
- enforcing natural gas and LP gas quality standards;
- providing technical advice and support to the Department of Finance's Public Utilities Office, Economic Regulation Authority (ERA) and the Energy Ombudsman;
- setting and enforcing minimum safety standards for consumers' electrical and gas installations;
- licensing electrical contractors, electrical workers and gas fitters;
- investigating and reporting on electrical and gas-related accidents; and
- promoting electricity and gas safety in industry and the community.

The Director of Energy Safety is an independent statutory office (established 1 January 1995) and is the head of EnergySafety.

EnergySafety became industry funded from 2006/07 under the *Energy Safety Act 2006* and *Energy Safety Levy Act 2006*. This mirrored practice in other jurisdictions. The scheme is operating successfully and no changes are considered necessary.

The cost of EnergySafety's activities is met by those who benefit from them, through the combination of licensing revenue and an industry levy. The legislation provides for the levy to be subject to review by Parliament.

As required by the legislation, this Business Plan for 2013/14 sets out:

- A statement of intent;
- The business environment and challenges, including major projects;
- The financial plan;
- Details of the proposed 2013/14 energy industry levy; and
- A brief outline in Appendix A of the 2011/12 year outcomes (the sixth complete year of the industry funding scheme), for information.

Once the Business Plan has been approved by the Minister, it will form the basis for his determination on the amount to be levied on energy industry participants, and the manner in which it is to be allocated between participants, for the 2013/14 year.

Ken Bowron
DIRECTOR OF ENERGY SAFETY

December 2012

STATEMENT OF INTENT

1.0 INTRODUCTION

This Statement of Intent is part of the Business Plan 2013/14 required by the *Energy Safety Act 2006*. It sets out the requirements for the administration of the energy industry levy. Apart from occasional specific-purpose grants, the levy, with revenue from electrical contractor, electrical worker and gas fitter licence fees, provides EnergySafety with all its capital and operating funding.

1.1 DEPARTMENTAL OBJECTIVES

The Department of Commerce (Commerce), of which EnergySafety is a Division, has the following objectives:

Vision

A business environment that is productive, innovative, fair and safe.

Mission

To create a contemporary, diversified economy that provides for the growth, safety and protection of the community by:

- *Promoting innovation and science*
- *Enhancing capacity; and*
- *Ensuring a world class regulatory environment.*

Strategic Directions

The five Directions featured in Commerce's *Future Directions* document are:

1. *Influencing and shaping our commercial environment.*
2. *Empowering business and the community.*
3. *Developing a world class regulatory environment.*
4. *Enforcing the law.*
5. *Strengthening organisational capacity.*

EnergySafety, as part of Commerce, both contributes to and embraces these strategic corporate directions.

1.2 ENERGYSAFETY'S PROGRAMS

EnergySafety is undertaking the following programs:

- **Don't Do It Yourself Campaign:** An advertising campaign was conducted in 2012 to ensure the public is aware of the dangers of undertaking unlicensed electrical work, the need always to use a licensed electrical contractor and to require an electrical safety certificate at the completion of all work.
- **Wood Pole Safety:** EnergySafety continues to work with Western Power to identify unsafe electricity transmission and distribution poles and ensure they are reinforced or replaced in accordance with good working practice.
- **Bush Fire Investigations:** EnergySafety carries out major investigations into significant bush fires allegedly caused by electricity network facilities.
- **Inspections of Domestic Installations:** EnergySafety encourages householders to have their electrical installations inspected for safety on a fee-for-service basis, using participating licensed electrical contractors. A similar service for gas consumers is planned.
- **Gas Appliance Rectification Programme:** EnergySafety is managing a major project to inspect and if necessary service or replace pre-1980 natural gas appliances, following advent of a broader gas specification into the market, thus allowing for more competition in the supply of natural gas. This project is planned to be completed in early 2013 before the changed gas is available.
- **Legislation:** Work is underway to consolidate and simplify existing laws; clarify the responsibilities for vegetation control near powerlines; update the systems for approval of electrical appliances; amend the period within which proceedings may commence for offences in accordance with a Coroner's recommendation; and enable proper investigation and sharing of information between agencies responsible for bushfires.
- **Electrical Licences:** As at 30 June 2012, there were 39,058 electrical workers, 4,397 electrical contractors and 245 in-house licence holders registered, an increase of 10% over the previous year.
- **Gas Fitter Licences:** As at 30 June 2012, there were 6,485 persons registered for gas fitting work, an increase of 9% over the previous year.
- **Licensing Statistics:** During 2011/12, EnergySafety's Licensing Office processed 8,435 electrical and 1,318 gas licence applications respectively, increases of 47% and 48% compared with the previous year. The gas statistics include 602 applications for converting Certificate of Competencies to Gas Fitting Permits.
- **Investigations:** EnergySafety investigates and if necessary prosecutes breaches of the laws applicable to electricity and gas installations and network operations.
- **Inspections:** EnergySafety inspects electrical and gas installations not associated with a network operator.

- **National Regulatory Reform Projects:** The Government of Western Australia continues to work with the Federal Government to develop national regimes for electrical appliance safety approvals, gas appliance safety approvals, national electrical and gas occupational licensing and harmonisation of energy supply technical and safety regulation.
- **Standards Development Work:** EnergySafety plays a leading role in the development of relevant Australian Standards, covering subjects such as electrical installations (AS/NZS 3000 Wiring Rules), high-voltage installations including electricity substations, gas installations, industrial gas appliances and major electricity and gas networks. During 2012/13, the Director of Energy Safety was invited to join Standards Australia's Standards Development Committee to help oversee the governance and policy development for all standards as a representative of the Western Australian Government and as an energy regulator.
- **Committee Participation:** EnergySafety is an active participant in a number of national regulatory and technical coordinating bodies.
- **Safety Statistics:** In 2011/12, 1,889 electric shock incidents were reported to EnergySafety. There were eight serious electricity-related accidents but no fatalities. Seventy four gas-related incidents were reported, with five serious gas-related accidents, with individuals injured, and one fatality.

2.0 ENERGYSAFETY'S ROLE

The Director of Energy Safety ("Director") is a statutory office established under Section 5 of the *Energy Coordination Act 1994*. The Director is an independent regulator subject only to written direction by the responsible Minister, who is required under the Act to table in Parliament any direction given to the Director.

EnergySafety seeks to ensure:

- the safety of people (the public, energy workers and consumers) and property affected by electricity and gas utility infrastructure;
- that consumers have safe electrical and gas installations at their premises;
- that electrical and gas appliances and equipment (for domestic, commercial and industrial purposes) purchased or hired are safe to use;
- that residential and business consumers receive gas supplies that are metered accurately and meet minimum standards of quality so appliances function safely;
- the safety of persons working on electrical and gas installations; and
- the safety of all persons using electricity and gas.

EnergySafety provides electricity and gas-related technical advice to the Department of Finance's Public Utilities Office, the Economic Regulation Authority (ERA) and the Energy Ombudsman.

EnergySafety develops policies concerning energy industry technical and safety issues, in some cases through membership of national technical standards and regulatory coordination

forums. EnergySafety also provides advice to the responsible Minister, including proposals for improved technical and safety legislation.

Licensing is closely associated with consumer and worker safety. EnergySafety issues licences for electrical contractors, electrical workers and gas fitters who meet defined competency requirements.

The statutory Electrical Licensing Board (which includes industry members appointed by the Minister) oversees licensing electrical workers and contractors and makes recommendations on disciplinary matters. The internal Gas Licensing Committee, operating under a delegated authority of the Director, deals with gas licensing matters and makes recommendations on disciplinary issues.

3.0 THE PERIOD AHEAD FOR ENERGYSAFETY

3.1 INTRODUCTION

EnergySafety's functions have undergone significant expansion since its creation on 1 January 1995 to include major additional responsibilities. These include gas network regulation (2000) and electricity network regulation (2001) and gas heating value regulation in late 2007.

During the industry consultation of 2005/06 dealing with the then industry funding proposals, industry clearly indicated its support for EnergySafety's functions and work. Now that industry funding is in place, the major focus in the period ahead is to deliver the outcomes expected. This requires balancing staff resources and expertise against government, industry and community needs and expectations.

The issues confronting EnergySafety have been categorised below as major new policy initiatives, regulatory operational matters and corporate development issues.

3.2 POLICY INITIATIVES

The following policy projects are in progress and expected to be completed during the next and subsequent financial years.

3.2.1 COAG National Regulatory Reform Initiatives

The Council of Australian Governments (COAG) has initiated a number of national regulatory reform projects relevant to EnergySafety. The outcomes affect EnergySafety's role, structure, funding and the legislation it administers.

During 2008 to 2012 EnergySafety made a significant commitment to the following COAG projects, representing an extra workload for staff and affecting project priorities and costs. This will continue for some years and funding has been included in the Business Plan.

National Occupational Licensing System (NOLS)

COAG has chosen electrical and gasfitting licences for the first group under a national occupational licensing system (NOLS). It is proposed that one occupational licence would be valid in all Australian jurisdictions. A new National Occupational Licensing Authority (NOLA) has been established and a national database and IT system are proposed.

NOLA would delegate its licensing activity to existing jurisdictional regulators such as EnergySafety.

The Federal Government's National Taskforce held a single public information session in September 2012 for stakeholders affected by the NOLS proposals. The Department of Commerce supplemented this with additional information sessions in and around Perth and in regional centres.

Energy Supply Industry Harmonisation

The Ministerial Council on Energy (MCE) established a review to develop an enhanced safety framework for the energy (gas and electricity) supply industries. The primary aim of

this work is to ensure improved public and industry safety through regulatory and non-regulatory means. This will contribute to the efficient delivery of energy network service by:

- Facilitating greater labour mobility;
- Lowering compliance burdens, while maintaining safety standards; and
- Facilitating increased safety system consistency across jurisdictions.

Safety regulation of these energy supply industries affects several government departments and agencies for the Commonwealth and most jurisdictions. The MCE developed an Intergovernmental Agreement (IGA) to formalise the cooperation between the Commonwealth, State and Territory governments to develop a harmonised safety system.

The MCE established the Energy Supply Industry Safety Committee (ESISC) to advise and assist with the development and implementation of the nationally harmonised system. ESISC is a non-statutory advisory body and comprises an independent chair, officials from each state and territory and the Commonwealth, representatives from the gas and electricity industries, and representatives from training bodies, unions and energy sector contractor businesses.

EnergySafety represents Western Australia on the ESISC.

ESISC is overseeing the development of a new Energy Network Safety System (ENSS) Standard for electricity networks. Standards Australia established a federally funded working party to develop this new Standard (AS5577), which is nearing completion.

National Construction Code

A committee reporting to COAG is considering a proposal from the building industry to create a National Construction Code. Aside from the building standards presently in the Building Code of Australia, it has also proposed to include all electrical, plumbing and gas standards.

Electrical and gas standards (as currently developed by the energy industry through Standards Australia) have a much wider reach than just building construction. They cover all types of electrical and gas installations including mine sites, industrial installations and maintenance. The standards, cited in existing legislation, ensure an integrated approach to safety is taken through the energy supply path: from production through transmission and distribution to the consumer, including appliances. The building industry represents only a small part of the consumer section and the reform path suggested would create fragmentation of standards and could affect regulation enforcement.

Following strong representations, electrical and gasfitting regulations and standards will be excluded for the time being but EnergySafety will monitor closely the Code's development and proposed scope.

3.2.2 Review of Legislation Administered by EnergySafety

Legislation administered by EnergySafety has, since commencing in 1945, been written and amended frequently, reflecting evolutionary changes in technology and in the electricity and gas industries.

Legislation administered by other agencies, if dealing with gas and electricity supply and utilisation, can affect the functions of EnergySafety. The *Electricity Industry Act 2004* and its

regulations and codes are an example. It is expected that the following will affect EnergySafety's legislation and functions:

- National Occupational Licensing System;
- Energy Supply Industry Safety Regulation;
- Electrical Equipment Safety System;
- Gas Appliance Certification Review; and
- National Occupational Safety and Health Act – electricity regulation.

EnergySafety attempts to amend the legislation it administers when industry, technical and/or government policy changes occur. Amendments also simplify and remove:

- any provisions that are no longer EnergySafety's responsibility;
- any inconsistencies or conflicts; and
- any overlaps.

Proposed legislation reforms approved by Cabinet in November 2011 will amend selected Acts and parts of Acts for which EnergySafety has responsibility. These reforms will remove inconsistencies between them and the suite of legislation associated with the *Electricity Industry Act 2004*. The reforms will also provide for:

- the appropriate sharing of information with other Western Australian investigation agencies for bushfires and energy-related safety agencies in Australia and New Zealand;
- the rationalisation of statutory responsibilities for the control of vegetation near power lines;
- expiry dates for certificates of competency for gas fitting;
- removal of duplication and overlap between existing legislative provisions; and
- updating the systems for approval of electrical equipment as part of a new national scheme.

3.2.3 Vegetation Control

Section 54 of the *Energy Operators (Powers) Act 1979*, dealing with the control of vegetation near power lines, will be replaced with a new regulatory regime. This will give a more balanced approach to responsibilities for ensuring that vegetation is kept safely clear of overhead power lines by land occupiers, local authorities and electricity network operators. This is important for public safety, fire prevention and electricity supply reliability and quality.

3.2.4 Electrical Equipment and Appliances

A complete review of Australia's regulatory regime for the safety of electrical equipment and appliances has occurred. EnergySafety is participating with other regulators in this national project. It is designed to ensure regimes operated by each jurisdiction are in harmony and have the capacity to deal with the challenges of rapidly changing technology and global manufacturing. Most electrical products are now imported. This project is nearing completion and is expected to be implemented in all jurisdictions in 2013 except NSW.

EnergySafety does not approve appliances but recognises the approvals granted in other jurisdictions.

3.2.5 Household Electrical Safety

Many homes have unenclosed (bare) electrical cable joints in ceiling spaces. These are a serious safety hazard. Previous policy allowed joints simply to be taped if Residual Current Devices (RCDs) were fitted. This has produced an unanticipated safety problem because the tape has dried over time and fallen away from the joints, leaving them exposed. Such joints should be protected by insulated enclosures.

Similarly, many older homes contain wiring insulated with Vulcanised India Rubber (VIR). Over time this insulation has deteriorated, leaving bare live wires exposed in ceiling spaces.

EnergySafety will consult with industry on the need to address these safety concerns and develop an education program for the general public.

3.2.6 Electrical Industry Safety Management Systems

Following the State Coroner's inquiry into the Tenterden fire fatalities, caused by clashing power line conductors, it is appropriate to encourage a more rigorous safety management regime on network operators. Current regulations tend to cause a reactive approach, often relying on corrective action instructions from the regulator, following safety incidents. Amendments under way to the *Electricity (Supply Standards and System Safety) Regulations 2001* (to be renamed *Network Safety Regulations 2013*) will require network operators to produce and follow a formal safety management system, a recognised approach for evaluating all safety risks and assigning priorities for mitigation measures. EnergySafety is represented on a Standards Australia committee developing a new standard for such systems. This new standard, AS 5577, should be completed early in 2013.

3.2.7 Distribution Overhead Powerlines

During recent years there have been concerns about the safety of overhead lines in the Western Power distribution system covering the south-west of the State. These concerns were confirmed by EnergySafety's findings in the 2006 and 2008 audits of Western Power's distribution wood pole management systems and the findings of the Legislative Council Standing Committee on Public Administration in 2012. EnergySafety issued an Order in mid 2009 requiring Western Power to correct the problems identified in the audits. EnergySafety also has analysed Western Power's management systems for preventing overhead conductors clashing and pole-top fires.

Work is underway analysing unassisted failures of overhead conductors.

EnergySafety continues to work closely with Western Power on its mitigation strategies to ensure that all reasonable measures are employed to avoid such incidents in future, since their effect on the community can be severe. EnergySafety devotes significant attention and resources to this program to ensure the safety of local communities as far as possible.

3.2.8 Gas Safety in Multi Storey Units

The Gas Appliance Rectification Programme survey uncovered a number of poorly maintained gas installations in large blocks of flats. The majority of the premises had instantaneous gas hot water systems installed and connected to multiple flued systems. Many had been installed with old asbestos flue systems. In installing retrofitted water heaters there has been disturbance to the integrity of the asbestos flues resulting in inappropriate flue connections (flexible aluminium, duct tape) and dislodgement of asbestos

spigot connectors. In some cases larger water heaters have been installed with higher gas input than the flue system capacity.

This is a concern for the network operator (ATCO Gas Australia) and EnergySafety. A program to undertake inspections of all known multiple-flue systems in blocks of flats has commenced and will continue through 2013/14.

3.3 REGULATORY OPERATIONAL MATTERS

Apart from the policy development activities, operational work associated with administering existing regulations is growing rapidly.

Some of the operational work is relatively routine, such as responding to requests for advice, responding to complaints, carrying out minor investigations and, as appropriate, making decisions on whether to warn, infringe or prosecute a person or business. There is also a routine level of installation inspection work carried out by EnergySafety's inspection branches, for electricity and gas installations not connected to a network¹ (e.g. pastoralist's facilities, mine sites, and Rottneest, Christmas and Cocos Islands).

During recent years the State's economic activity has continued to expand. This has generated increased work for industry and thus also for EnergySafety, additional to that caused by the expanded regulatory framework.

EnergySafety has managed to cope with demands on its Licensing Office. The very high level of industry activity over recent years has resulted in a sustained influx of electrical and gas operatives seeking local work. The Licensing Office's staff resources were increased, leading to a substantial reduction in the average time required from application to issue of a licence. Nonetheless, considerable work pressure remains in this area and is kept under review.

Some operational work can evolve into major projects. For example, EnergySafety remains concerned with Western Power's management of its extensive wood pole electricity distribution system. Major compliance audits were completed in late 2006 and 2008, and an Order was issued October 2009. EnergySafety continues to monitor Western Power's response to ensure that it properly addresses the issues of concern. Additionally, EnergySafety has been responding to questions from the Legislative Council Standing Committee on Public Administration which has been conducting a review of Western Power and Horizon Power's transmission and distribution systems.

EnergySafety has established panel contracts for technical personnel to be available for short-term projects. This will allow some targeted compliance audits to be conducted, mainly involving the network operators working in the Pilbara and other remote locations.

EnergySafety conducts programmed (and targeted) compliance audits on a sample of industry operatives including electrical contractors and gas fitters (including authorisation holders).

The performance of Inspection Plans used by and Installation Inspectors employed by network operators must also be monitored. The Inspectors are authorised ("designated") by the Director of Energy Safety and perform the vital function of checking the compliance of consumers' electrical and gas installations in accordance with an approved plan following

¹ Installations connected to a network or pipeline are required to be inspected by the network operator or pipeline licensee, which is required to report results to EnergySafety.

work by electrical contractors and gas fitters. They conduct a first level investigation and then report cases of non-compliance to EnergySafety for possible follow-up action. They are obliged, in accordance with the terms of their designation, to comply with a Code of Conduct.

Targeted audits will be carried out to ensure that all Installation Inspectors are reporting defects as required by their statutory obligations.

3.3.1 Safety Promotion

EnergySafety and energy suppliers promote:

- gas and electricity user safety;
- community safety awareness about electricity and gas infrastructure; and
- how to work safely near electricity and gas facilities (aimed at all types of workers in various industries).

EnergySafety applies a combination of industry-specific activities, including safety sessions during regional visits, publications aimed at industry and the public (Energy Bulletin and the EnergySafety website), and through television, radio, newspaper advertisements and articles in industry publications.

Safety improvement and safety promotion show a clear correlation. Television has proven to be the most effective medium for reaching the general community. But, a substantial campaign is required to have any worthwhile impact. Given that the cost of such campaigns is significant, EnergySafety has run a major TV campaign approximately every two years. In future, allowance has been made to conduct annual campaigns to ensure that public awareness is high and to improve the State's gas and electrical safety performance generally and in comparison with other jurisdictions.

3.4 CORPORATE PROJECTS AND ISSUES

3.4.1 Staff Attraction and Retention

EnergySafety, as a regulator, needs experienced staff who understand the business and technical aspects of the electrical and gas industries. They must evaluate and negotiate safety and performance issues with their senior industry counterparts.

This requires a competent grasp of industry-specialist technical practices (including safe field work practices), energy legislation and occupational health and safety obligations, industrial relations implications and economic effects. Some staff, particularly engineers, also need strong skills in policy development and written communication.

Staff with such capabilities are difficult to recruit and retain, especially while WA's economy remains so strong and competition for suitable staff is high.

EnergySafety has attempted to offer more competitive employment packages to its engineers and inspectors through an "Attraction and Retention Benefit" (ARB). The ARB has had modest results in attracting new recruits but has been somewhat helpful in retaining staff.

The ARB has recently been replaced by an Attraction and Retention Incentive (ARI) scheme which is more aligned with market remuneration packages offered in the private sector. The

ARI includes performance incentive components. It is hoped that the ARI will help EnergySafety fill its vacancies for electrical inspectors particularly.

Recruiting specialist technical personnel remains difficult. EnergySafety competes for staff with the gas and electricity network operators, major consultancies and large construction contractors. Hence the ARI arrangements are essential. The financial forecasts have been cast accordingly.

EnergySafety continues to have problems attracting electrical inspectors. Four of five gas inspector positions are filled but only five of the eleven electrical positions are occupied. It is hoped that the ARI will attract more applicants.

Further recruiting is required and is expected to continue to be a critical activity, especially as some staff are approaching or have reached retirement age. Part-time work and part-time contract work options are also utilised to supplement EnergySafety's core of full time, permanent personnel.

3.4.2 Compliance Management System

During 2010/11, EnergySafety gained approval to develop a new Compliance Management System (CMS). This computer system will replace outdated and unsupported electricity and gas inspections systems. It will also improve productivity and efficiency by supporting a mobile inspection workforce and aligning the workflows across directorates. EnergySafety processes were rigorously mapped to ensure consistency between directorates and to ensure efficient processes. Tenders were called in November 2011, and the successful provider, CMO Global, was appointed in October 2012. The new computer system (and processes) will be progressively delivered by the end of 2013. The financial forecasts include the expected budget for this major project.

3.4.3 National Occupational Licensing System (NOLS)

Apart from the regulatory, legislative and funding issues raised in Section 3.2.1, the NOLS initiative will affect Commerce's IT systems significantly. This project has been delayed considerably, with commencement dates for electrical and gas occupations now expected to be near the end of 2013.

It remains unclear how existing IT systems in each jurisdiction will integrate with the new national register. The options range from developing a simple linkage between Commerce's systems and the national register (so that data can be uploaded and downloaded) to dispensing with the Department's systems and adopting the new national register.

Because the final approach to the IT issues remains unclear, EnergySafety is not justified in making a specific provision in this Business Plan. More funds may be needed but the amount and timing of expenditure cannot be determined with satisfactory precision. The IT issues are likely to be resolved during 2012/13, permitting, if required, a proper assessment of the funds and staff resources EnergySafety will be expected to contribute.

3.4.4 Gas Appliance Rectification Programme

The Government approved the development of legislation to enable natural gas of a broader quality range to be supplied into the domestic market. This is expected to increase security of supply, improve pricing competition and enable producers to choose the most efficient method of developing gas fields.

Alinta Energy Assist continues to replace and/or service domestic natural gas appliances identified during an inspection as a safety risk if allowed to operate on the changed gas.

Phase two will extend into the first half of 2013 and be completed in time to allow the flow of the broader specification gas into the metropolitan distribution system.

4.0 ENERGYSAFETY'S ACTIVITIES

4.1 LEGISLATION ADMINISTERED

The Director of Energy Safety and his staff administer the following legislation:

- *Energy Safety Act 2006*
- *Energy Safety Regulations 2006*
- *Energy Safety Levy Act 2006*

- *Energy Coordination Act 1994* (other than Parts 1A, 2A, 2B, 2C and 2D)
- *Energy Coordination (General) 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) Regulations 1999*
- *Gas Standards (Gas Supply and System Safety) Regulations 2000*
- *Gas Standards (Infringement Notices) Regulations 2007*

- *Gas Supply (Gas Quality Specifications) Act 2009* (Part 5, Division 2)

EnergySafety also assists the Economic Regulation Authority (ERA) and the Energy Ombudsman's office with technical advice as and when required.

4.2 SPECIFIC ACTIVITIES

The legislation provides for EnergySafety to:

- Ensure the safety of consumers' electrical installations and appliances, by:
 - licensing electrical workers and electrical contractors (through the Electrical Licensing Board);
 - enforcing prescribed technical standards for electrical 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 offered for sale, to check compliance with prescribed safety requirements.
- Ensure the safety of consumers' gas installations and appliances (including industrial gas appliances), by:
 - licensing gas fitters;
 - 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 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:
 - inspecting 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 failures in service of network operators' assets, accidents causing injury or death and wildfires ignited by network operator assets.
- 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' complaints about gas supply reliability and quality; and
 - auditing network operators' compliance with prescribed meter management requirements, to ensure acceptable meter accuracy.
- Appoint and monitor the performance of all electricity and gas 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 on safe work practices.
- Issue exemptions or variations to certain regulatory requirements (electrical and gas).
- Investigate electrical and gas safety incidents.

- Enforce statutory requirements through advice, warnings, infringement notices, prosecutions and, in the case of licence holders, also through disciplinary action.
- Respond to consumer complaints involving electrical and gas technical and safety matters.

Furthermore EnergySafety:

- provides energy-related policy advice and support to the Minister, Government and Director General Department of Commerce; and
- promotes electricity and gas safety to the public and businesses and tradespersons in the electricity and gas industries.

5.0 PERFORMANCE TARGETS

The following performance indicators provide an overview of the type and volume of EnergySafety's regulatory work, as well as the influence of this work on safety outcomes.

MEASURES	11/12 Target	11/12 Actual	12/13 and beyond Target
GAS			
Gas related deaths	0	1	0
Gas related accidents ² (including fatalities)	10	17	10
Gas installations inspected and found non-complying (includes matters not directly affecting safety)	11%	6.5%	7%
No. of EnergySafety audits of gas network operators' Inspection Plans ³	2	2	2
Investigations under Acts and Regulations	200	219	200
No. of Type B gas appliance variations assessed	60	57	60 ^c
Presentations to Industry or other Groups	20	43	25

^c Target based on current edition of AS 3814-2009 and known future gas turbine installations in power stations

MEASURES	11/12 Target	11/12 Actual	12/13 and beyond Target
ELECTRICITY			
Electricity related deaths	0	0	0**
Electricity related accidents ² (including fatalities)	12	8	12
Electrical installations inspected and found non-complying (includes matters not directly affecting safety)	14%	19%	14%
No. of EnergySafety audits of electricity network operators' Inspection Plans ³	2	3	2
Investigations under Acts and Regulations	650	603	650
Presentations to Industry or other Groups	5	6	5

* Trend analysis is used to set the targets

** EnergySafety aspires to a target of zero fatalities but has no direct control over accidents and fatalities. It strives through education, policies and enforcement to prevent any electrocutions.

² Accidents are defined as serious safety incidents where a person has received some type of medical treatment (other than just precautionary assessment tests) from a health professional, in a hospital or similar.

³ Inspection Plans of energy distributors have a life cycle of several years and hence compliance audits are timed to fit with that cycle.

6.0 INFORMATION AND ADVICE TO THE MINISTER

EnergySafety provides advice and support to the Minister for Commerce.

Interaction between the Minister's office and EnergySafety takes place through the Director of Energy Safety and the Director General, Department of Commerce. However, EnergySafety's Director Gas, Director Policy & Electrical Engineering and Director Electricity Compliance respond directly when circumstances require.

Advice and information provided to the Minister by EnergySafety includes the following:

- Proposals for major policy projects, such as new legislation or amendments;
- Reports on the status and management of major policy projects;
- Advice on proposed regulatory actions that may affect the public or businesses;
- Advice on information releases dealing with subjects relevant to this Ministerial portfolio;
- Reports on the status of major investigations or audits;
- Advice to assist with responses to enquiries (oral or written) to the Minister's office, if requested to do so by the Minister or his staff. This may involve correspondence and/or meetings;
- Advice on resource requirements and work programs; and
- Advice on nationally significant energy issues (e.g. major regulatory reform projects).

BUSINESS ENVIRONMENT AND CHALLENGES

7.0 WA'S ENERGY INDUSTRY ENVIRONMENT

During the next five years, existing shortcomings with Western Power's electricity supply network will continue to require major attention as will, to a lesser extent, the networks of Horizon Power. The younger age and generally better state of the gas distribution networks operated by ATCO Gas and others mean they require comparatively less regulatory attention from safety and performance perspectives. However, older networks such as Albany now need increasing focus.

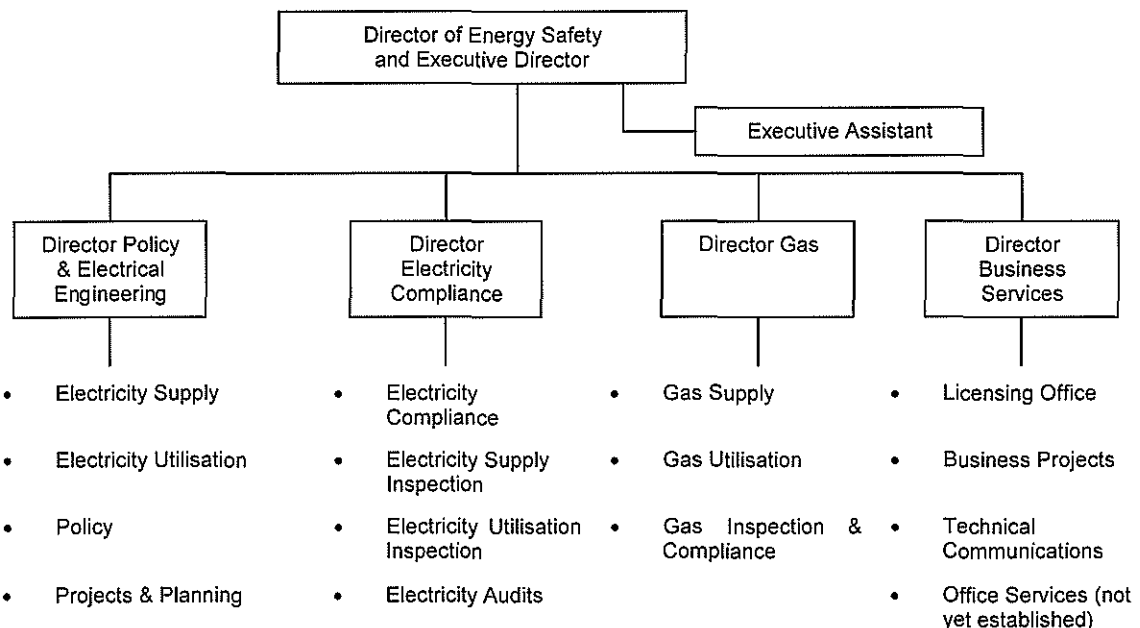
For electrical contracting and gasfitting, it is largely a case of continuing with current regulatory initiatives which appear to be efficient and effective.

New enforcement measures during 2007/08 (larger fines and the introduction of Infringement Notices) encouraged substantial improvement in electrical and gas industry compliance during the period, although there is a trend to challenge the higher infringement fines and take the matters to court. This increases costs for both EnergySafety and the defendant.

7.1 ENERGYSAFETY STRUCTURE, RESOURCES AND POWERS

7.1.1 Introduction

The Executive Director, Energy Safety Division ("EnergySafety"), heads the Division. The incumbent also holds the statutory office of Director of Energy Safety.



This structure reflects the rapid growth in the electricity sector and will take some years to fully implement. The structure will allow for the development and maintenance of critical technical expertise relevant to each industry sector.

The EnergySafety Division is located at offices on the corner of Sevenoaks Street and Grose Avenue, Cannington.

7.1.2 Policy & Electrical Engineering Directorate

This Directorate is headed by the Director Policy & Electrical Engineering and is responsible for –

- All EnergySafety policy coordination, including ministerial advice, new legislation and regulatory reform proposals;
- 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
- Coordinating major electrical projects and planning initiatives.

There are two engineering branches:

- ❖ Electricity Supply Branch, comprising two experienced Principal Engineers; and
- ❖ Electricity Utilisation Branch, headed by a Principal Engineer.

Each deals 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 Electricity Compliance Directorate, when the latter is carrying out complex investigations (such as those dealing with electricity industry design failures, major bushfires and industry work practices) and corporate compliance audits of electricity network operators and licensed contractors.

7.1.3 Electricity Compliance Directorate

The Directorate is headed by the Director Electricity Compliance and is responsible for -

- ministerial advice, regulatory reform proposals, industry liaison and assessment of requests for variations to regulatory requirements; and
- All electrical operational activities.

The Directorate has three Branches, as follows:

- ❖ Electricity Supply Inspection
- ❖ Electricity Utilisation Inspection
- ❖ Electricity Compliance

These Branches deal with the following key activities:

- Conducting corporate compliance audits of electricity suppliers concerning network safety;
- Guiding and approving electricity supplier Inspection Plans, which set out electricity consumer installation inspection practices and commitments, and conducting audits to ensure compliance;
- Inspecting electricity consumers' installations in remote locations (not connected to networks);
- Conducting compliance audits of electrical equipment retailers for compliance with safety requirements;

- Recommending to the Director of Energy Safety the appointments of all electrical inspectors in the State, monitoring their performance, maintaining codes of conduct, monitoring compliance;
- Carrying out investigations into serious accidents (fatalities, injury and damage) and recommending safety promotion, warnings, prosecutions or disciplinary actions as appropriate.
- Advising consumers and electrical businesses and tradespersons about 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; and
- Assisting the Director with appeals against network operator inspector's rulings.

The Electricity Compliance Directorate is based at the Cannington Office, but also has senior electrical inspector positions at Geraldton, Kalgoorlie and Bunbury. The NW and far north of the State are covered by a senior electrical inspector based in the Perth office, who conducts regular programmed inspections in these areas. The branch operates on a 24/7 basis to respond to electrical incidents (fires, injury, fatalities).

7.1.4 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; and
- All gas related operational work.

The following two Branches:

- ❖ Gas Supply Branch, headed by a Principal Engineer; and
- ❖ 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. ATCO Gas Australia) and licensed gasfitting contractors, as well as enforcement activities.

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

- Conducting corporate compliance audits of gas suppliers concerning network safety and quality (composition) of NG and LPG supplied;
- Guiding and approving gas supplier Inspection Plans, which set out gas consumer installation inspection practices and commitments, and conducting audits to ensure compliance;

- Inspecting gas consumers' installations in remote locations (not serviced by networks), 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, for compliance with safety requirements;
- Recommending to the Director of Energy Safety the appointments of 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, and recommending safety promotion, warnings, prosecutions, disciplinary actions etc, as appropriate;
- Advising consumers and gas businesses and tradespersons about 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 with appeals against external inspector's rulings and requests for variations from prescribed requirements.

The Gas Inspection Branch is based at the Cannington Office. Support is provided from senior electrical inspectors at country locations, where practicable.

The branch operates on a 24/7 basis to respond to gas incidents (fires, injury, fatalities and major gas supply interruptions).

7.1.5 Business Services Directorate

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

The Directorate has three Branches, as follows:

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

These Branches deal with:

- the development and maintenance of licensing administration 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 its Executive Officer);
- supporting the Gas Licensing Committee in its discharge of the statutory functions delegated by the Director of Energy Safety (the Director Business Services is chairman of the Gas Licensing Committee);
- managing formal disciplinary proceedings against electrical licensees for the Electrical Licensing Board, and gasfitting licensees for the Director of Energy Safety. Serious proceedings are forwarded to the State Administrative Tribunal;
- administration of the Division's industry levy scheme, including data collection and modelling, licence revenue forecasting, expenditure budget development;
- internal audit, expenditure tracking and projection, performance indicator development and progress monitoring;
- overseeing the development of the annual Business Plan and maintenance of the Division's Operational Plan;
- 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);
- statistical analysis and reporting in respect of electricity and gas-related incidents, and EnergySafety's key performance indicators; and
- industry technical (regulatory) communication, annual reporting and safety promotion.

7.1.6 EnergySafety's Staff Resources

In 2006/07 EnergySafety's establishment level was 56 FTEs.

In 2011 the Government approved increasing the FTE level from 56 in 2010/11 to 64 by 2014/15, with all the new positions being required in the rapidly expanding electricity sector. It was planned that this will occur with an additional two positions per annum. The approved FTE level for 2013/14 is 62.

Since then, EnergySafety has encountered considerable difficulty attracting and retaining the highly skilled and experienced technical staff it requires to perform its statutory functions. The remuneration it can offer has not been competitive compared with equivalent roles in the private sector and energy industry.

The new Attraction and Retention Incentive (ARI) payment, mentioned in Section 3.5.1, to replace the ARB, may help to attract suitable candidates for these vacancies.

7.2 ELECTRICAL AND GAS SAFETY OUTCOMES

7.2.1 General

The electrical and gas safety outcomes for Western Australia (WA) have been summarised below, based on incidents reported by industry and the general public. The reported incidents are recorded in EnergySafety's inspection systems.

The comparative data have been obtained from regulatory authorities throughout Australian states and territories. Data for WA reflects the information available as of 25 August 2011.

7.2.2 Electrical Safety

Although WA's fatality rate is marginally above the national average the trend line is moving downward. Uniform national definitions and criteria for electrical and gas fatalities and serious accidents do not exist. Western Australian figures include all electricity-caused fatalities but some jurisdictions exclude certain categories (such as suicide, for example). Therefore inter-jurisdictional comparisons should be viewed with caution.

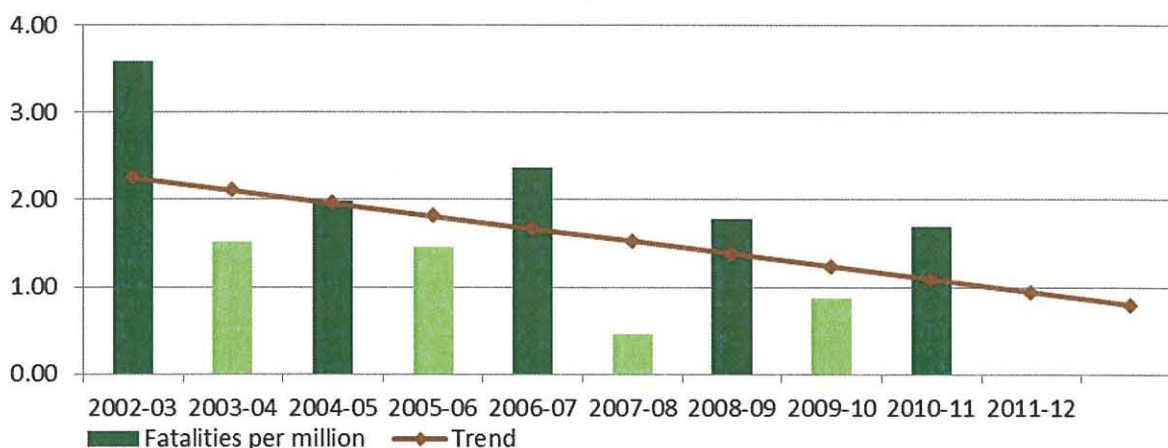
The installation of RCDs in all new homes, additions/alterations and upon sale or renting should produce a declining trend in the number of fatalities. In October 2009, it was made mandatory that properties being sold or leased in Western Australia were fitted with at least two RCDs.

Additionally, safety awareness campaigns may have contributed to the declining fatality rate.

Electrical Fatalities

In 2011/12 there were no electricity-caused fatalities reported in Western Australia.

CHART A: WA ELECTRICAL FATALITIES PER MILLION POPULATION (2002-03 TO 2011-12)



Note: Light green indicates that a safety campaign was conducted in the corresponding financial year. A safety awareness campaign was conducted in 2011-12 with no fatalities reported for that year.

Western Australia's trend in the number of fatalities per year continues to decrease steadily (Chart A).

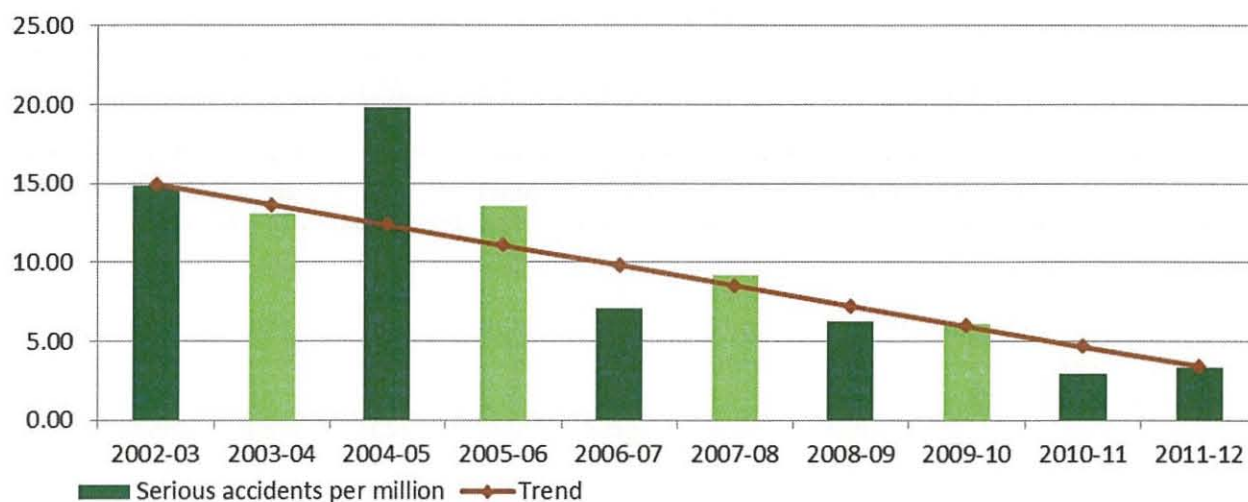
Chart A demonstrates a correlation between media awareness campaigns and electrical safety. A corresponding reduction occurred in the number of electrical fatalities in years

when EnergySafety conducted a safety awareness campaign. This is evident by the results demonstrated in the years 2003/04, 2005/06, 2007/08, 2009/10 and 2011/12. There was a safety campaign conducted in the 2011/12 financial year and there were no fatalities reported in that year.

Serious Electrical Accidents – Non fatal

WA's serious non-fatal electrical accidents per million decreased over the past ten years (Chart B). Serious non-fatal accidents are those where victims require the assistance of health professionals but do not include accidents resulting in persons receiving a precautionary electro-cardiograph (ECG) assessment where treatment is not required.

CHART B: WA SERIOUS ELECTRICAL ACCIDENTS (NON-FATAL) PER MILLION POPULATION (2002-03 TO 2011-12)



Note: Light green indicates that a safety campaign was conducted in the corresponding financial year.

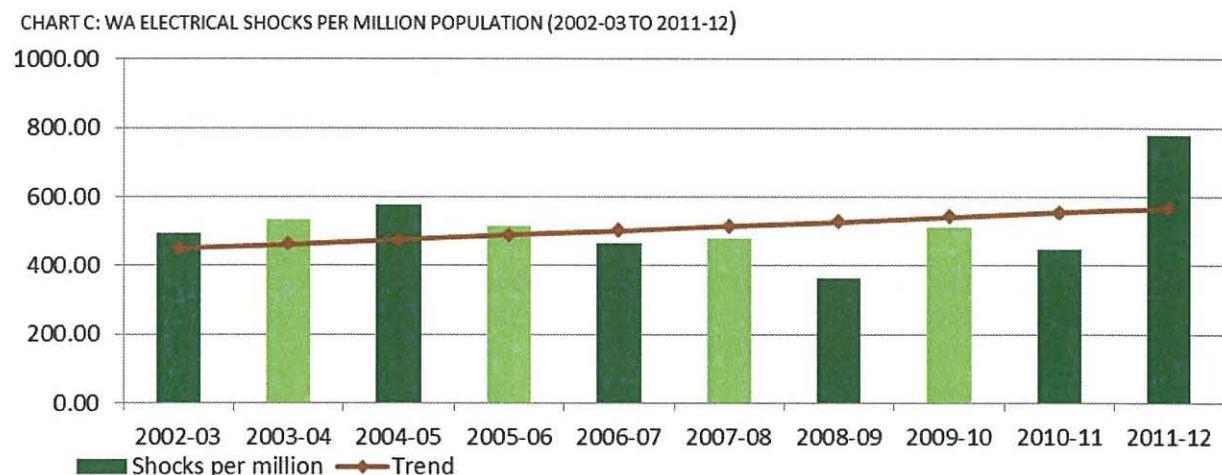
Eight non-fatal serious electrical accidents were reported in 2011/12 compared with seven in 2010/11. Eighty five per cent of these occurred in the workplace. Electrical workers were involved in 57 per cent of serious electrical accidents.

Electric Shocks

Electric shock reports are an indicator of community electrical safety and over the past few years have become a valuable source of information. A shock report can often identify potential safety hazards which need to be fixed. Such reports help EnergySafety recognise trends.

An electric shock can be experienced due to an error by the victim (e.g. contacting live parts) or another person, faulty equipment in the home or workplace or a fault with the electricity supply network.

Chart C below demonstrates the number of electrical shocks per million over the past ten years.



Note: Light green indicates that a safety campaign was conducted in the corresponding financial year.

During 2011/12 fiscal year there were 1889 electrical shocks reported compared with 1053 in 2010/11 which represents a 79% increase compared to the previous year. This may be due to increased awareness among the general public to report electric shocks. Shock reports increase in years when a safety awareness campaign takes place.

Western Power's and Horizon Power's commitment to the replacement of their outdated aerial service cables appears to have affected electrical shock incident reporting. The general public and industry, through publications and advertisements, are more aware of the fundamental dangers of minor electric shocks and the importance of mandatory reporting requirements.

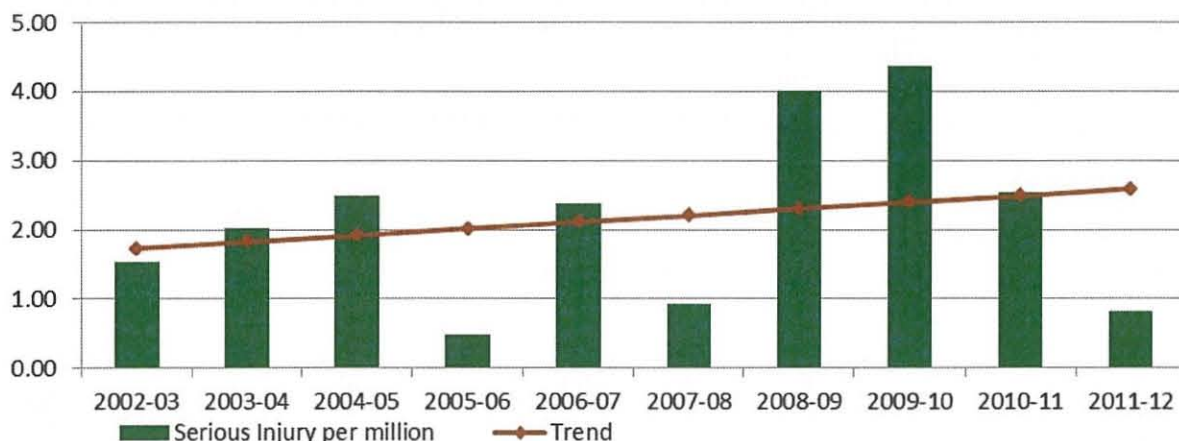
7.2.3 Gas Safety

There was one gas-related fatality reported in 2011/12.

The fatal incident occurred in the communal kitchen of a company producing stock feed for farm animals. Reports indicate that shortly after the victim was noticed going into the kitchen, flames were seen to engulf the building. A 45kg LPGas cylinder, one of two connected to the gas installation in the kitchen had resulted in a BLEVE (boiling liquid expanding vapour explosion). Although gas may somehow have been involved, the cause of death is yet to be determined by the coroner.

Despite a fatality in WA during 2009/10 and 2011/12, the trend line has not been affected and is still moving downward since 2002/03. This suggests that the Gas Directorate's proactive inspection program has been an effective communication tool in promoting awareness of gas safety to industry and the general public.

CHART D: WA GAS INCIDENTS RESULTING IN SERIOUS INJURY PER MILLION POPULATION (2002-03 TO 2011-12)

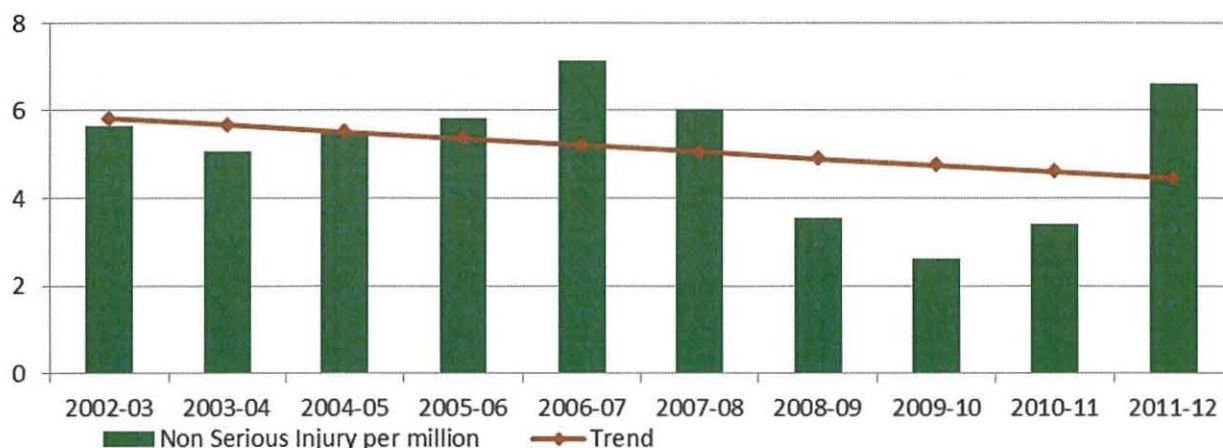


Gas incidents by their very nature can harm several people in a single incident. The figures for gas-related fatalities have shown a positive outcome. However, serious injuries have increased over the reporting period (Chart D).

An analysis of the incidents indicates that the most common cause of gas-related serious injury is unskilled interference. Increasing awareness about the dangers of gas and utilising it safely should bring about a decrease in the current trend.

During the ten year period the trend for the number of serious gas injuries has been rising (Chart D). 2005/06 and 2007/08 had the lowest number of recorded serious injury incidents and 2009/10 the highest.

CHART E: WA GAS INCIDENTS RESULTING IN NON SERIOUS INJURY PER MILLION POPULATION (2002-03 TO 2011-12)



Incidents that do not result in a fatality and/or do not require the victim to be hospitalised have been categorised as those resulting in 'non-serious injury'. The trend shows a positive gradual decline during the ten year period (Chart E). However, the figures for 2011/12 are

approaching the high rates of 2006/07. This may be due to increased awareness among the general public to report gas incidents.

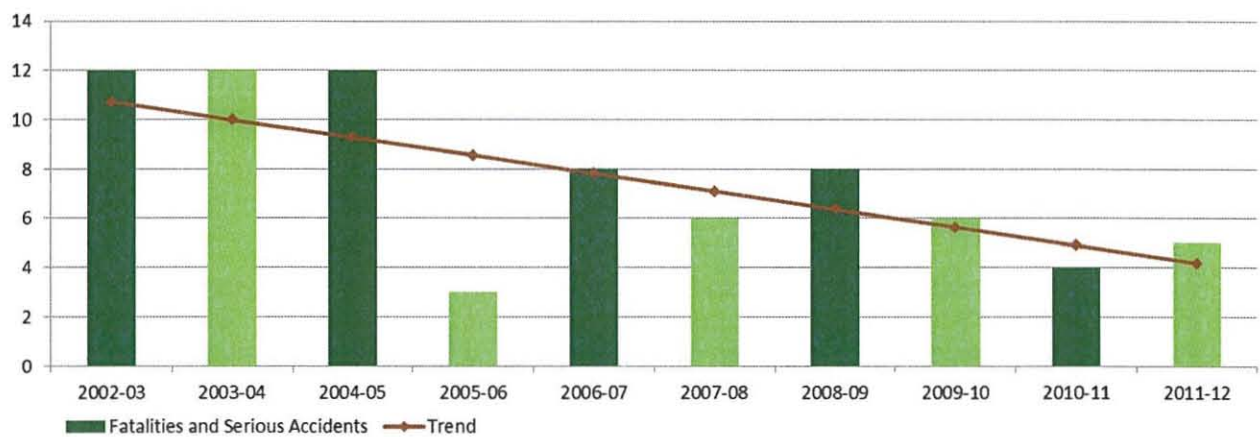
7.2.4 Electrical & Gas Worker Safety

Electrical workers are at greater risk of electrocution than members of the general public or workers in other occupations.

Despite their knowledge of working with electricity, most of the incidents involving electricians result from performing tasks on live equipment, contrary to EnergySafety's published Code of Practice.

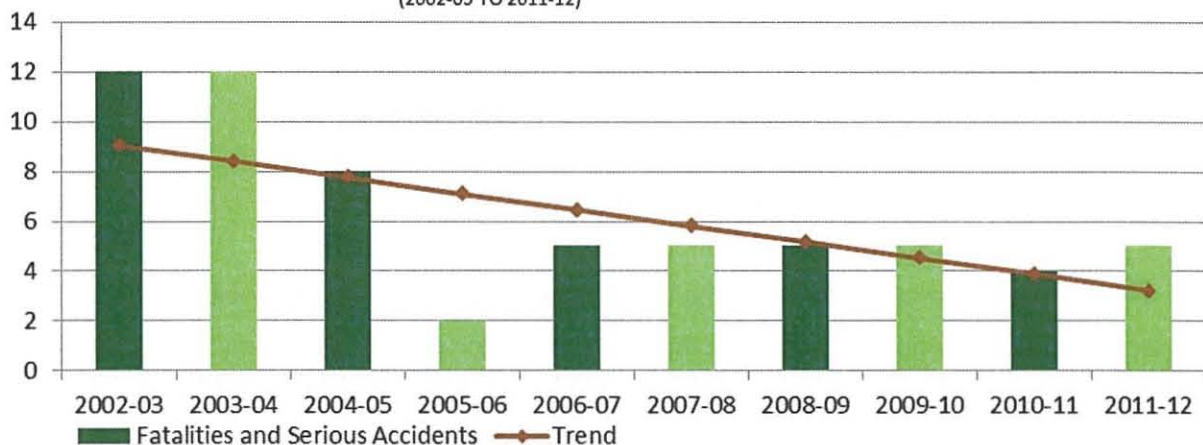
The trends are moving in the right direction which suggests that the efforts by EnergySafety warning workers of the dangers of performing live work are effective.

CHART F : FATALITIES AND SERIOUS ACCIDENTS INVOLVING ELECTRICAL WORKERS IN WA (2002-03 TO 2011-12)



Note: Light green indicates that a safety campaign was conducted in the corresponding financial year.

CHART G: FATALITIES AND SERIOUS ACCIDENTS RESULTING FROM 'LIVE WORK' QUALIFIED ELECTRICIANS IN WA (2002-03 TO 2011-12)

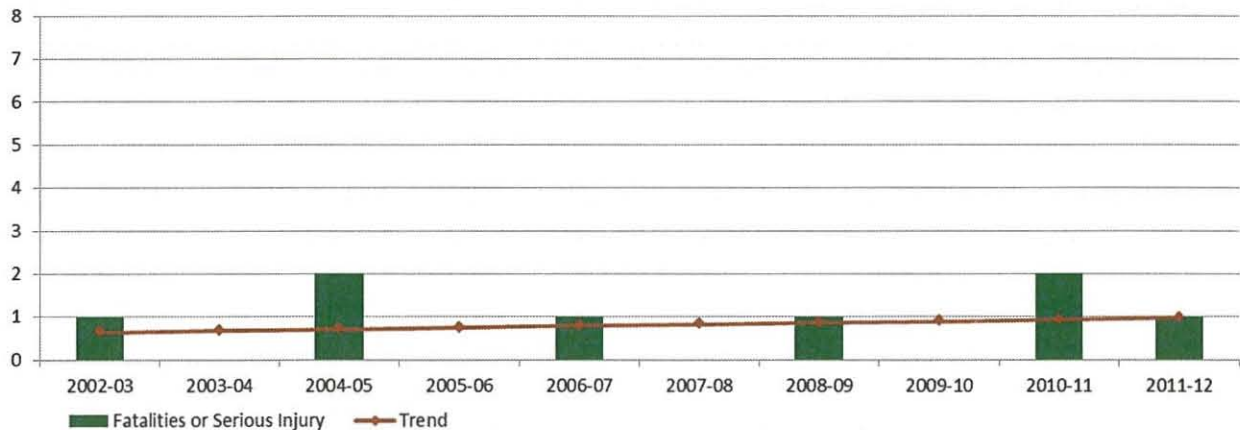


Note: Light green indicates that a safety campaign was conducted in the corresponding financial year.

During the ten year period there were no gas-related fatalities involving gas workers. Serious injuries involving gas workers are lower compared with electricians (Chart H).

However, the trend shows an increase and it is essential that workplace practices and procedures for gas workers are confirmed to be rigorous and effective in ensuring safety of workers.

CHART: WA GAS INCIDENTS RESULTING IN FATALITY OR SERIOUS INJURY INVOLVING GAS WORKERS



Note: The data included in Chart H reflects historical information assembled by EnergySafety.

7.2.5 Concluding Remarks

A statistical analysis of electricity and gas safety data indicates improving trends for fatal incidents. Advertising campaigns correlate with safety outcomes. This substantiates EnergySafety's belief that advertising campaigns help to increase awareness about safety in the wider community.

Based on statistical trends highlighted in this report, future projects focussed on increasing awareness of electrical and gas safety through advertising and education would be of benefit to the people of Western Australia.

7.3 MEASURES TO IMPROVE SAFETY OUTCOMES

7.3.1 General

Human error on the part of the person affected, such as:

- assuming something was disconnected when in fact it was live, or
- making unintended contact with live parts when using a tool, or
- failing to clear an area of gas before attempting to relight a gas appliance

rather than incorrect installation of electrical or gas equipment causes many safety incidents. But the frequency of such incidents can also be reduced by improving technology, safety devices and compliance with prescribed installation and work practice standards.

7.3.2 Installation Compliance Inspections

EnergySafety oversees and manages an electrical and gas consumer installation safety inspection regime. This regime requires the electricity and gas network operators across WA, LPG suppliers and pipeline licensees to inspect the work of electricians and gas fitters

at consumer's electrical and gas installations of all types (commercial, institutional, industrial and residential). This is done either on an individual basis or, if the network operator (or LPG supplier) has an approved inspection system plan, on a sample basis. The energy industry engages some 176 installation compliance inspectors across WA through direct employment or on a fee-for-service basis.

The Director of Energy Safety authorises (designates) these compliance inspectors. In effect, they work jointly for EnergySafety and the network operator when conducting their inspection activities. EnergySafety also audits the network operators' approved inspection system plans. In addition, EnergySafety has 16 employed inspectors (11 electrical and 5 gas), who conduct regulatory inspections and compliance inspections for installations not connected to a network operator. There are a further 27 designations for engineering and senior staff who support the Inspectors or become involved in complex issues.

Comparisons with the installation inspection regimes of other jurisdictions have shown the WA system delivers very good results. These will be improved further through the new enforcement powers now available, including Infringement Notices.

7.3.3 Retro-fitting of Residual Current Devices (RCDs)

RCDs save individuals from serious shock or electrocution in about 90% of cases in homes or small businesses. They also have extensive application in industrial plants and premises, albeit in different forms to suit the equipment and work environment.

One of the most common forms of serious electrical accident in residential premises occurs when persons enter a building's roof space to carry out some type of work. They make contact with exposed live parts (due to wiring damage or insulation deterioration) while simultaneously touching some earthed metalwork (e.g. a copper pipe). If the wiring installation has RCD protection, such contact will not cause a serious shock or electrocution. EnergySafety encourages everyone preparing to enter a roof space to turn off the electricity main switch first.

The Government approved legislation to require the retro-fitting of RCDs at residential premises at the time of sale, lease or rental. Similar initiatives are being pursued or have already been undertaken by regulators in other jurisdictions. This is the most acceptable way of ensuring that the purchasers or renters of a home can be confident the electrical installation is safe, while requiring only a minor outlay for the vendor or landlord. The measure should achieve a significant penetration of RCD protection over a 15 year period. The regulations came into operation on 9 August 2009.

During 2009-2012 there were numerous enquiries and issues raised concerning the new regulations, especially near August 2011 when the two year lead-in time for rental properties ended and it became mandatory for all rental properties to have two RCDs installed. This required many technical interpretations and some minor regulatory changes that increased the workload of the Electricity Compliance Directorate.

RCDs are the single best initiative to reduce serious electrical incidents. A major advertising campaign ran in January 2011 to encourage people to install RCDs in all homes. The analysis of the campaign showed that it was well received by the target audience and that electrical contractors had seen an increase in enquiries and installations of RCDs. However, the analysis also showed that more work is required to increase the awareness and knowledge of RCDs, including the need for their regular testing. EnergySafety will continue to advertise the importance of RCDs, and the need to test them regularly, in future campaigns.

7.3.4 Electrical and Gas Safety Promotion

EnergySafety is committed to reminding the community of the hazards associated with unsafe electrical and gas installations and appliances through regular safety promotion activities.

Experience here and elsewhere shows campaigns should be aimed at both the public and energy workers in industry, to improve safety awareness. Campaigns need to continue, as the message requires constant reinforcement to be effective.

Public safety and similar campaigns aimed at the general community rely on media advertising. Surveys have shown that TV advertising is most effective compared with other media. EnergySafety's 2008 and 2011 campaigns for example had good awareness recall by the public.

However, TV advertising is expensive and requires substantial planning and funding to be effective. For this reason, TV campaigns have historically been planned to run approximately every two years to limit costs.

In the future, EnergySafety will look to annual campaigns to help improve public awareness and to reduce electrical incidents to levels comparable with other states.

The 2012 campaign focussed on encouraging householders not to attempt their own electrical wiring work or appliance repair and to insist on receiving an Electrical Safety Certificate from electrical contractors upon completion of their work. The campaign's effectiveness will be assessed independently shortly after it concludes.

FINANCIAL PLAN

8.0 INTRODUCTION

The following Financial Plan presents forecasts for EnergySafety's revenue and expenditure budget components (both capital and operating) over the 2013/14 year and beyond.

8.1 FINANCIAL PLAN, NOTES AND EXPLANATIONS

EnergySafety's Financial Plan provides details of:

- (1) estimated revenue from electrical and gas licence fees and other minor revenue-generating activities;
- (2) planned operating and capital expenditure; and
- (3) the energy industry levy required to make up the shortfall between (1) and (2).

Estimates are provided for the next financial year 2013/14, and the subsequent four years. Projections for the out-years are less accurate and subject to review prior to each year. All figures are estimated in 2012/13 dollars. Normally, they should increase each year, on average at a rate comparable to the Consumer Price Index.

As the bank balance remains high for reasons listed below, the Financial Plan includes cost estimates that do not require a levy increase for 2013/14.

OPENING CASH BALANCE

A bank balance of \$12.170 million is anticipated at the end of 2012/13. This is a reduction from the balance in 2011/12 but remains higher than budget. The bank balance grew and has stabilised at this level due to:

- underestimates of revenues (the effect of the WA boom was underestimated and the effect of the Global Financial Crisis was overestimated),
- the underspend of the budget (mainly due to the inability to recruit required staff resulting in continuing vacancies and the subsequent inability to complete projects),
- deferral of advertising; and
- the delay in implementing the Compliance Management System (CMS)

It is proposed to use this as a source of funds over the next five years and to reduce the closing balance at the end of each year.

(Notes continued after Table on next page)

\$ Million (2012/13 Dollars)

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Opening Cash Balance		*12.170	9.440	7.295	5.879	3.773
1. Source of funds						
a) Licensing revenue	5.619	6.654	6.469	7.298	6.711	6.603
b) Other minor revenue	0.100	0.055	0.055	0.055	0.055	0.055
c) Indian Ocean Territories	0.074	0.074	0.074	0.074	0.074	0.074
d) Industry levy (net)	6.444	6.444	6.444	6.444	6.444	6.444
Total Budget Revenue	12.237	13.227	13.042	13.871	13.284	13.176
2. Expenditure						
2.1 Recurrent items						
a) Major elec safety campaigns	0.350		0.300		0.300	
b) Major gas safety campaigns		0.300		0.300		0.300
c) Audits of electricity networks	0.216	0.150				
d) Corporate Services	1.480	1.480	1.480	1.480	1.480	1.480
e) Legal services	0.100	0.100	0.100	0.100	0.100	0.100
f) Labour costs	9.270	9.681	9.979	10.079	10.180	10.281
g) Other recurrent	2.700	3.096	3.186	3.186	3.186	3.186
h) IS support & maint (CMS)		0.111	0.102	0.103	0.104	0.105
i) Digitisation of files		0.250				
Total Budget Recurrent	14.116	15.168	15.147	15.247	15.349	15.452
2.3 Capital Expenditure						
a) Desktop IT	0.095	0.040	0.040	0.040	0.040	0.040
b) Software replacements CMS	2.100	0.157				
c) IS Project Support	0.600	0.442				
d) Office fit-out	0.057	0.100				
e) Mobile Computing		0.050				
Total Budget Capital	2.997	0.789	0.040	0.040	0.040	0.040
Total Budget Expenditure	17.113	15.957	15.187	15.287	15.389	15.492
Revenue Less Expenditure		-2.730	-2.145	-1.416	-2.105	-2.316
Closing Cash Balance	*12.170	9.440	7.295	5.879	3.773	1.458

* Estimated Actual

SOURCE OF FUNDS

- a) **Licensing revenue:** is derived from electrical worker, electrical contractor, and gas fitter licence fees. The total revenue per year varies on a five year cyclical basis, as the electrical worker fees are for a five year term and renewals are not equally distributed over the period. Most fees are within 5-10% of full cost, with regular steps taken to reflect full cost recovery. The National Occupational Licensing System (NOLS) is expected to deliver increased costs through the need to fund the National Occupational Licensing Authority (NOLA) and reduced revenue through the recognition of inter-jurisdictional licences. The effect of these issues is yet to be determined and no allowance has been made in this financial forecast.

The licensing revenue is presented here on a cash basis. For 2013/14 this is \$6.655m, whereas on an accrual basis the amount is \$4.220m.

- b) **Other minor income:** covers the sale of publications to industry.
- c) **Indian Ocean Territories (IOT):** Commerce has a service agreement with the Commonwealth's Department of Regional Australia, Local Government, Arts & Sport (DORA) to supply regulatory services to the IOT similar to those it provides in the WA mainland, but at full cost to DORA. EnergySafety provides electricity and gas regulatory services under this agreement and the expected reimbursement is shown.
- d) **Industry levy (net):** this is the energy industry levy necessary to make up the difference between expected expenditure and the sum of the revenues of (a), (b) and (c) above for all of the five years of the forecast, divided by five to give a consistent annual figure. This averaging mechanism reduces year-to-year fluctuations and is carried out on a yearly, rolling basis. The result is the amount of the levy needed to make EnergySafety fully funded and is comparable with the amounts applied in other jurisdictions, for similar purposes. The figures are in 2012/13 dollars. Normally the levy would increase by an average of CPI. Due to EnergySafety's cash at bank, the levy has been set at the previous year's level.

RECURRENT EXPENDITURE

- a) & b) **Major safety campaigns:** These are for both electricity and gas and it is proposed to have a campaign every year as shown. Industry presentations and safety material (e.g. safe work practices videos) are covered under Recurrent Expenditure.
- c) **Audits of electricity networks:** Electricity transmission and distribution safety compliance audits are conducted mainly on the network operators working in the Pilbara and remote locations. Western Power is audited in various areas but additional issues may arise. Technical labour resources are available through an established multi-year consultant panel contract.
- d) **Corporate Services:** EnergySafety relies on central departmental corporate services (covering finance, HR and IT/IS) to be provided by the Department of Commerce. The amounts shown are the estimated costs provided by the Department's Corporate Services Division.
- e) **Legal Services:** are provided by the State Solicitor's Office and charged to EnergySafety on an as-used basis.

- f) **Labour costs:** include all expenditure associated with permanent, contract and temporary employees, known salary increases under awards (if different to CPI) and direct on-costs such as leave entitlements, employee entitlements, superannuation and the Attraction and Retention Incentive. The estimates reflect historical expenditure patterns but provide for modest success in recruiting additional inspectors.
- g) **Other recurrent expenditure:** includes all rent and related outgoings associated with EnergySafety's Cannington offices and an evidence storeroom nearby, plus other costs such as energy and communications services charges, various consumables and services necessary for operating an office, travel, training, printing, vehicles, technical services, recruitment services and FBT. Again the estimates reflect historical expenditure patterns but allow for modest increase in inspection staff expenses.
- h) **IS support and maintenance (CMS):** includes all the expected new licensing, support and maintenance costs for the new Compliance Management System (CMS).
- i) **Digitisation of Files:** includes the expected labour and operational costs involved in completing the digitisation of licensing files.

CAPITAL EXPENDITURE

- a) **Desktop IT:** covers only the routine replacement of desktop PCs, local printers and related equipment. All general Commerce IT network infrastructure costs and software user licence costs are covered by the Corporate Services charge to EnergySafety.
- b) & c) **Information Systems (IS) Software Replacement:** EnergySafety's current corporate IS are –
- ❖ the Electrical Inspection System (EIS) which supports the operational work of the Electrical Inspection Branch and records vital data;
 - ❖ the Gas Inspection System (GIS) which supports the operational work of the Gas Inspection Branch and records vital data;
- These systems are in the process of being replaced with the new CMS. The item at b) reflects the anticipated capital costs of the CMS system and the item at c) shows the expected internal IS project support costs
- d) **Mobile Computing:** covers the expected mobile computing costs associated with rolling out the new CMS system to all inspection staff.

CLOSING CASH BALANCE

Averaging the Industry Levy to be consistent over the forecast five year period necessarily provides excess income in some of the five years of the forecast period, which is carried forward. Similarly, in some years the income from the levy and other revenue may be insufficient to cover all expenditure. In such cases a temporary credit facility (from the Department of Treasury & Finance) could be required. This is not the preferred strategy as it could put additional pressure on the Consolidated Fund. It has not occurred in this five year forecast. Similarly, it is prudent to aim for a closing balance at the end of the budget

period in the order of \$1.5m to avoid EnergySafety seeking temporary credit and to allow for fluctuations in revenue and/or non-payment of quarterly levy payments, and to provide insurance should there be large unplanned expenditure associated with one or more major investigation.

8.2 INDUSTRY LEVY QUANTUM

It is proposed that the levy be capped at the 2012/13 level of \$6.444m in this Business Plan.

The levy continues to allow for the significant restructure of EnergySafety, the CMS project and the increased costs for the provision of Corporate Services.

The manner in which the levy of \$6.444m is to be applied across various industry participants is outlined in Section 9.

INDUSTRY LEVY STATEMENT

9.0 INTRODUCTION

This Statement is produced in accordance with section 6 (1) of the *Energy Safety Act 2006* – “the Act”.

The Act makes provision for the collection of a levy from energy industry participants. Similar contribution schemes operate for other Department of Commerce divisions and are levied on the gas and electrical industries in Victoria and Queensland.

For 2013/14, the proposed Industry Levy, in accordance with the *Energy Safety Act 2006* section 6 (1) (c) and the related *Energy Safety Levy Act 2006*, will be \$6.444m. The Act allows the responsible Minister to determine the levy for the financial year, for notice of this amount to be published in the Gazette and for EnergySafety to issue notices of assessment accordingly. All revenue raised from the Levy will be used solely for energy safety-related activities.

As required by the governing legislation, the next section of the Business Plan details the methodology for the calculation and allocation of the appropriate portions of the Levy to individual industry participants.

9.1 APPORTIONMENT OF LEVY BETWEEN ENERGY SECTORS

The proposed 2013/14 Industry Levy of \$6.444m will be apportioned as 67% to the electrical industry and 33% to the gas industry in accordance with Section 6(2) of the Act.

The total Levy contribution received from participants in the electrical industry will therefore be \$4.317m.

The corresponding figure for the gas industry will be \$2.127m.

9.2 MODEL FOR ALLOCATION OF LEVY WITHIN EACH ENERGY SECTOR

To allocate the Levy within each industry sector, EnergySafety will continue to use the model devised for the allocation of the 2006/07 Levy after consultation with industry. The model is based on the following:

- a) Levy allocation across the gas sector to be based on the number of gas consumer sites supplied by each gas distribution system licence holder and LPG distributors supplying LPG in bulk and in portable 45kg cylinders in WA, subject to a minimum aggregate total of 500 sites. The aggregate may be based on multiple networks.
- b) Levy allocation across the electricity sector to be based on the aggregate number of consumer sites served by each network operator subject to a minimum aggregate total of 500 sites. The aggregate may be based on multiple networks.

In mid-2012 the Director of Energy Safety wrote to all participants in both energy sectors requiring them to confirm, in accordance with regulation 4(5) of the *Energy Safety Regulations 2006*, the number of LPG and consumer sites connected. Responses were received from all participants.

On the basis of the information received, EnergySafety calculated the proportion of all consumers supplied by each supplier within both industry sectors. This proportion was then used to calculate the annual levy contribution payable by each participant.

A similar survey will be carried out prior to 2013/14 to determine the levy contributions for each supplier in that fiscal year.

9.3 ADMINISTRATION OF THE LEVY SCHEME

EnergySafety maintains a confidential database of industry site or operator-specific information that provides an audit trail in support of the levy calculations for each participant.

Although the total levy amount falls due for payment at the beginning of each financial year, it is proposed to invoice industry participants quarterly, as in previous years.

The formal assessment for the year will be communicated to individual participants concurrently with an invoice for the first payment. In accordance with section 17(3) (b) of the Act, if an instalment is not paid at or before the due date the whole of the annual levy becomes due and payable immediately. There will be no reductions in liability for departures from the industry during the year, or back accounts for arrivals into the industry during the year.

APPENDIX 'A'

A brief outline of 2011/12 year outcomes for information purposes only

The following are highlights of the work during 2011/12:

OPERATIONAL WORK INCLUDING COMPLIANCE ENFORCEMENT ACTIVITIES

Gas Appliance Rectification Programme

The strategic objective of this Programme is to facilitate the rectification and/or removal of pre-1980 domestic natural gas appliances in order to assist the Western Australian Government's plan to promote a broader gas specification into the market, thus allowing for more competition in the supply of natural gas. A broader gas specification will have ramifications for some pre-1980 domestic natural gas appliances still operational in homes around the State. The first stage of the Programme, which involved receiving calls and providing investigative services, is fundamentally complete with only a small number of consumers now registering their pre-1980 gas appliances. The tender for stage two, which is the supply of, and/or the installation, disposal and service of domestic gas appliances was tendered and awarded to Alinta Energy Assist. The data gathered during stage one has helped identify almost ten thousand appliances for replacement and a further eight thousand for servicing. At 30 June 2012, approximately 50% of these appliances have been replaced and a further 25% have been serviced. Work on changing appliances commenced in May 2011 and is expected to continue through to December 2012 ready to allow the flow of broader specification gas into the metropolitan distribution system currently estimated for the first quarter of 2013. A timetable for the change-out of appliances is broken into post codes and has been published on the EnergySafety website.

Electricity Distribution Systems

Throughout 2011/12 EnergySafety worked with Western Power and Horizon Power in their attempts to verify data obtained from inspecting their wood poles using the sound, dig and drill method. As a result, both utilities have acknowledged that these data are not sufficiently reliable to detect unsafe poles before they fail. Western Power therefore will move immediately to reinforce the bases of poles with properly designed steel stakes and replace poles judged not suitable for reinforcing. Horizon Power will adopt a similar approach but will replace wood poles with steel poles. These measures will bring down the level of community risk as quickly as practicable. Western Power will furnish quarterly progress reports to EnergySafety.

National Regulatory Reform – Electricity and Gas Licensing

Work continued throughout the year to prepare departmental IT systems to accommodate the proposed uniform national licensing scheme for electrical contractors, electricians, electrical fitters, restricted electrical workers and gas fitters. Considerable effort has been devoted to refining the uniform national legislation required for the scheme through committee work and detailed technical consultations with the federal task force and other

jurisdictions. A consultation Regulation Impact Statement is expected to be released for stakeholder comments early in the 2012/13 year.

National Regulatory Reform – Appliance Safety

The new uniform national approval and certification scheme for electrical equipment, including household appliances, has been adopted by all jurisdictions apart from NSW. The Western Australian Government has authorised legislation to be prepared to give effect to the scheme in this State.

National Regulatory Reform – Electricity Supply Safety

A new Australian Standard AS5577 governing the preparation and administration of electricity network safety cases is expected to be completed by the end of 2012. EnergySafety has played a prominent role in developing the new standard. This initiative was begun by the Ministerial Council on Energy following national consultative meetings with all interested parties. When the new standard is finished it will be called up in Western Australian regulations and will apply to all network operators licensed in this State.

Bush fire investigations

Under EnergySafety's leadership, a new protocol governing how investigations are to be managed for bushfires suspected to have been caused by electricity is nearing completion. Protocol participants include the Department of Fire and Emergency Services, the Department of Environment & Conservation, WA Police and Western Power. When completed, the protocol will be converted into a formal memorandum of understanding to be signed by all participants. This MOU will help ensure that all electrically-caused fires are properly investigated while allowing all parties to perform their statutory functions.

Other Network Safety Risks

Community risks associated with electricity networks include: overhead conductors breaking and falling to the ground, conductors clashing and igniting fires, pollution build-up on pole cross-arms and insulators leading to pole-top fires and trees making contact with power lines. EnergySafety has worked closely with network operators throughout the year to help them develop effective measures to avoid or minimise these risks. The Government has authorised legislation to be prepared to give legal backing to vegetation control practices which have evolved over many years through consultation and cooperation between all those involved.

Compliance Management System

Given the significant differences in compliance legislation and processes between Department of Commerce agencies, EnergySafety was given approval to develop an individual solution for its needs. EnergySafety processes (including inspection processes) have been mapped to ensure consistency between directorates and to ensure efficient processes. Requests for information were obtained from vendors, in order to develop a recommendation on the preferred way forward. A tender was advertised in November 2011, closing in December 2011. A preferred contractor has been identified and a formal contract is expected early 2012/13. The new computer system (and processes) is expected to be progressively delivered by the end of 2013.

Energy Acts Amendments

The proposed *Energy Acts Amendment Bill* amends selected Acts and parts of Acts, for which EnergySafety has responsibility, to remove any inconsistencies between them and the suite of legislation associated with the *Electricity Industry Act 2004*. The Bill will also provide for:

- The national requirements for the energy efficiency and labelling of gas appliances;
- The rationalisation of statutory responsibilities for the control of vegetation near power lines;
- Expiry dates for certificates of competency for gasfitting;
- Removal of duplication between and overlap between existing legislative provisions;
- Updating the systems for approval of electrical appliances to match national initiatives;
- Amending the period within which proceedings may be commenced for gas and electricity offences in accordance with the Coroner's recommendations; and
- Enabling proper investigation and the sharing of information between investigating agencies responsible for investigating electrical and gas accidents

The Bill is planned to be introduced to Parliament in 2013.

Demand for Licensing Services

The Licensing Office at EnergySafety continues to receive a high volume of electrical and gas licence applications. The applications have been processed in a consistent and timely manner with the available resources.

Electrical Licensing

As at 30 June 2012, there were **39,058** electrical workers, **4,397** electrical contractors and **245** in-house licence holders registered.

The Electrical Licensing Board grants licences to eligible electrical operatives and conducts competency assessments of operatives when necessary. It also recommends disciplinary action when appropriate.

Members of the Electrical Licensing Board as at 30 June 2012 were:

Mr K McGill – Chairman

Mr G Wilton – representing the interests of electrical workers

Mr P Beveridge – representing the interests of electrical contractors

Mr G Grundy – representing the interests of electrical workers with restricted licences

Mr G Bryant – representing the interests of large businesses, who are consumers of electrical services

Mr P Mittonette – representing the interests of small businesses, who are consumers of electrical services

Mr S Abdoolakhan – nominated by the Director of Energy Safety

Ms L McGuigan – a residential consumer of electrical services

The Electrical Licensing Board met 25 times during the year.

Gas Licensing

As at 30 June 2012, there were **6,485** persons registered for gasfitting work*. Certificate of Competency holders are not included in this figure.

The Gas Licensing Committee operates under delegated authority of the Director of Energy Safety and considers applications for licences for gas operatives. Routine applications are dealt with by licensing staff under delegated authority, as in the case of electrical licences.

The Gas Licensing Committee met 20 times during the year.

(*The number of persons registered for gasfitting work as at the end of 30 June 2011 was 5933 and not 7533 as reported in the previous business plan.)

Prosecutions

The following tables provide summaries of prosecutions finalised during 2011/12. Prosecutions follow investigations by inspectors and review and authorisation by senior management of EnergySafety. The investigations are often initiated by inspectors of the electricity and gas distributors, as part of their consumer electrical or gas installation inspection work.

Summary of prosecution actions for breaches of electricity related legislation

Summary of prosecution action for breaches of electricity related legislation 1 July 2011 – 30 June 2012				
Legislation	Breach	Number of Offences	Fines \$	Court Costs \$
<i>Electricity (Supply Standards and System Safety) Regulations 2001</i>	10(1)(a)	1	15,000.00	1,569.70
<i>Electricity (Licensing) Regulations 1991</i>	19(1)	6	7,750.00	1,299.10
<i>Electricity Act 1945</i>	25(1)(a)	5	272,000.00	3,248.50
<i>Electricity (Licensing) Regulations 1991</i>	33(1)	3	12,500.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	45(1)	2	3,500.00	1,299.40
<i>Electricity (Licensing) Regulations 1991</i>	49(1)	20	82,000.00	9,946.25
<i>Electricity (Licensing) Regulations 1991</i>	49(B)	1	7,500.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	50(1)	7	5,000.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	50A	1	4,000.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	52(1)	8	11,000.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	52(3)	11	35,500.00	1,299.40 (cont)

Summary of prosecution action for breaches of electricity related legislation				
1 July 2011 – 30 June 2012				
Legislation	Breach	Number of Offences	Fines \$	Court Costs \$
<i>Electricity (Licensing) Regulations 1991</i>	52(b)	6	5,000.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	53(2)	1	2,500.00	649.70
<i>Electricity (Licensing) Regulations 1991</i>	59(1)(a)	1		
<i>Electricity (Licensing) Regulations 1991</i>	59(1) (c)	1		
<i>Electricity (Supply Standards and System Safety) Regulations 2001</i>	63	2	3,000.00	649.70
TOTAL		80	466,250	23,860

Summary of prosecution actions for breaches of gas related legislation

Summary of prosecution action for breaches of gas related legislation				
1 July 2011 – 30 June 2012				
Legislation	Breach	Number of Offences	Fines \$	Court Costs \$
<i>Gas Standards Act 1972</i>	13 (A)(2)	3	28,700.00	\$1,949.10
<i>Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999</i>	28 (2), 28 (3), 28 (3a)(b), 28 (3a)(c)	1	2,500.00	649.70
<i>Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999</i>	42A	1	*	*
TOTAL		5	31,200	2,599

* Global Penalty (more than one offence)

Summary of Infringement notices issued for breaches of electricity related legislation

Summary of Infringement Notices issued for Breaches of electricity related legislation			
1 July 2011 – 30 June 2012			
<i>Legislation</i>	<i>Section / Regulation</i>	<i>Number of Offences</i>	<i>Fines (\$)</i>
<i>Electricity (Licensing) Regulations 1991</i>	52(3)	5	17,000.00
<i>Electricity (Licensing) Regulations 1991</i>	45(1)	2	1,000.00
<i>Electricity (Licensing) Regulations 1991</i>	52(1)	2	6,000.00
<i>Electricity Act 1945</i>	33B(2)	1	5,000.00
<i>Electricity Regulations 1991</i>	316A	1	2,000.00
TOTAL		11	31,000.00

Summary of Infringement notices issued for breaches of gas related legislation

Summary of Infringement Notices issued for Breaches of gas related legislation			
1 July 2011 – 30 June 2012			
<i>Legislation</i>	<i>Section / Regulation</i>	<i>Number of Offences</i>	<i>Fines (\$)</i>
<i>Gas Standards Act 1972</i>	13A(2)	5	5,000.00
	13D(1)	1	1,000.00
	13H(4)	1	1,000.00
<i>Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999</i>	18(2)(a)	28	16,800.00
	19	1	600.00
	20(1)(b)	5	3,000.00
	23	1	400.00
	26(1)(a)	7	4,200.00
	28(2)	25	10,000.00
	28(3)	23	9,200.00
TOTAL		97	51,200.00

MAJOR POLICY WORK

National Regulatory Reform Projects

Significant progress has been made in developing national regimes for electrical appliance safety approvals, gas appliance safety approvals, national electrical and gas occupational licensing, and the harmonisation of energy supply technical and safety regulation. This work continues to dominate the policy area and demands major commitments from senior staff.

Standards development work

During the year, the EnergySafety Division played a significant role in the development of Australian Standards, covering subjects such as electrical installations (AS/NZS 3000 Wiring Rules), high-voltage installations including electricity substations, electricity network safety management systems, gas installations, industrial gas appliances and gas distribution networks.

A new Standard for electricity network safety management systems, AS5577, is being developed following an agreement and funding allocation through the Council of Australian Governments. On completion, planned for early 2013, all state regulators will enact legislation to require network operators to develop and operate safety management systems meeting AS5577. This standard requires detailed risk assessment of all network hazards and implementation of asset and operations management practices, to reduce all risks to as low as reasonably practicable.

Additionally, work has progressed on the review of the following standards:

- Review of AS/NZS 5601 for release in 2013.
- Review of AS 1375 1st review since 1985, for release early 2013.
- Review of AS 3814 for release in 2013
- AS1677
- AS 2473
- Finalisation of Second amendment to AS/NZS 3000:2007
- Review of AS/NZS 3001:2008 and publication of first amendment to this standard.

Committee Participation

Aside from major work on several key technical standards committees, EnergySafety continued to be involved in a number of national regulatory coordination and other technical standards bodies. The following is a summary list:

- National Regulatory Coordination Bodies
 - Electrical Regulatory Authorities Council (ERAC)
 - Gas Technical Regulators Committee (GTRC)
 - National Equipment Energy Efficiency Committee (Committee E3)
 - Energy Supply Industry Safety Committee (ESISC)
- National Standards Councils, Boards and Committees
 - Member of Standards Australia (representing the Government of WA)
 - Council of Standards Australia (representing the Government of WA)

- Standards Australia Standards Development Committee
- AG-006 Gas Installations
- AG-008 Gas Distribution Networks
- AG-011 Industrial and Commercial Gas Fired Appliances
- AG-013 Gas Components
- ME-046 Gas Fuel Systems for Vehicle Engines
- ME-15 Storage LP Gas
- EL-01 AS/ NZS 3000 (Wiring Rules)
- EL-001-20 AS/NZS 3018 Domestic Electrical Installations
- EL-001-44 AS/NZS 4836 Safe working on LV electrical installations
- EN-004 Energy Network Management and Safety Systems
- EL-002 Safety of Household and Similar Electrical Appliances and Small Power Transformers and Power Supplies
- EL-043 High Voltage Electrical Installations
- EL-052 Electrical Energy Networks, Construction and Operation
- National Occupational Licensing System – Interim Advisory Committee
- National Occupational Licensing System – Electrical Occupations Regulators Working Group
- National Occupational Licensing System – Gas Occupations Regulators Working Group
- National Occupational Licensing System Implementation Committee

SAFETY STATISTICS: SERIOUS ACCIDENTS AND FATALITIES

The following were reported to the EnergySafety Division during the year:

Electricity related incidents and fatalities

Electric shocks	1889
Serious electricity related accidents	8
Fatalities (included in serious electrical accidents):	0

Gas related incidents and fatalities

The following were reported to EnergySafety during the year:

Incidents	74*
Serious gas related accidents (persons injured)	5
Fatalities	1**

*The number of incidents varies from the figures reported for the Annual Report due to additional incidents reported at a later date and removal of data where gas was not the cause of the incident.

**There was one fatality reported for gas during the year. However, the cause of death is yet to be determined by the coroner.

Details of the fatality are:

A fatal incident occurred in the communal kitchen of a company that produces stock feed for farm animals. Reports indicate that shortly after the deceased was seen going into the kitchen, flames were seen to engulf the building. A 45kg LPGas cylinder, one of two that had been connected to the gas installation in the kitchen had resulted in a BLEVE (boiling liquid expanding vapour explosion). Although gas may somehow have been involved, the cause of death is yet to be determined by the Coroner.

FINANCIAL OUTCOME

The surplus available for carry forward at the end of 2011/12 was close to expected figures.

It had been forecast that \$12.472m would be carried forward into 2012/13. The actual amount carried forward was \$12.269m. This is a result of capping the levy at \$6.444m for the past two years and aiming to reduce the cash at bank through the levy equalisation scheme.