



Department of Consumer
And Employment Protection
Government of Western Australia

EnergySafety

ENERGYSAFETY DIVISION BUSINESS PLAN 2008/09

December 2007

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A brief outline of the 2006/07 year outcomes (the first complete year of the industry funding scheme), for information purposes only.

Note:

This Business Plan was approved by Michelle Roberts MLA, Minister for Employment Protection, on 10 January 2008.

FOREWORD

This document sets out the Business Plan 2008/09 for the Energy Safety Division (known as “EnergySafety”) of the Department of Consumer & Employment Protection (DOCEP).

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

- administering electricity and gas technical and safety legislation and providing policy and legislative advice to the Minister and Government;
- setting and enforcing minimum safety standards for electricity and gas networks;
- enforcing natural gas and LP gas quality standards;
- for the purpose of ensuring satisfactory billing of consumers by gas suppliers, administering the regulatory scheme that determines the “higher heating value” of natural gas in distribution systems subject to the commingling (mixing) of gas from different sources;
- providing technical advice and support to the Economic Regulation Authority (ERA) and the Energy Ombudsman;
- at the request of the ERA or Energy Ombudsman, investigating the performance of electricity and gas network operators, particularly in respect of energy supply reliability and quality;
- setting and enforcing minimum safety standards for consumers' electrical and gas installations;
- setting and enforcing safety and energy efficiency standards for consumers' electrical and gas appliances;
- licensing electrical contractors, electrical workers and gas fitters and carrying out accident investigations;
- promoting electricity and gas safety in industry and the community; and
- promoting energy infrastructure security and resilience.

EnergySafety derives most of its statutory functions through the statutory functions of the Director of Energy Safety, an independent statutory office (established 1 January 1995) that is held by the head of EnergySafety. Since its inception in 1995 as part of the first major restructuring of the State's energy utilities, EnergySafety has had a busy corporate life and has seen its functions considerably expanded to include *inter alia* electricity and gas network regulation, energy efficiency regulation, natural gas higher heating value regulation and critical energy infrastructure protection.

As part of these changes, EnergySafety became fully industry funded from 2006-07 following the passing of legislation and the subsequent publishing in the *Government Gazette* of the *Energy Safety Levy Notice 2006* as approved by the Minister during June 2006. This mirrored what other major jurisdictions had also done and 2006/07 was the first financial year under which EnergySafety was fully industry funded. The scheme is operating successfully during 2007/08.

In summary, the industry funding scheme means that the cost of EnergySafety's activities is now fully met by those who benefit from them, through the combination of licensing revenue and industry levy revenue. The legislation provides for the levy to be subject to review by Parliament.

This Business Plan is a key part of the process for the yearly industry funding of EnergySafety as required by the legislation, since it sets out the following for EnergySafety, for 2008/09:

- A statement of intent;
- The business environment and challenges, including major projects;
- The financial plan;
- Details of the proposed 2008-09 energy industry levy; and
- A brief outline of the 2006/07 year outcomes (the first complete year of the industry funding scheme), in Appendix A, for information purposes only.

Once the Business Plan has been approved by the Minister, it will (in accordance with the legislation) form the basis for the Minister's determination on the overall fixed amount to be levied on energy industry participants, and the manner in which it is to be allocated between participants, for the 2008/09 year.

Albert Koenig
DIRECTOR OF ENERGY SAFETY and
EXECUTIVE DIRECTOR, ENERGYSAFETY

December 2007

STATEMENT OF INTENT

1.0 Introduction

EnergySafety is the statutory technical and safety regulator for Western Australia's electrical industry and most of the gas industry. This Statement of Intent is part of the Business Plan 2008/09 required by the *Energy Safety Act 2006* setting out the requirements for the administration of the energy industry levy that, in combination with the revenues from electrical contractor, electrical worker and gas fitter licensing, provides EnergySafety with all its capital and operating expenditure for 2008/09.

1.1 Departmental Objectives

The Department of Consumer and Employment Protection (DOCEP), of which EnergySafety is a Division, has the following overall objectives:

Vision Statement

The Corporate Vision of DOCEP is for:

"A fair, safe and prosperous community".

Mission Statement

DOCEP's Mission is:

To create an employment and trading environment that provides for the growth, safety and protection of the community by:

- *Enhancing capacity*
- *Enhancing an effective regulatory environment; and*
- *Enforcing the law.*

Strategic Directions

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

1. Influencing and shaping our community's environment.
2. Enhancing the capability of the community.
3. Enhancing the regulatory environment.
4. Enforcing the law.
5. Strengthening DOCEP as an organisation.

EnergySafety, as part of DOCEP, both contributes to and embraces these strategic corporate directions for its own area of business.

Following commencement on 1 January 1995 as the Technical & Safety Division of the then Office of Energy and subsequent public sector restructuring in mid 2002,

EnergySafety became a Division of DOCEP, which has four other key regulatory functions, each also represented by a separate Division that operates relatively independently: Labour Relations, Consumer Protection, Resources Safety and WorkSafe.

This "all regulatory" nature of the department provides a positive corporate environment for EnergySafety as the State's energy industry technical and safety regulator.

EnergySafety reported to the Minister for Energy until January 2007, when it became part of the portfolio of the Minister for Employment Protection, the Hon Michelle Roberts. All other Divisions of DOCEP except Consumer Protection also report to this Minister.

2.0 EnergySafety's Objectives

EnergySafety is the State's technical and safety regulator for all the electrical industry and most of the gas industry¹, through the functions of the Director of Energy Safety.

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 direction by the responsible Minister, who in accordance with the Act is required to table in Parliament any direction given to the Director.

EnergySafety, through the role of the Director of Energy Safety, has a wide suite of statutory functions and compliance enforcement powers. In summary, on the basis of those functions, EnergySafety seeks to ensure:

- the safety of people (the public, energy workers and consumers) and property in respect of electricity and gas utility infrastructure;
- that residential and business consumers receive electricity and gas supplies that are metered accurately and meet minimum standards of quality so that appliances function safely;
- that consumers have safe electrical and gas installations at their premises;
- that electrical and gas appliances and equipment (including that for industrial purposes) purchased or hired are safe to use;
- that common household appliances and certain types of electrical equipment (including some that are for industrial purposes) perform and are labelled to satisfy prescribed energy efficiency standards;
- the safety of persons working on consumers' electrical and gas installations; and
- the safety of all persons using electricity and gas.

EnergySafety is also an active participant in the national framework for the promotion of energy industry infrastructure security and resilience, through the Energy Infrastructure Assurance Advisory Group (EIAAG) which is administered by the Commonwealth

¹ Safety regulation of the high pressure (>1.9Mpa) gas transmission system and upstream gas production is the responsibility of the Resources Safety Division of DOCEP.

Attorney General's Department, although the emergency management functions it has administered since 1995 were transferred to the Office of Energy in January 2007 as part of final changes under the "Machinery of Government Reforms" initiated by the then incoming government of 2001².

EnergySafety also provides technical advice and support to the Economic Regulation Authority (ERA) and the Energy Ombudsman in relation to a variety of energy industry issues, and at the request of the ERA or Energy Ombudsman, investigates the performance of network operators, particularly in respect of energy supply reliability and quality and related complaints.

In addition to the above functions, EnergySafety performs a considerable amount of policy development work related to energy industry technical and safety issues, some of which takes place through national technical standards forums and regulatory coordination forums. EnergySafety also has the key function to provide advice to the responsible Minister generally, and this includes proposals for the improvement of energy industry legislation and statutory requirements in a technical and safety regulatory context.

One of the functions closely associated with the safety of consumers' installations and the safety of workers carrying out work on consumers' installations is the licensing of workers and contractors who meet defined competency requirements. EnergySafety carries out this licensing for electrical contractors, electrical workers and gas fitters.

In respect of electrical workers and contractors, the statutory Electrical Licensing Board (which includes industry members who are appointed by the Minister) oversees this function and also deals with minor disciplinary actions, whilst recommending to the Director which more serious cases warrant referral to the State Administrative Tribunal for possible licence cancellation or suspension. The internal Gas Licensing Committee makes similar recommendations on gas disciplinary proceedings.

In broad terms, there is no specific intention during the period ahead to vary the manner in which EnergySafety has approached its work to date. Inevitably, the substantial amount of policy work and operational work to be done will require decisions to be made about priorities and the extent to which some activities, including compliance enforcement, are undertaken. These decisions will be greatly affected by the labour and financial resources available, although improved efficiencies are expected to be achieved in terms of enforcement, as a result of the proclamation on 30 November 2007 of the *Gas and Electricity Safety Legislation Amendment Act 2007*.

This Act amended the *Energy Coordination Act 1994*, the *Electricity Act 1945* and the *Gas Standards Act 1972* to provide *inter alia* significantly improved enforcement powers for EnergySafety, through the raising of penalties (generally to \$250,000 maximum) and substantially expanded order-making powers which are now much more suitable for dealing with electricity and gas network deficiencies. Additionally, earlier in 2007 the Minister approved the introduction of Infringement Notices and many offences of a non-serious nature can be expected to be dealt with through this avenue, rather than prosecution, in the future.

² During 2007-08 as part of transferring from the portfolio of the Minister for Energy to the portfolio of the Minister for Employment Protection, the emergency management functions of EnergySafety were transferred to the Office of Energy, the latter continuing to report to the Minister for Energy.

2.1 The road ahead for EnergySafety

General

EnergySafety's functions have undergone significant expansion since its creation on 1 January 1995 to include major additional responsibilities such as gas network regulation (2000) and electricity network regulation (2001), equipment energy efficiency regulation (2000 and later), critical energy infrastructure protection (2002) 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 full industry funding is in place, the major challenge for EnergySafety in the period ahead is to deliver meaningful outcomes. This requires an appropriate balance between staff resource capacity and expertise and government, industry and community needs and expectations.

There is certainly no shortage of issues for EnergySafety to address or respond to as a regulator, both in respect of major new policy initiatives, operational matters and corporate development issues, as the following sub-sections demonstrate.

Significant policy projects

The following significant policy projects are expected to be completed during the next two years. Aside from the work required to complete them, once finalised these projects will also require ongoing additional administration and enforcement effort, since they expand the regulatory framework:

- To further reduce the incidence of serious electrical accidents amongst electricians, a completely new Part IX to the *Electricity Regulations 1947* is proposed, so as to set out minimum standards for safe electrical work practices by electricians, particularly when proposing to work on or near live parts of a consumer's installation. This project has experienced ongoing delay through lack of staff resources and legislation drafting difficulties. As a result it is now planned to issue the safe work practices standards in the form of formal guidelines under the *Electricity Act 1945* in early 2008, and then to recommence the drafting of formal regulations that will largely mirror these guidelines.
- To make major improvements to the energy efficiency of gas appliances and equipment, it is planned (as part of national changes) to regulate gas use efficiency through major changes to the *Gas Standards Act 1972* and related regulations. This work continues and is the subject of consultation at the national level.
- There is a need to replace the simplistic and no longer deemed relevant provisions of section 54 of the *Energy Operators (Powers) Act 1979* (which deals with the control of vegetation near power lines) with a new regulatory regime under the *Electricity Act 1945*. What is needed is a more balanced approach to responsibilities for ensuring that vegetation is kept safely clear of overhead power lines by land occupiers and electricity network operators. This is important in terms of public safety and electricity supply reliability and quality.

Two years ago EnergySafety developed and widely issued a set of guidelines for network operators and land occupiers (including Local Government and other government entities) that outlined a responsibility framework for keeping vegetation clear of power lines, based on rules developed during the mid 1990s and used by Western Power since that time. These guidelines were very well received and have shown that the new regulatory scheme (which is intended to be based on the same principles), once drafted and enacted, should work satisfactorily. It is now proposed to obtain a fresh set of Government approvals for the drafting work to take place during 2008.

- There is a need to complete the review of Australia's regulatory regime for the safety of electrical equipment and appliances. EnergySafety is currently participating with other regulators in a national review designed to ensure the regimes operated by each jurisdiction are as harmonised as possible and capable of dealing with the challenges offered through global manufacturing, as most electrical products are now imported. The outcomes of the review will be presented to a Ministerial Council for approval in principle, most likely in late 2007-08, after which there will be a substantial implementation phase.
- The COAG Working Group on licensing regimes has endorsed and is supporting the decision by ERAC (the Electrical Regulatory Authorities Council, which is a national committee of jurisdictional regulators such as EnergySafety), to review the existing policy framework for the issuing and use of restricted electrical licences. The objective is to achieve a much higher level of uniformity between jurisdictions. EnergySafety is making a significant contribution to this review, the outcomes of which are planned to be provided to a Ministerial Council for endorsement, most likely in late 2007-08. This will be followed by further, more detailed policy and operational implementation work at EnergySafety during 2008-09.
- To improve the safety of people using electricity and persons working in and around homes, especially in roof spaces, the Government has decided to mandate the retro-fitting of residual current devices (RCDs) or "safety switches" in all types of dwellings. EnergySafety is therefore currently drafting regulations to make it compulsory for RCDs to be installed in a dwelling (house or unit), if not already installed, prior to the sale of the premises or in the case of leased premises, within 2 years. Whilst much of the work will take place during the latter half of 2007-08, there will be significant implementation issues to manage during 2008-09.
- During recent years there have been concerns about two aspects of overhead lines in the Western Power distribution system covering the SW of the State:
 - Pole top fires causing wildfires and power outages; and
 - High voltage conductor clashing causing wildfires and power outages.

EnergySafety continues to deal with Western Power on its mitigation strategies and to review them to ensure that all reasonable measures are employed to avoid such incidents in future, since their impact on the community can be severe. This is an area of activity that continues to demand significant attention.

As can be seen, there is a significant amount of major project policy work to be carried out, in addition to the more day-to-day policy work including advice to Ministers, participating on Standards Australia committees in relation to key technical standards, preparing and issuing guideline information to industry and the community, and general safety promotion.

Significant operational work projects and issues

Further to the policy work described above, there is a large, continuing amount of operational work associated with administering the existing regulatory framework.

Much of the operational work is relatively routine, such as dealing with requests for advice, dealing with complaints, carrying out investigations and, as appropriate, making decisions on whether or not to prosecute a person or business, or whether to recommend disciplinary action. 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 network³ (e.g. boats, caravans, pastoralist's facilities, mine sites etc).

During recent years the State's level of economic activity has continued to expand and this has naturally generated increased work for industry and thus also for EnergySafety, additional to that already experienced through the expansion of the regulatory framework.

EnergySafety is still finding it difficult to cope with demands on its Licensing Office as the very high level of industry activity presently in the State has resulted in a sustained influx of electrical and gas operatives seeking local work. During 2007 the Licensing Office's staff resources were increased and this contributed 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 needs to be kept under review.

The work of the Licensing Office will be assisted by the introduction on 1 July 2008 of the new DOCEP computer based licensing system which will replace the ELA and GLA computer systems developed in 1995. The new system will serve several DOCEP Divisions but will be customised for each, and deliberately designed in a modular fashion so that should future organisation changes occur, a Division's system can be relocated with the Division. It should be noted that EnergySafety is not being required to fund any of the development work as the existing ELA and GLA systems were already due for replacement prior to the commencement of industry funding for EnergySafety.

Some operational work can however be of a major project nature.

For example, in late 2006 EnergySafety completed a compliance audit of Western Power's wood pole management systems. Significant issues were identified for further action and/or follow-up and this work will take some considerable ongoing effort by EnergySafety, if all the potential benefits of the audit are to be achieved.

Similarly, 1st July 2008 is also planned to be the commencement date for the long awaited amendments to the *Electricity (Licensing) Regulations* 1991, which cover electrical licensing and consumer electrical installation standards. This is a major project requiring extensive redrafting of many licensing information documents and other actions such as to support changes in Notices of Completion.

In the lead up to the 1 July commencement date, EnergySafety will be conducting a major "roadshow" of industry presentations in Perth and regional centres throughout WA.

³ Installations connected to a network or pipeline are required to be inspected by the network operator or pipeline licensee, who is required to report results to EnergySafety.

The formal approval during late 2007 of amendments to the *Gas Standards (Gas Supply and System Safety) Regulations 2000* that were developed in liaison with industry to deal with the issue of gases of different heating values commingling in gas distribution systems will also lead to an operational project to implement a suitable management regime, in liaison with gas suppliers. This work will continue in 2008-09.

Another area requiring significant attention is that of electrical worker safety in the electricity supply industry (ESI). During the last 3 years there have been several serious safety incidents including a fatality and it is of concern to EnergySafety that work pressures including "contracting out" by network operators may be resulting in poor safe work practices and lack of compliance with corporate safety standards and regulatory requirements. This issue requires further interaction with the ESI, to achieve better outcomes in terms of compliance and "on job safety".

In addition, it is important that EnergySafety conducts programmed (but random) compliance audits on a sample of industry operatives including –

- electrical contractors;
- gas fitter contractors including authorisation holders; and
- airconditioning and refrigeration contractors (working under restricted electrical licences).

Also, a sample of retail premises selling electrical and gas products needs to be audited to check compliance with –

- electrical safety approval requirements;
- gas safety approval requirements;
- energy efficiency labelling requirements; and
- minimum energy performance standards (MEPS).

The latter minimum energy performance requirements also place obligations on industry such as in regard to distribution transformers, motors and airconditioning plant, demanding a separate auditing approach on other parts of industry.

Additionally, the performance of the various utilities' Installation Inspectors must also be monitored. These Inspectors are authorised ("designated") by EnergySafety and perform the valuable function of checking the compliance of consumers' electrical and gas installations after work by industry operatives, reporting non-compliances 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.

Random spot audits therefore need to be carried out from time to time to ensure that all are reporting defects as required by the statutory obligations that require the energy utilities to carry out such installation inspection work.

Safety Promotion

There is a need for EnergySafety and the energy suppliers to regularly promote:

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

EnergySafety deals with the above through a combination of industry specific activities (e.g. through safety sessions during regional roadshows), through publications aimed at industry and also at the public, which are distributed and are also available via the EnergySafety website, and through television, radio and newspaper advertisements.

In terms of television, it is a very good medium for reaching the general community, however operational experience shows that a substantial effort is required if it is to have any worthwhile impact. Given that the cost of any substantial TV campaign is significant, EnergySafety has adopted a general strategy of running a major TV campaign approximately every 2 years.

Corporate projects and issues

EnergySafety, as a regulator, needs to have staff who understand the various business and technical areas of the electrical or gas industries and who can expertly evaluate and negotiate safety and performance issues with their industry counterparts.

This requires a competent grasp of industry-specialist technical practices (including safe field work practices), the energy legislation and OSH obligations, industrial relations implications and economic impacts. Some of the staff (particularly Engineers) also need to be strong in policy development work.

Staff of this kind are difficult to recruit and retain, especially whilst WA's economy is so strong. The Government's directive to relocate EnergySafety's offices from West Leederville to Cannington in mid 2006 has also made retention and recruiting difficult.

To help counter this, the Minister approved in early 2007 a proposal for EnergySafety to offer improved employment packages to its technical staff (including Inspectors) so that these are considerably more competitive in the context of today's industry environment than was the case. This "Attraction and Retention Benefit" (ARB) supported a major new recruiting campaign by EnergySafety, for various types of vacant technical positions. This was reasonably successful and resulted in some senior positions being offered to overseas applicants and it is expected that further recruiting will be required during 2008-09, especially as a number of the staff are approaching retirement age. Part-time work and part-time contract work options will also be utilised to supplement EnergySafety's core of full time, permanent personnel.

Given that the State's economy shows no signs of contraction and major new resources and energy supply contracts are being signed by industry in WA, it is expected that the ARB arrangements will have to continue for the foreseeable years ahead, and the financial forecasts have been cast accordingly.

EnergySafety's senior staff continue to have a major role in the development of DOCEP's new corporate "Compliance Management System (CMS)" which will support the enforcement activities of several of DOCEP's regulatory Divisions, including EnergySafety. CMS will be a major electronic information system that covers incident reporting, investigations, warnings, infringement notices, prosecutions, disciplinary actions, certain types of installation inspections, compliance audits, the issuing of remedial action orders, inspector field work scheduling and reporting, plus appliance approvals and the like. This development work will continue well into 2008-09, after which implementation trials will take place.

Unlike during 2006-07 when EnergySafety was required to move from its West Leederville Offices to its current location at 1st Floor Mason Bird Building, 303 Sevenoaks St (corner Grose Ave), Cannington and during 2007-08 when EnergySafety's office space in that building was finally fitted out to its operational requirements, EnergySafety should not experience any accommodation issues during 2008-09.

It is also expected that during 2008-09 there will not be any need to commit time and resources to issues such as portfolio changes and related changes in agency function, as was the case in 2006-07 when EnergySafety transferred from the portfolio of the Minister for Energy to the Minister for Employment Protection, and transferred its emergency management functions to the Office of Energy.

3.0 The nature and scope of EnergySafety's activities

3.1 Legislation administered

As the State's technical and safety regulator for all electrical and most gas infrastructure, installations and activities, the Director of Energy Safety with support of the staff administers the following legislation:

- *Energy Safety Act 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*

EnergySafety also assists the Economic Regulation Authority (ERA) and the Energy Ombudsman's office in the enforcement of prescribed standards for electricity supply reliability and quality, in accordance with the provisions of the following legislation:

- o *Electricity Industry (Licence Conditions) Regulations 2005*
- o *Electricity Industry (Ombudsman Scheme) Regulations 2005*
- o *Electricity Industry (Network Quality and Reliability of Supply) Code 2005*

3.2 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 functions of the associated Electrical Licensing Board) and enforcing prescribed technical standards for electrical installing work;

- requiring electricity network operators to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - conducting safety inspections of consumers' electrical installations that are not connected to utility networks; and
 - auditing electrical appliances and equipment being offered for sale, to check compliance with prescribed safety and energy efficiency requirements (such as the star rating labelling scheme and MEPS).
- Ensure the safety of consumers' gas installations and appliances (including industrial gas appliances), by:
 - licensing gas fitters and enforcing prescribed technical standards for gasfitting work;
 - requiring gas network operators, gas pipeline licensees and LPG cylinder distributors to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - overseeing the work of external inspectors approving industrial gas appliances;
 - conducting safety inspections of consumers' gas installations that are not connected to utility networks or are not supplied with LPG directly from a gas distributor; and
 - auditing gas appliances and equipment being offered for sale, to check compliance with prescribed safety and efficiency requirements.
 - Ensure the safety and acceptable performance of electricity transmission and distribution infrastructure by:
 - auditing electricity network operators' design standards and constructed networks for compliance with prescribed safety requirements;
 - monitoring the safe work practices of network operators' employees and contractors, including attendance to incidents;
 - investigating unsatisfied consumers' complaints about unacceptable electricity supply reliability and quality, when referred by the ERA or Ombudsman; and
 - auditing network operators' compliance with their approved meter management plans, to ensure acceptable meter accuracy.
 - Ensure the safety and acceptable performance of gas distribution infrastructure by:
 - auditing gas network operators' design standards and constructed networks for compliance with prescribed safety requirements;
 - monitoring the safe work practices of network operators' employees and contractors, including attendance to incidents;
 - monitoring the quality of gas provided to consumers generally, for compliance with prescribed requirements;
 - investigating unsatisfied 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 oversee all inspectors in the State (including those of network operators).
- Ensure the safety of electrical and gas workers by enforcing prescribed safety requirements and providing guidance in respect of safe work practices.
- Issue exemptions or variations to certain regulatory requirements (electrical and gas).
- Investigate electrical and gas safety incidents (although incidents associated with electricity or gas utilities' supply systems, or their customers, are usually inspected first by the utilities' inspectors).
- Enforce statutory requirements through advice, warnings, prosecutions and, in the case of licence holders, also through disciplinary action.
- Respond to consumer concerns generally regarding electrical and gas technical and safety matters.

Furthermore Energy Safety:

- provides wide-ranging energy related policy advice and support to the Minister, Government and DOCEP's Director General;
- promotes electricity and gas safety to both the public and industry operatives; and
- participates in the in the national framework for the promotion of energy industry infrastructure security and resilience, through the *Energy Infrastructure Assurance Advisory Group* (EIAAG) which is administered by the Commonwealth Attorney General's Department.

4.0 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	06/07 Target*	06/07 Actual	07/08 and beyond Target*
GAS			
Gas related deaths	0	3	0
Gas related accidents ⁴ (including fatalities)	15	6	14
Gas installations inspected and found non-compliant (includes matters not directly affecting safety)	18%	11%	15%
No. of EnergySafety audits of gas suppliers' Inspection Plans	2	0	2
No. of Type B gas appliance variations assessed	50	85	45
Investigations under Acts and Regulations	200	314	200
Presentations to Industry or other Groups	10	8	10

MEASURES	06/07 Target*	06/07 Actual	07/08 and beyond Target*
ELECTRICITY			
Electricity related deaths	3	5	3
Electricity related accidents ⁴ (including fatalities)	30	20	25
Electrical installations inspected and found non-compliant (includes matters not directly affecting safety)	7.5%	6.4%	7.0%
No. of EnergySafety audits of electricity suppliers' Inspection Plans	2	2	2
Investigations under Acts and Regulations	700	484	650
Presentations to Industry or other Groups	10	8	10

* Trend analysis is used to set the targets

⁴ Accidents are defined as serious safety incidents where a person has received some type of medical treatment (including assessment tests) from a health professional.

5.0 Type of information and advice to be provided to the Minister

EnergySafety provides advice and support to the Minister for Consumer and Employment Protection, since the Department (DOCEP) to which EnergySafety belongs is responsible to this Minister.

Interaction between the Minister's office and EnergySafety normally takes place via the Director of Energy Safety. However EnergySafety's Director Gas and Director Electricity are available to liaise directly if required.

The type of advice and information provided to Minister by EnergySafety includes the following:

- Proposals for major policy projects such as new legislation, or amendments.
- Advice on the status and management of major policy projects, such as proposals for legislation.
- Advice on proposed regulatory actions that may have some significant impact on the public, or on a corporation.
- Advice on information releases that deal with subjects relevant to the Ministerial portfolio area.
- Advice on the status of major investigations or audits that have received media publicity.
- Advice for dealing with industry enquiries (verbal or written) to the Ministers' offices, if requested to do so by the relevant Minister or his/her staff. This may involve correspondence and/or meetings.
- Advice on resource requirements and work programs.
- Advice on energy infrastructure protection and security issues.
- Advice on nationally significant energy issues (e.g. flue-less gas space heaters, International Energy Agency matters, etc).

BUSINESS ENVIRONMENT AND CHALLENGES

6.0 Introduction

This part of the Business Plan provides an overview of the energy industry environment that exists within Western Australia today and highlights the demands on EnergySafety's technical and safety regulatory functions that the changes of recent years have created.

6.1 WA's energy industry environment

WA's energy industry is now truly restructured, following the disaggregation of Western Power into separate generation (Verve Energy), networks (Western Power), retail (Synergy) and integrated regional businesses (Horizon Power) on 1 April 2006.

The gas industry was substantially restructured in 2000 with the sale of AlintaGas and this commenced the progressive opening of the market to full retail competition. It is well known that the competitive gas supply market that has emerged from these changes is very favourably viewed by industry, especially in the resources sector. There is now pressure to introduce additional natural gas capacity to the State's industry, via expansion of the Dampier – Bunbury natural gas pipeline and through new sources of supply⁵.

The electricity supply industry has had a much slower reformation but it is clear that many positive changes should take place in the immediate years ahead. For example, the South West Interconnected System (SWIS) networks business of the previous Western Power (which is the entity that retains this name) can now use its revenue for reinvestment and maintenance as would any independent business, contrary to the situation when the networks business was part of a vertically integrated utility. This is a positive change, but of course it will take a number of years for the shortcomings of the last 10 years (evidenced by the Mt Barker, then Tenterden and more recently the Toodyay and Denmark fires resulting from clashing conductors, and the ongoing, widespread supply interruptions and safety problems from pole-top fires) to be dealt with by the new Western Power.

The same is expected of Horizon Power, a successor to the old Western Power, generating and supplying electricity at many remote towns of the State including Esperance and parts of the Pilbara.

There are several other Pilbara and Goldfields based electricity network operators and other smaller entities. However, experience has shown that these networks are generally maintained in a manner consistent with the resources sector's standards that seek to minimise safety problems and 'downtime'.

Therefore, looking ahead to the next five years and the networks of the major players during this period, it is likely that existing shortcomings with Western Power's SWIS electricity supply network will require major attention, as will the networks of Horizon Power. On the other hand, the younger nature and generally better state of the gas

⁵ EnergySafety has been asked to review the WA NG specification and as part of this will in late 2007-08 carry out a survey of pre-1980 gas appliances in service, to ascertain what action may be needed to improve or replace these as a prerequisite to modifying the current gas specification. This work is being directly funded by the Government.

distribution networks operated by Alinta and others should mean they require comparatively less regulatory attention from a safety and performance perspective.

These matters are also the subject of attention from the ERA which through its gas and electricity network licensing regime monitors the safety and performance of network assets, in addition to approving network access rules and transport charges. The Energy Ombudsman deals with consumer complaints. As Energy Safety provides technical support to both these organisations, there will be continuing communication and cooperation between each of the two regulators and Energy Safety.

In the electrical contracting and gasfitting areas it is largely a case of continuing with current regulatory initiatives which appear to be working well:

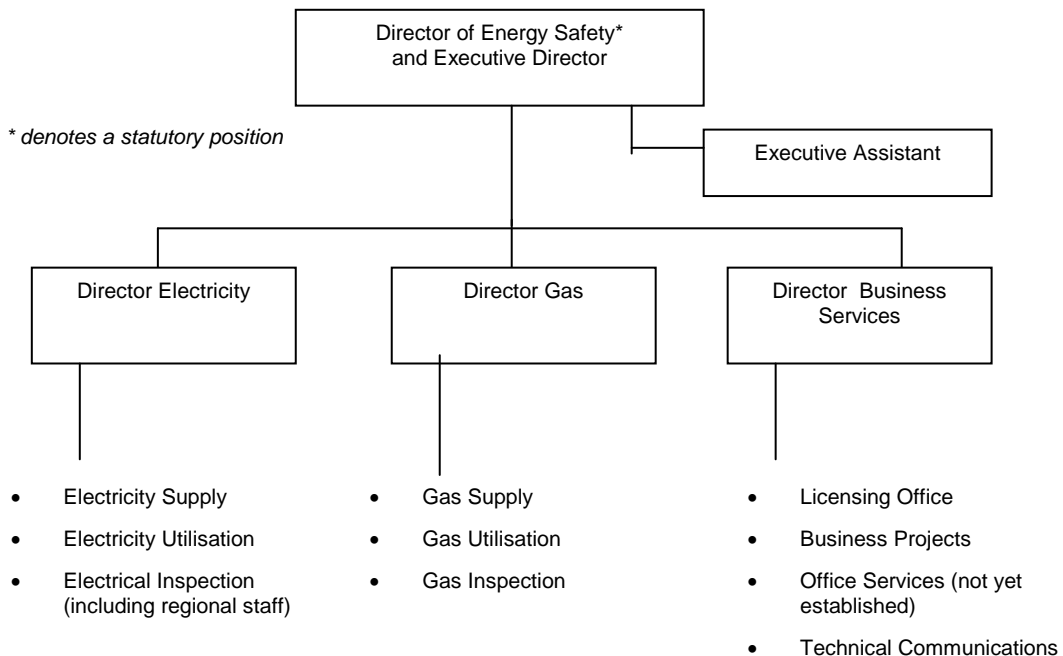
- For example, the incidence of serious electrical defects in work carried by electrical contractors is at an all-time low, largely due to the success of the "Contractor Connect Scheme", it is believed. This scheme provides real incentives for major electrical contractors involved in residential electrical work to ensure their work is safe and compliant.
- In respect of gas, there is a new "demerit points scheme" now in place and early signs indicate that it will work to substantially deal with those who are persistently delivering defective gasfitting work.

The availability of the new enforcement measures (larger fines and Infringement Notices) should assist in improving compliance, especially among gas fitters.

6.2 Energy Safety structure, resources and powers

6.2.1 Introduction

The Executive Director, Energy Safety Division (or "Energy Safety"), heads the Division and by design the incumbent also holds the statutory office of Director of Energy Safety.



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

6.2.2 Electricity Directorate

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

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

The following two Branches:

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

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

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

- Conducting corporate compliance audits of electricity suppliers in relation to network safety and supply standards;
- Guiding and approving electricity supplier "Inspection Plans", which set out electricity consumer installation practices and commitments, and conducting audits to ensure compliance;
- Inspecting electricity consumers' installations in remote locations (not serviced by utilities);
- Conducting compliance audits of electrical equipment retailers, in relation to safety and energy efficiency (labelling and MEPS) requirements;
- Appointing all electrical inspectors in the State, maintaining codes of conduct, monitoring compliance;
- Carrying out investigations into serious accidents (injury and damage) and incidents (supply interruptions), and recommending safety promotion, warnings, prosecutions, disciplinary actions etc, as appropriate.
- Advising consumers and industry operatives in relation to energy safety and compliance matters;
- Technical and investigative support to the Electrical Licensing Board and the Licensing Office;

- Monitoring safe work practices used in industry;
- Participating in industry safety promotion campaigns (e.g. regional presentations); and
- Assisting the Director with appeals against external inspectors' rulings.

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

6.2.3 Gas Directorate

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

- All gas related technical and safety policy work including ministerial advice, new legislation, regulatory reform proposals, technical standards development, industry liaison and assessment of requests for variations to regulatory requirements;
- All gas related operational work; and
- The development of strategies and plans, including liaison with a local industry reference group, in respect of electricity and gas infrastructure assurance, plus liaison with infrastructure security organisations at State and national level.

The following two Branches:

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

each deal with gas industry policy work and emergency management matters, including ministerial advice, new legislation, national policy issues, regulatory reform proposals, and requests for variations to regulatory requirements. They also provide specialist direction and assistance to the Gas Inspection Branch, when the latter is carrying out complex investigations and corporate compliance audits of gas utilities (e.g. Alinta) and licensed gasfitting contractors, as well as enforcement activities;

The 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 in relation to network safety and quality (composition) of NG and LPG supplied;
- Guiding and approving gas supplier "Inspection Plans," which set out gas consumer installation practices and commitments, and conducting audits to ensure compliance;
- Inspecting gas consumers' installations in remote locations (not serviced by utilities), with special focus on industrial installations such as mine sites with industrial gas appliances;
- Conducting compliance audits of gas appliance retailers, and gas appliance re-conditioners, in relation to safety requirements;

- Appointing all gas inspectors in the State, maintaining codes of conduct, monitoring compliance, especially in relation to the approval of industrial gas appliances;
- Carrying out investigations into serious accidents (injury and damage) and incidents (supply interruptions), and recommending safety promotion, warnings, prosecutions, disciplinary actions etc, as appropriate;
- Advising consumers and industry operatives in relation to energy safety and compliance matters;
- Technical and investigative support to the Gas Licensing Committee and the Licensing Office;
- Monitoring safe work practices used in industry;
- Participating in industry safety promotion campaigns (e.g. regional presentations); and
- Assisting the Director with appeals against external inspectors' rulings and requests for variations from prescribed requirements.

The Directorate 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 in response to the reporting of gas incidents (fires, injury, major gas supply interruptions, etc).

6.2.4 Business Services Directorate

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

The Directorate currently has three Branches, as follows:

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

An Office Services Branch is yet to be established, to provide for the efficient future delivery of various corporate services and external contract services necessary for the functioning of EnergySafety.

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

- the development and maintenance of licensing policies covering the licensing of electrical contractors, electricians, restricted electrical workers and the various types of gas fitters;

- administering the Licensing Office, which deals with all electrical and gas licensing enquiries, applications, renewals, and manages the licence holder databases and related applications;
- supporting the Electrical Licensing Board in the discharge of its statutory functions (including provision of Executive Officer);
- supporting the Gas Licensing Committee in its discharge of the statutory functions delegated by the Director (the Director Business Services is chair);
- managing formal disciplinary proceedings in respect of electrical operatives for the Electrical Licensing Board, and in respect of gas fitting operatives, for the Director of Energy Safety, the more serious proceedings being forwarded to the State Administrative Tribunal;
- administration of the Division's industry levy scheme including data collection and modelling, licence revenue forecasting, expenditure budget development;
- representing EnergySafety's needs in relation to various corporate and central agency activities, including internal audit, expenditure tracking and projection, performance indicator development and progress monitoring;
- overseeing 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 generally.

6.2.5 EnergySafety's staff resources

The previous Business Plan 2006-07 advised the Minister had approved that a total of 10 extra permanent staff were to be appointed progressively to bring EnergySafety's longer term establishment level to 56 FTEs.

The strategy adopted was that the additional staff would be appointed in line with financial capacity.

Since then Government approval for an ARB (Attraction and Retention Benefit) in line with that submitted by EnergySafety during October 2006 allowed extensive recruiting during mid 2007 to fill vacant positions. Most positions are expected to be filled by mid 2008.

Meanwhile some technical personnel have been engaged on a limited term basis to augment existing permanent staff resources.

The current status (at December 2007) of Energy Safety's staffing is that the establishment level of permanent, full time positions is 53.

The 7 positions that were added to the FTE total of 46 at the inception of industry funding are the following:

- 3 new permanent positions for the Licensing Office (one of which is yet to be formally created and filled);
- Project & Planning Officer, Electrical Inspection Branch (yet to be advertised and filled);
- Project & Planning Officer, Electrical Inspection Branch (yet to be advertised and filled);
- Senior Engineer Gas Supply (part of current global recruiting); and
- Clerical Officer Gas Inspection, Gas Inspection Branch (currently being recruited).

The decision on further recruiting will be taken during the next 12 months.

6.2.6 EnergySafety's regulatory powers

EnergySafety's regulatory powers originate from the regulatory functions of SECWA, the State's vertically integrated electricity and gas utility and regulator that ceased at the end of 1994. The regulatory functions at that time were tailored solely to suit safety regulation of consumers' installations and not electricity and gas networks.

Since then the recent passing and proclamation of the *Gas and Electricity Safety Legislation Amendment Act 2007* has addressed these concerns. Additionally the ability since mid 2007 to issue Infringement Notices also assists compliance enforcement.

In an environment where increasing competition inevitably puts cost pressures on all energy industry players, including network operators, it is important that the regulator can act to maintain a level playing field and also protect the community. These improved powers are significant in that context.

The next section describes in more detail some of the issues that are important for EnergySafety's business focus.

6.3 Industry and Community Electrical and Gas Safety

6.3.1 General

During 2006/07, 8 fatalities (5 electrical, 3 gas related) and 26 accidents⁶ (20 electrical, 6 gas related) were reported.

In summary, too many Western Australians continue to be killed or injured while using or working with (or near) energy related equipment. The benefits of saving lives and accidents flow directly to the community. For example, a reduction of 1 fatality and 5 serious accidents in a year would save the community about \$1.35m annually.

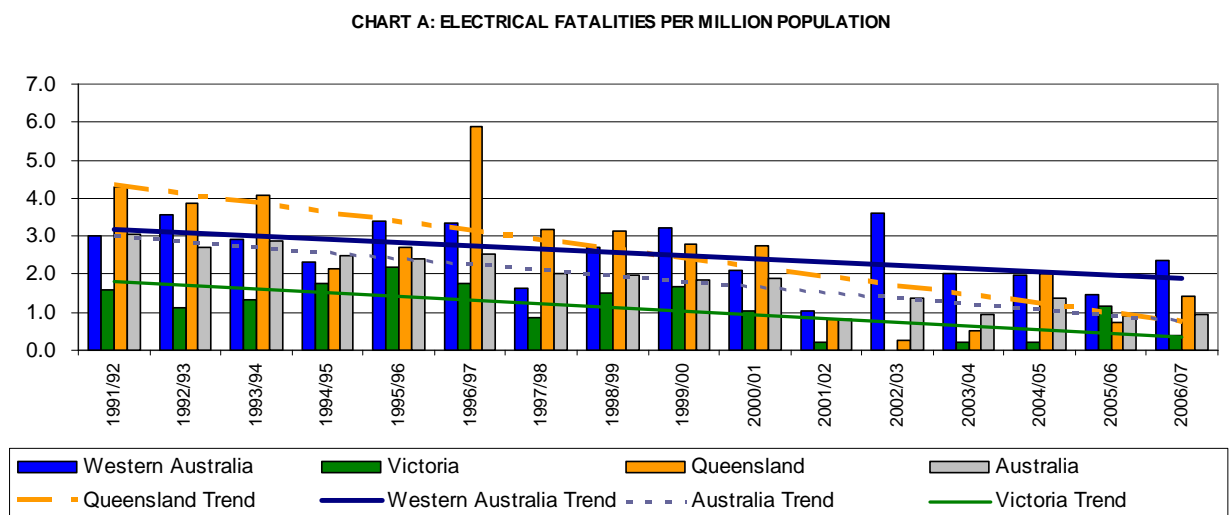
The key way of reducing this unfortunate statistic is to advertise safety messages, and to greatly raise awareness of energy related hazards and how to deal with them or avoid them.

There is also a need to raise awareness of the risks for regional Western Australians who are over-represented in the energy accident statistics, although the indications are that this trend is declining.

In the case of the electrical industry, some additional regulatory measures are required as is covered in Section 2.1 and in some of the Sub-Sections that follow.

6.3.2 Current level of safety within WA

While the long-term trends appear to be in the right direction, the following graph shows that Western Australia has a higher level of electrical fatalities than many other jurisdictions.



⁶ Accidents are electrical and gas incidents of a serious type where a person has received some type of medical treatment (including assessment tests) by a health professional. Electrical "shocks" are non-serious electrical incidents where the person has experienced a shock or tingle of an electrical nature, but has not required any medical treatment.

For example WA is at about three times the trend level of Victoria and substantially higher than the Australian average. A significant factor in the lower rate of fatalities in Victoria is the extensive public advertising of electrical safety in that State. EnergySafety expects to carry out a major public safety awareness program in the last half of 2007/08 and needs to reinforce the outcomes by undertaking further programs on a regular basis in future years, however funding constraints mean these programs will generally take place every 2 years rather than yearly.

CHART B: WA ELECTRICAL FATALITIES PER MILLION POPULATION - 1990/91 to 2006/07

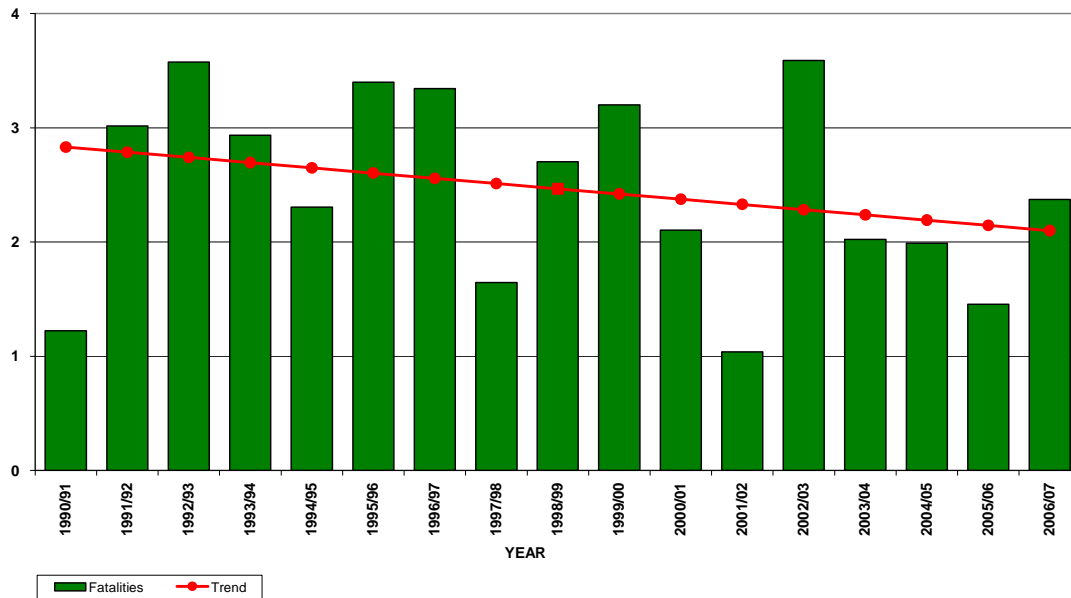
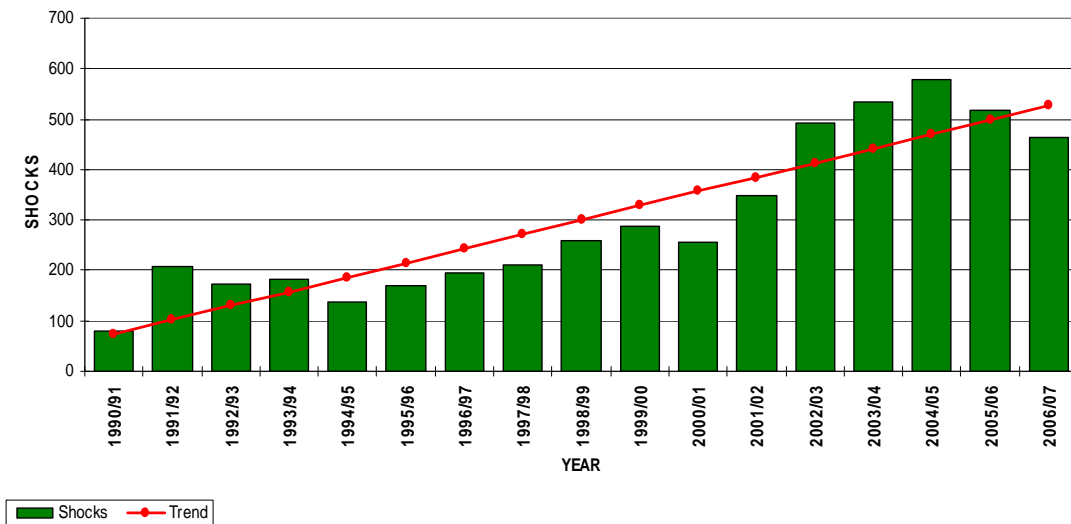


CHART C: WA ELECTRICAL SHOCKS PER MILLION POPULATION - 1990/91 - 2006/07



The increase in the reporting of shocks can be attributed to the introduction of mandatory reporting requirements, however it does indicate that a problem exists.

CHART D: WA GAS INCIDENTS RESULTING IN FATALITY OR INJURY PER MILLION POPULATION - 1994/95 to 2006/07

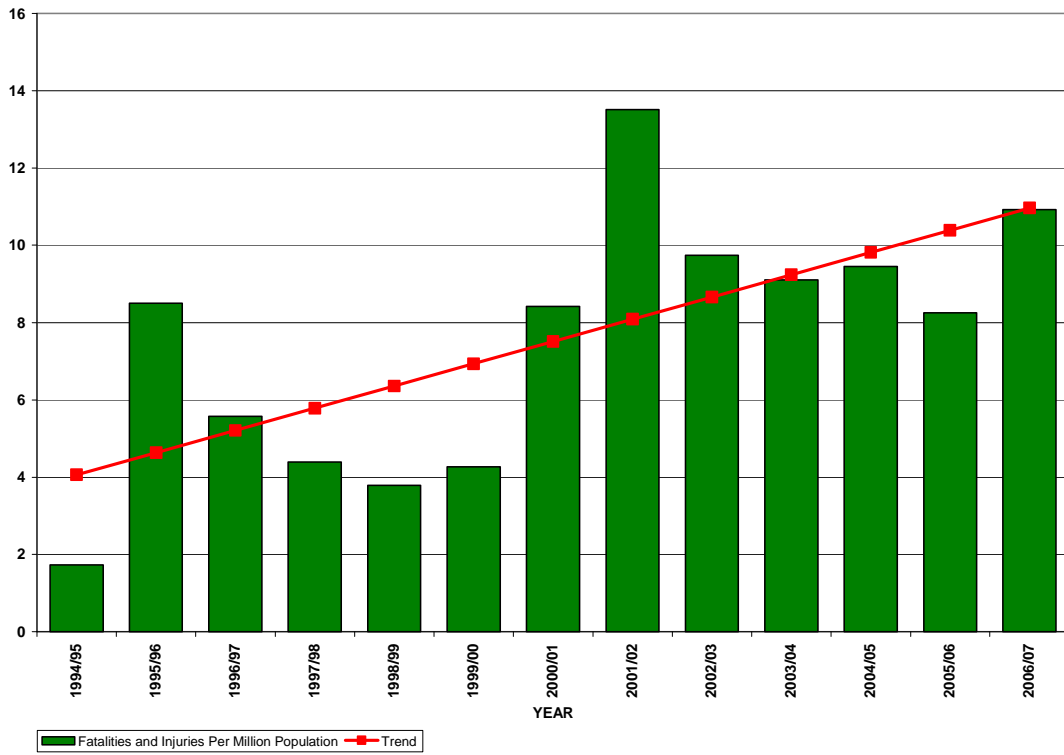
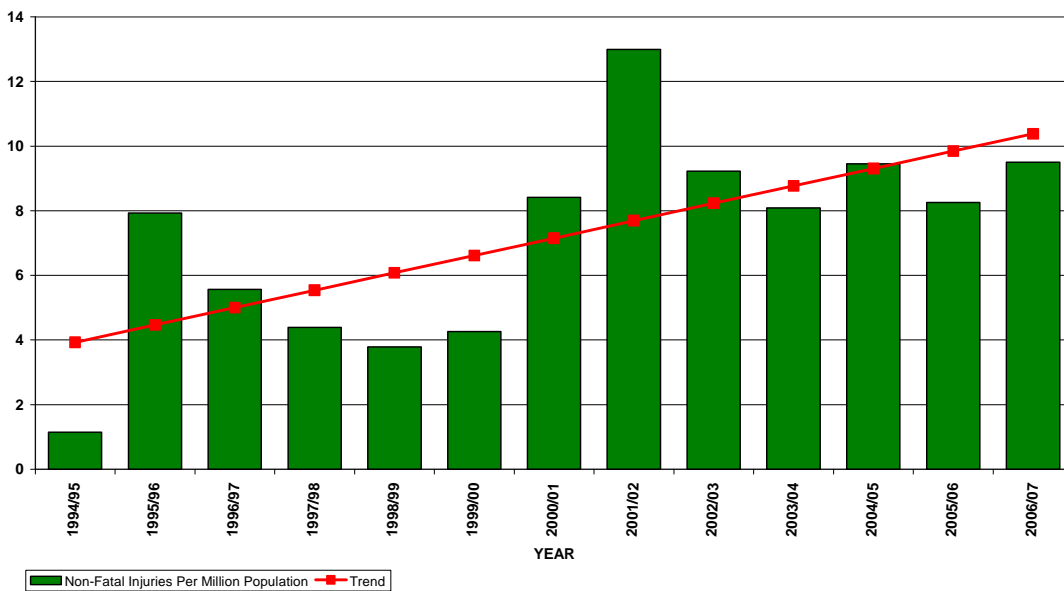
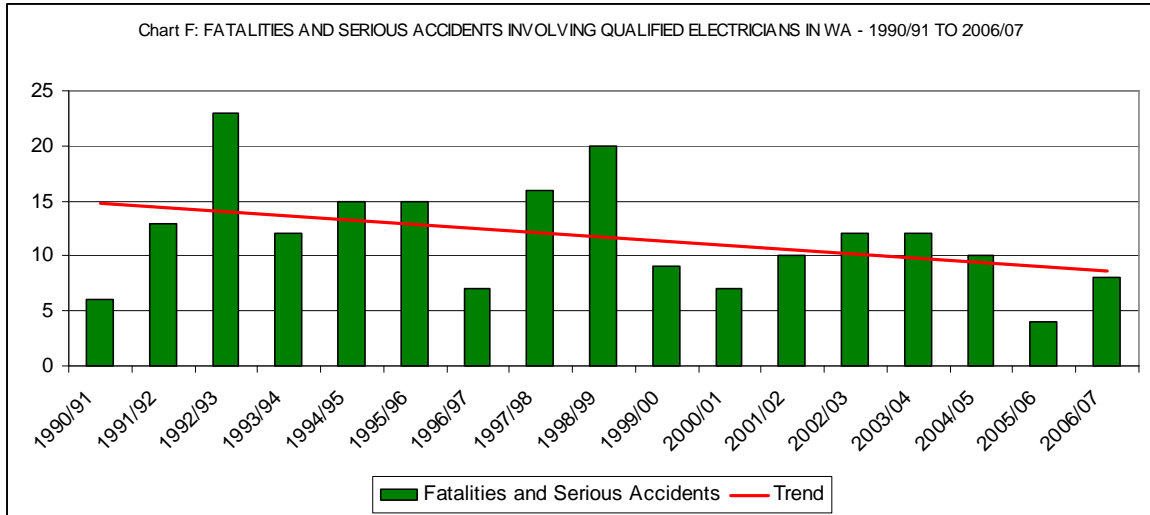


CHART E: WA GAS INCIDENTS RESULTING IN NON-FATAL INJURY PER MILLION POPULATION - 1994/95 to 2006/07

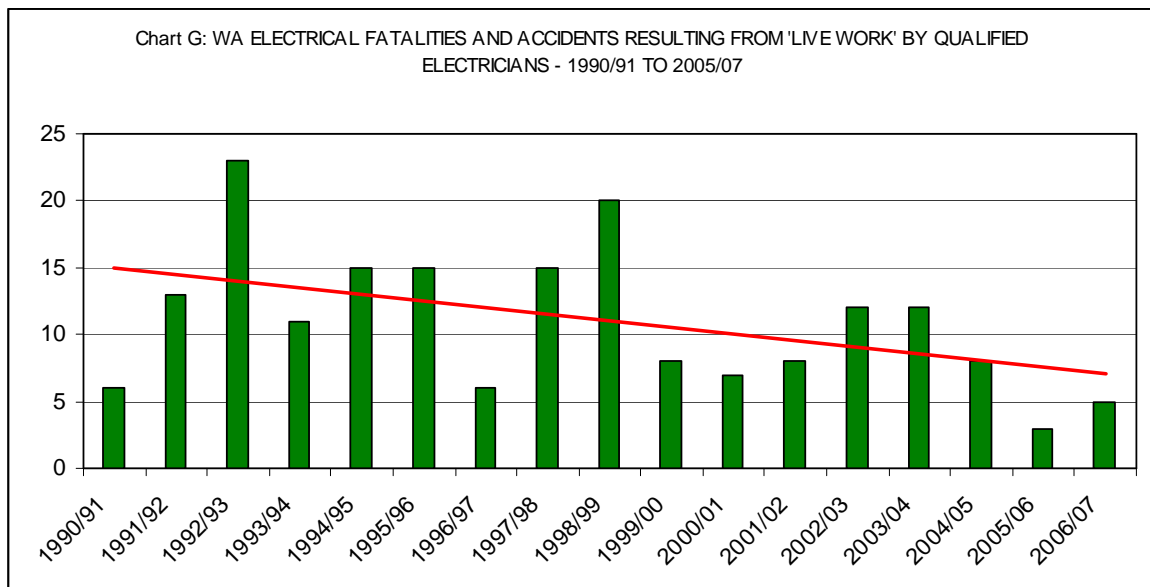


6.3.3 Electrical and gas worker safety

It is a concern that electricians, despite their skills (which should make them safer with electricity than members of the public) are many more times more likely to be electrocuted than members of the general public.



Work on or near 'live' parts of consumers' installations is of particular concern, as shown below.



Although the graph shows an improvement trend in regard to 'live' (415/240 volt) work safety incidents, there are still too many of these due to pressure to do electrical work 'live', so as to avoid the extra effort and cost of shutdowns or alternative arrangements such as after-hours work.

But serious electrical accidents and electrocutions are not confined to electricians. For example, not so long ago two line-workers were electrocuted during only a 12 month period. EnergySafety, as regulator, should and can make a substantial contribution to this area.

Gas workers on the other hand have much better job safety outcomes, as is evident from the statistics. However It would be invalid to attempt simple comparisons since there are substantial differences between the electrical and gas industries.

6.4 Measures to improve safety outcomes

6.4.1 General

Recent electrocutions in WA reinforce that there is a real need for public safety promotion and workplace safety improvement programs, including industry education.

Although many accidents appear to take place due to human error on the part of the person affected, such as by –

- assuming something was 'dead' when in fact it was 'live', or
- making unintended contact with 'live' parts when using a tool and thus shorting out part of a switchboard, or
- failing to clear an area of gas before attempting to relight a gas appliance

rather than the failure of electrical or gas equipment or the incorrect installation of such equipment, the incidence of accidents can also be reduced by improving technology, safety devices and compliance with prescribed installation and work practices standards.

The following Sub-Sections deal with some of these options, as well as education measures.

Aside from the use of specific requirements or controls on industry workers, other measures to improve safety outcomes (for both the worker and the end user of the work being carried out) include greater Inspector visibility.

A survey conducted by Donovan NFO in 2001 for WorkSafe WA supported the need to increase the visibility of Inspectors in the workplace in order to motivate businesses to actively manage occupational safety and health. This observation equally applies to the energy safety regulation area. Such a proactive approach however places considerable extra and competing demands on the available Inspectors.

6.4.2 Consumer safety through installation compliance inspections

EnergySafety oversees and manages an electrical and gas consumer installation safety inspection regime. This regime engages some 170 (estimated as 100 full-time equivalent) Inspectors across WA, employed by the various electricity and gas network operators, LPG suppliers or pipeline licensees, or operating on a fee-for-service basis for these entities. They inspect the work of licensed operatives at consumers' electrical and gas installations of all types (commercial, institutional, industrial and residential) either on an individual basis or, if the network operator (or LPG supplier) has an approved Inspection System Plan, on a sample basis.

This work continues as a key part of the enforcement regime. Comparisons with the installation inspection regimes of other jurisdictions has shown the WA framework delivers very good results. These will be further improved through the new enforcement powers now available (especially the ability to issue Infringement Notices).

6.4.3 Retro-fitting of Safety Switches

It is a well established fact that safety switches (more correctly called Residual Current Devices or RCDs) will save individuals from serious shock or electrocution in about 90% of cases in the home or small business. 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 is through persons entering the building's roof space to carry out some type of work (e.g. to repair something), then making contact with exposed live parts (due to damage or deterioration over many years of the wiring) while simultaneously contacting some earthed metalwork (e.g. plumbing pipe). If the wiring installation has "whole of house" RCD protection – either through a single or preferably two RCDs – then such contact will not result in a serious shock but only a tripped electricity supply to the premises.

Unfortunately, the promotional work carried out by EnergySafety during the 1990s did not result in significant retrofitting of RCDs by householders in pre-1991 homes (since then the fitting of RCDs has been mandatory).

The Government has therefore approved the retro-fitting of RCDs as a future mandatory requirement on the vendors of residential premises and the landlords of residential premises. 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 of a home can be confident the electrical installation is safe for their use, whilst making this a minor outlay only for the vendor and achieving a significant penetration of RCD protection over a 15 year period. EnergySafety is currently drafting the regulations and following detailed industry consultation during the second half of 2007/08 it is anticipated that the regulations will come into operation during 2008/09.

6.4.4 Residential installation safety assessments

During 2008/09 EnergySafety intends to develop a scheme under which individuals may select and engage an electrical contractor to carry out and report on an assessment of the safety and functionality of a dwelling's electrical installation, based on a standard, structured plan that has been developed and approved by EnergySafety.

Energy Safe Victoria has already developed and implemented a similar scheme.

The need for this type of service, which is proposed to operate on a fee-for-service basis (with payment directly to the contractor), has become increasingly evident in WA as dwellings age and the persons either proposing to purchase them or renovate them, or simply properly maintain them, need better information on which to base their decisions.

Each electrical contractor undertaking such a service would be held accountable for the accuracy and quality of their reports to clients, by the Electrical Licensing Board.

Once the electrical installation assessments have been developed and implemented, following industry consultation, a similar scheme is expected to be developed for the gas industry.

6.4.5 General electrical and gas safety promotion for the community

Community safety is important and EnergySafety aims to be proactive in 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 in relation to the safe use of electricity and gas, electricity and gas infrastructure, and the hazards of working with energy. Campaigns need to be ongoing, as the message requires constant reinforcement to be effective.

Public safety and similar campaigns aimed at the general community are mainly reliant on the use of media advertising. Recent surveys have shown that TV advertising is very effective, whereas other forms of media are not. EnergySafety's 2004-05 campaign for example had good results.

However, TV advertising is expensive and requires adequate funding to be available. For this reason, TV campaigns are being planned to run every 2 years approximately, and the next campaign is expected to run during late 2007-08.

6.5 Energy efficiency regulation of appliances and equipment

An increasing amount of electrical equipment used both in residential premises and industry is already subject to energy efficiency requirements such as labelling and minimum energy performance standards (MEPS).

During 2008/09 EnergySafety intends to participate more actively in the "E3 Committee", the Equipment Energy Efficiency Committee which operates under the Ministerial Council for Energy and is chaired by the Australian Greenhouse Office (which is also a member of ERAC).

This will ensure that EnergySafety is up to date in its knowledge of the new directions and latest steps of Australia's energy efficiency program, which is a key component of national efforts to minimise greenhouse gas emissions and related climate change.

It is also expected that EnergySafety will become a participant in the national check testing program for the conduct of compliance checks on products and equipment registered under the energy efficiency program which is overseen by E3.

FINANCIAL PLAN

7.0 Introduction

The Financial Plan that follows on the next page sets out in detail the forecasts for the various components that make up EnergySafety's revenue budgets and expenditure budgets (both capital and operating) over the 2008/09 year and beyond.

Each of the components in the Table is explained in the text of section 7.1.

7.1 Financial Plan, notes and explanations

EnergySafety's Financial Plan is designed to provide a detailed overview of –

- (1) estimated revenue from electrical and gas operative 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 2008-09, as well as for the four forward years, although it needs to be recognised that projections for the out-years are less accurate and subject to review prior to each year.

The following points should be noted in relation to the attached Plan, in the sequence of items listed in the attached Plan:

SPECIAL EXPENDITURE ITEMS

- a) Global Recruitment Campaign: EnergySafety's longer term establishment level as approved by the Minister is 56 FTEs and recruiting is currently in progress (and expected to continue into 2008-09) to fill up to 53 positions.

The extra staff are needed to provide necessary additional capacity for EnergySafety's work, such as to advise industry, carry out standards development, coordinate regulatory activities with other agencies, support the ERA and Energy Ombudsman, enforce existing requirements and carry out a wide range of policy work.

Further positions will be added to achieve the total of 56 FTEs staff as soon as practicable in terms of financial capacity. In the meantime contract personnel will be engaged when necessary to add specialist expertise for particular projects or for general part-time support.

- b) As part of its role, EnergySafety needs to promote electrical and gas safety, through programs that are varied from year to year. This is to promote public and consumer safety using TV, radio and print media and it is proposed to have one major campaign every 2 years as shown. Industry presentations and safety material (e.g. safe work practices videos) are covered under Recurrent Expenditure.

(notes continued after Table on next page)

FINANCIAL FORECASTS:

	\$m					
	07/08	08/09	09/10	10/11	11/12	12/13
OPERATING EXPENDITURE:						
1) <u>Special Expenditure Items</u>						
a) Global recruitment campaign	0.550	0.400	0.000	0.000	0.000	0.000
b) Major safety campaign (TV etc)	0.485	0.000	0.500	0.000	0.500	0.000
c) Payments into fund for employee entitlements (super, holiday pay etc)	0.600	0.023	0.025	0.026	0.027	0.028
<u>TOTAL SPECIAL ITEMS:</u>	1.635	0.423	0.525	0.026	0.527	0.028
2) <u>Recurrent Expenditure</u>						
a) Corporate services (to DOCEP)	0.730	0.759	0.790	0.821	0.854	0.888
> Special EIS & GIS support	0.150	0.150	0.000	0.000	0.000	0.000
b) Legal services (mainly to SSO)	0.320	0.333	0.346	0.360	0.374	0.389
c) Labour and remuneration costs*	5.294	5.883	6.190	6.363	6.618	6.883
d) Office & administration costs	0.942	0.979	1.018	1.059	1.101	1.145
e) Other recurrent expenditure	0.797	0.823	0.862	0.897	0.932	0.967
<u>TOTAL RECURRENT:</u>	8.233	8.927	9.206	9.500	9.879	10.272
<u>TOTAL OPERATING EXPENDITURE:</u>	9.868	9.350	9.731	9.526	10.406	10.300
CAPITAL EXPENDITURE:						
a) Desktop IT hardware/software replacement	0.112	0.094	0.135	0.090	0.120	0.135
b) IS Software replacements – see notes**	0.000	0.000	0.000	0.000	0.000	0.000
<u>TOTAL CAPITAL:</u>	0.112	0.094	0.135	0.090	0.120	0.135
TOTAL EXPENDITURE:	9.980	9.444	9.866	9.616	10.526	10.435
SOURCE OF FUNDS:						
a) Estimated licensing revenue		3.426	2.714	3.523	4.096	4.203
b) Other minor income		0.09	0.093	0.096	0.100	0.104
c) Indian Ocean Territories service		0.054	0.056	0.058	0.060	0.062
d) Base energy industry levy***		3.548	7.003	5.939	6.270	6.066
e) Adjustment to equalise levy		2.217	-1.238	-0.174	-0.505	-0.301
f) Total levy	5.636	5.765	5.765	5.765	5.765	5.765
g) Carry forward to next year	2.326	2.217	0.979	0.806	0.301	0.000
h) Funds from previous year	0.654	2.326	2.217	0.979	0.806	0.301
<u>AVAIL FUNDS FOR EACH YEAR:</u>		9.444	9.866	9.616	10.526	10.435
*** total levy over the 5 forward years =		28.826	or	5.765	average p.a.	
Fund for employee entitlements:	0.600	0.623	0.648	0.674	0.701	0.729

Notes:

(1) *The above figures include the existing attraction and retention benefit (ARB) allowances for ES technical staff and allow for a 5% vacancy rate during the year.

(2) Proposed 2008-09 levy at \$5.765m is less than 2007-08 levy plus CPI increase at 4%

Financial Plan notes and explanations (continued):

- c) Employee entitlements: there is a need for EnergySafety to set aside funds to cover liabilities associated with its labour force, such as accumulated leave and certain superannuation entitlements. This fund has now been created and the expected accumulation is shown below the "Source of Funds" data, although the amount remaining at any time is dependent on staff retirements etc.

RECURRENT EXPENDITURE

- a) EnergySafety requires corporate services (covering finance, HR and IT/IS) to be provided by DOCEP and the amount shown is the estimated cost, which is escalated in line with inflation. Extra expenditure is required as shown for IT infrastructure maintenance and for maintaining the EIS and GIS applications until they are replaced in 2009-10 as part of the new corporate-wide Compliance Management System (CMS) application during 2009/10. These replacements are being funded by the Government as per earlier (pre-industry funding) plans.
- b) Legal Services are normally provided by State Solicitor's Office and these are charged to EnergySafety at nominal cost.
- c) Labour and remuneration costs include all expenditure associated with permanent, contract and temporary employees, including expected salary increases per the award and all direct on-costs such as superannuation and FBT. The costs associated with recruiting additional staff are not included in this line but under "Special Expenditure Items".
- d) Office and administration costs include all rent and related outgoings associated with EnergySafety's Cannington offices and a minor Inspector's Store nearby, for operational equipment, plus other costs such as energy and communications services charges, various consumables and services etc necessary for operating an office.
- e) "Other recurrent expenditure" covers all other expenses not covered by (a) – (d) above, such as travel, training, printing costs, vehicles etc.

CAPITAL EXPENDITURE

- a) IT hardware and software replacement covers only the routine replacement of desktop PCs and local printers etc. All general DOCEP IT network infrastructure is covered by the Corporate Services charge to EnergySafety.
- b) Information Systems (IS) replacement: EnergySafety's current corporate IS are –
- ❖ the Electrical Inspection System (EIS) which supports the operational work of the Electrical Inspection Branch and collects vital data;
 - ❖ the Gas Inspection System (GIS) which supports the operational work of the Gas Inspection Branch and collects vital data;
 - ❖ the Electrical Licensing Application (ELA) that handles all electrical worker / contractor licensing transactions and records; and
 - ❖ the Gas Licensing Application (GLA) that handles all gas fitter licensing transactions and records.

As stated in (a) above, these systems are currently being replaced and this work should be completed by end of 2009-10.

SOURCE OF FUNDS

- a) Licensing revenue is that derived from electrical worker, electrical contractor, and gas fitter licence fees. The total revenue per year varies on a 5 year cyclical basis, as the electrical worker fees are for a 5 year term and renewals are not equally distributed over the 5 year period. Licence fees may only be set to reflect the cost of administering a licensing system and currently most fees are within 20-10% of full cost, with continued steps being taken to increase fees beyond CPI adjustments, so as to 'close the gap' and reflect full cost recovery. All fees are expected to be at full cost recovery within 5 years (Note: as fee increases are at each government's discretion, future increases have not been factored into the forward years, although the 2008-09 revenue estimate is based on proposed fee increases in line with the CPI).
- b) Other minor income: covers the sale of publications and the like to industry.
- c) Indian Ocean Territories (IOT) services: DOCEP has a service agreement with the Commonwealth's Department of Transport and Regional Services (DOTARS) to provide regulatory services to the IOT as it does on the WA mainland, but at full cost to DOTARS. EnergySafety is providing electricity and gas regulatory services under this agreement and the expected income is as shown.
- d) Base industry levy: this is the "unadjusted" energy industry levy that would be necessary to make up the difference between each year's total expenditure and the sum of the revenues of (a), (b) and (c) above. In other words, it is the raw amount of the levy needed to make EnergySafety fully industry funded.
- e) Adjustment to equalise the levy: the figures at (d) show that over the 5 year period the combination of varying expenditure needs and varying licence revenue is such that it requires considerable variation in the levy itself. This is not desirable from a levy administration perspective, hence the Financial Plan at lines (f), (g) and (h) contains a mechanism that provides for an averaging of the levy over the 5 year forecast period, so as to reduce year-to-year fluctuations (this averaging is carried out on a yearly, rolling basis). The quantity shown at line (e) is the variation from the average levy, which is calculated at the foot of the page and for completeness shown at line (f).
- f) This line shows the actual (or equalised, or averaged) industry levy over the 5 year forecast period. It should be noted that this amount of levy is reasonable when compared with the amounts applied in other jurisdictions, for similar purposes (see section 8.0).
- g) Carry forward to next year: the equalisation scheme referred to in (e) and (f) above necessarily provides excess income in some of the 5 years of the forecast period, and that needs to be allocated for "carry forward". Similarly, in some years the income from the equalised levy and other revenue may be insufficient to cover all expenditure and in this case a temporary credit facility (from the

- Department of Treasury & Finance) will be required. During this forecast period such a facility is not expected to be necessary.
- h) In keeping with (g), this line shows the amount carried forward from the previous year, to allow totals to be calculated. It had been forecast prior to 2007-08 that \$1.243m would be carried forward into 2007/08, however the actual amount was \$2.326m, principally due to increased licensing revenues and reduced expenditure due to staff vacancies.

7.2 Industry levy quantum

The Financial Plan shows the industry levy for 2008/09 is required to be \$5.765m, based on the equalisation scheme (as explained in section 7.1) that allows for fluctuations in revenue from licensing and in various types of expenditures.

The proposed 2008-09 levy at \$5.765m is less than the 2007-08 levy of \$5.636m plus a CPI increase at 4%.

The manner in which the levy of \$5.765m is to be applied across various industry participants is outlined in section 8.

INDUSTRY LEVY STATEMENT

8.0 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. A similar contribution scheme levied on the gas and electrical industries is to be found in other States, e.g. Victoria and Queensland.

The Levy is based on the concept that there should be a contribution from those parties who benefit from the existence, continuous development and enforcement of WA's electricity and gas technical and safety regulatory framework. It is assumed that entities that contribute a portion of the Levy will pass on this cost to its clients. The clients and beneficiaries of the regulatory framework are gas and electricity users generally as well as purchasers of commodities or goods produced using electricity or gas, irrespective of whether they are at home, at recreation or at work in commerce or industry. All these users benefit from safe energy supply systems, safe and efficient energy installations and appliances, safety promotion and related emergency management work.

For 2008/09 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 a total of \$5.765m. This legislation allows the responsible Minister to make a formal determination of the levy for the financial year, for notice of this amount to be published in the Gazette and for Energy Safety to issue notices of assessment accordingly. In accordance with the legislation, all revenue raised from the Levy will be used solely for energy safety related activities.

It should be noted that the proposed \$5.765m levy compares favourably with the levy raised in other States' jurisdictions, although it is difficult to make detailed comparisons as the various regulators' offices have some considerable variation in the scope of their work (e.g. in respect of their detailed functions such as critical infrastructure security, installation inspections, gas heating value regulation etc) and in their types of income (e.g. through electrical equipment approvals).

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 the individual industry participants.

8.1 Apportionment of levy between energy sectors

The proposed 2008/09 Industry Levy of \$5.765m 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 \$3.863m.

The corresponding figure for the Gas Industry will be \$1.902m.

8.2 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. This model was devised after consultation with Industry and was agreed to be fair and equitable. The model is based on the following:

- a) Gas 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 sites⁷. The aggregate may be based on multiple networks.
- b) Electricity 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 2007 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 in these responses, 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 2008/09 to determine the levy contributions for each supplier in that fiscal year.

8.3 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, as in the initial year 2006-07, it is proposed to invoice industry participants at quarterly intervals.

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 time due for payment of that instalment then the whole of the annual levy unpaid becomes due and payable at that time. 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.

⁷ The addition of a minimum of 500 sites for gas suppliers is a variation (since 2007/08) on the original model, based on experience gained through 2006/07.

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APPENDIX 'A'

A brief outline of the 2006/07 year outcomes (the first complete year of the industry funding scheme), for information purposes only

Introduction

EnergySafety is Western Australia's technical and safety regulator for the electricity industry and most of the gas industry.

EnergySafety is a Division of the Department of Consumer and Employment Protection. Albert Koenig was (and currently is) the Executive Director of EnergySafety and has the statutory title Director of Energy Safety.

EnergySafety comprises three Directorates:

1. Gas Directorate (previously Gas & Emergency Management Directorate);
2. Electricity Directorate; and
3. Business Services Directorate.

The Director Gas was (and currently is) Geoff Wood. The position of Director Electricity was held by Arthur Tunnicliffe until December 2006, after which the position remained vacant. The position Director Business Services was held by Vincent Henderson until December 2006, after which it was held by Margaret Allen.

The principal functions of EnergySafety can be summarised as:

- administering electricity and gas technical and safety legislation and providing policy and legislative advice to the Minister and Government;
- setting and enforcing minimum safety standards for electricity and gas networks;
- enforcing natural gas and LP gas quality standards;
- for the purpose of ensuring satisfactory billing of consumers by gas suppliers, administering the regulatory scheme that determines the "higher heating value" of natural gas in distribution systems subject to the commingling (mixing) of gas from different sources;
- providing technical advice and support to the Economic Regulation Authority (ERA) and the Energy Ombudsman;
- at the request of the ERA or Energy Ombudsman, investigating the performance of electricity and gas network operators, particularly in respect of energy supply reliability and quality;
- setting and enforcing minimum safety standards for consumers' electrical and gas installations;
- setting and enforcing safety and energy efficiency standards for consumers' electrical and gas appliances;

- licensing electrical contractors, electrical workers and gas fitters and carrying out accident investigations;
- promoting electricity and gas safety in industry and the community; and
- promoting energy infrastructure security and resilience.

EnergySafety derives most of its statutory functions through the statutory functions of the Director of Energy Safety, an independent statutory office (established 1 January 1995) that is held by the head of EnergySafety. Since its inception in 1995 as part of the first major restructuring of the State's energy utilities, EnergySafety has had a busy corporate life and has seen its functions considerably expanded to include *inter alia* electricity and gas network regulation, energy efficiency regulation, natural gas higher heating value regulation and critical energy infrastructure protection.

As part of these changes, EnergySafety became fully industry funded from 2006-07 following the passing of legislation and the subsequent publishing in the *Government Gazette* of the *Energy Safety Levy Notice 2006* as approved by the Minister during June 2006. This mirrored what other major jurisdictions had also done and 2006/07 was the first financial year under which EnergySafety was fully industry funded.

The following are highlights of the work during 2006-07

Operational work including compliance enforcement activities

Presentations to Autogas installers

EnergySafety conducted a series of industry awareness presentations to autogas installers, to alert them to problems caused by contaminants collecting in the autogas vaporiser of converted motor vehicles, affecting the safe operation of those engines. The presentations enabled EnergySafety to make public the findings of its investigations into the contamination caused by plasticisers being extracted by the autogas from the flexible hose connections, causing some vaporiser/converter deterioration and failures. The presentations provided information to autogas installers on how they can prevent this problem occurring in existing converted vehicles. Appropriate measures will be introduced for all new autogas vehicle installations to prevent these types of contaminants forming.

Promotion of the safe use of gas appliances

EnergySafety, in conjunction with safety promotional initiatives of Alinta, participated in lifestyle shows on commercial television, to promote the safe use of gas appliances. The presentations focused on gas barbecues, particularly those used in alfresco areas. Lifestyle television shows have become popular with people seeking more leisure time and the safety messages prompted many inquiries about the safe use of gas appliances in general.

Audit of Western Power's wood pole management systems

In November 2006 EnergySafety released the outcome of its major compliance audit, commenced in 2005, into Western Power's wood pole management systems, designed to ensure poles are structurally safe for the duty imposed and ongoing service. Many non-compliances were found and EnergySafety is following up with Western Power on the specific issues required to be addressed. EnergySafety considers the remedial

actions triggered by the audit will significantly improve community safety and electricity network performance.

Indian Ocean Territories Inspections

Senior Energy Safety electricity and gas inspection staff carried out an inaugural visit to the Indian Ocean Territories under DOCEP's Service Delivery Agreement (SDA) with the Commonwealth Department of Transport and Regional Services (DOTARS). The purpose of the visit was to meet key stakeholders for Indian Ocean Territories, to advise of Energy Safety's services and to overview compliance with WA technical and safety legislation i.e. licensing of electrical and gas workers, energy efficiency, appliance labelling, appliance approval etc. A program for future inspections was developed. (Note: electricity network safety regulation and gas supply safety regulation are not part of the SDA).

Unprecedented increase in demand for licensing services

The Licensing Office at Energy Safety experienced an unprecedented high volume of electrical and gas licence applications as a result of the sustained high level of industry activity throughout the State, triggering applications from persons of other states and from overseas. This resulted in delays in the processing of electrical and gas licence applications, restorations of expired licences and reapplications for gasfitting permits. Overall, the increase in workload was well managed by staff of the Licensing Office. Electrical and gas workers were also requested, via Energy Bulletins, to avoid unnecessary telephone and email inquiries, as well as to ensure licence payments and notifications of changes of address were made on a timely basis. Many industry operatives assisted the Office in this way, which was appreciated.

Electrical licensing

At 30 June 2007, there were **26,477** electrical workers, **3,346** electrical contractors and **234** in-house licence holders registered.

The Electrical Licensing Board grants licences to eligible electrical operatives and conducts formal disciplinary proceedings against operatives where appropriate.

Members of the Electrical Licensing Board as at 30 June 2007 were:

- Mr K McGill – Chairman
- Mr J Murie – 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 D Retallack – 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
- Ms A Ciffolilli – a residential consumer of electrical services
- Mr D Saunders – nominated by the Director of Energy Safety

The Electrical Licensing Board met **23** times during the year.

Gas licensing

At 30 June 2007, there were **5,800** persons registered for gasfitting work.

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 **3** times during the year.

Energy Safety audits of electrical contractors and air conditioner installers

During the year, Energy Safety electrical inspectors commenced a program of carrying out audits of electrical contractors, air conditioner installers and appliance retailers. The purpose of the audits is to identify departures from legislative requirements, in particular, the *Electricity (Licensing) Regulations 1991* and the *Electricity Act 1945*.

During these audits, electrical inspectors checked for compliance particularly in the following areas:

- Submitting Notices for electrical installing work
- Maintaining a register of electricians
- Supervising electrical apprentices
- Displaying “EC” numbers on advertising material, which includes vehicles
- Displaying energy efficiency labels on appliances

The main area of non-compliance found was the non submission of Notices, particularly by air conditioner installers. Businesses to be audited are selected on a random basis. Electrical contractors or air conditioning installers with a ‘performance history’ are likely to be selected for audit. The audit program uncovered many breaches of legislation which have required further action including warning letters and prosecutions.

Variations and exemptions

The Director of Energy Safety, pursuant to regulation 32(2) of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*, may issue variations and exemptions from requirements in standards, in response to requests from industry.

These variations/exemptions are available for various types of gas installations in Western Australia. The related gas installation must conform to the conditions imposed in the variation/exemption.

During the year 85 such requests for variations or exemptions were received, in respect of requirements for industrial gas appliance installations.

After careful consideration, decisions approving (and in some cases rejecting) the requests were conveyed to applicants during the year.

Prosecutions

The following tables provide summaries of prosecutions finalised during 2006-07:

Summary of prosecution action for breaches of electricity related legislation				
Legislation	Breach	Number of Offences	Fines (\$)	Court Costs (\$)
Electricity Act 1945	Section 33(B)(2)	18	6,400.00	2,484.20
Electricity (Licensing) Regulations 1991	Regulation 19(1)	5	8,000.00 *	2,453.50 *
Electricity (Licensing) Regulations 1991	Regulation 33(1)	2	750.00 *	475.70 *
Electricity (Licensing) Regulations 1991	Regulation 49	13	9,650.00 *	6,192.40 *
Electricity (Licensing) Regulations 1991	Regulation 50(1)	1	1,500.00	475.40 *
Electricity (Licensing) Regulations 1991	Regulation 50A	1	1,000.00	1,000.70
Electricity (Licensing) Regulations 1991	Regulation 52(3)	10	3,500.00 *	1,026.40 *
Electricity (Licensing) Regulations 1991	Regulation 53(2)	1	750.00	475.70
Electricity (Licensing) Regulations 1991	Regulation 63(1)	1	1,000.00	*
Totals		52	32,550.00	14,584.00

* Global Penalty (more than one offence)

Summary of prosecution action for breaches of gas related legislation				
Legislation	Breach	Number of Offences	Fines (\$)	Court Costs (\$)
Gas Standards Act 1972	Section 13A(2)	2	450.00	1,329.15
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	Regulation 8	1	1,600.00 *	475.70 *
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	Regulation 28(2)	7	3,850.00 *	2,803.60 *
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	Regulation 28(3a)(b)	6	*	*
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	Regulation 28(3a)(c)	6	*	*
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	Regulation 38(1)	1	*	*
Totals		23	5,900.00	4,608.45

* Global Penalty (more than one offence)

Major policy work

Amendments to Part VIII of the Electricity Regulations 1947

Part VIII of the *Electricity Regulations 1947* dealing with the supply of electricity to consumers was amended in October 2006. The amendments removed many old regulations made redundant by the electricity reforms of recent years. They also made all operators of electricity supply networks responsible for carrying out inspections of consumers' electrical installations.

Infringement notices

EnergySafety introduced an infringement notice system late in the year to apply to many breaches of legislation that it administers. Infringement notices are a means for more efficient and lower cost compliance enforcement. For example, after an Inspector's Order or Defect Notice has been issued to an electrical contractor or gas fitter, EnergySafety can now decide if the alleged offender will be prosecuted in a Magistrate's Court or an Infringement Notice will be served. The Infringement Notice is much more efficient for low level offences.

New publication "Guidelines for Approval of Type A Gas Appliances"

A booklet to assist manufacturers, retailers, hirers and users who sell, hire or use Type A gas appliances has been published by EnergySafety to explain why the appliances need to be approved. Type A gas appliances are mainly domestic or commercial gas appliances and are required by legislation to be approved. Such approval ensures that the appliances are safe and suitable for use in Western Australia. The booklet also explains the approvals processes that apply.

Standards development work

During the year, EnergySafety played a significant role in the development of Australian Standards, covering subjects such as electrical installations (AS/NZS 3000 Wiring Rules), HV installations including electricity substations, marina electrical installations, gas installations, industrial gas appliances and gas distribution networks.

Committee participation

Aside from major work on several key technical standards committees, EnergySafety was 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 Appliance and Equipment Energy Efficiency Committee (NAEEEC)
 - National Oil Supply Emergency Committee (NOSEC) [Note: since January 2007, the Office of Energy has taken over this function]
- National Standards Councils, Boards and Committees
 - Council of Standards Australia (representing the Government of WA)
 - Electrotechnology Standards Sector Board
 - AG6 Gas Installations
 - AG5 Industrial Gas Appliances

- AG8 Gas Distribution
- AG9 Natural Gas Vehicle Technical Standards
- AG10 Specification for Natural Gas Quality
- AG11 Gas Component & Industrial Equipment Standards Committee
- CH-038 Liquefied Petroleum Gas
- EL1 Wiring Rules and related sub-committees
- EL2 Electrical Appliance Safety
- EL4 Electrical Accessory Safety
- EL11 Electricity Metering
- EL42 Renewable Energy Power Supply Systems
- EL43 High Voltage Electrical Installations
- ME46 Gas Fuel Systems for Vehicle Engines.

Safety statistics: Serious accidents and fatalities

Serious electricity related accidents and fatalities

The following were reported to Energy Safety during the year:

Electric shocks:	929
Serious electricity related accidents ¹ :	22
Fatalities (included in serious electrical accidents):	5

Table 1: Serious electricity related accidents¹ notified per million population

Year	Serious Electricity Related Accidents per Million Population	Five year average
1997-98	14	20
1998-99	21	19
1999-00	15	17
2000-01	11	15
2001-02	12	15
2002-03	16	15
2003-04	16	14
2004-05	23	16
2005-06	15	16
2006-07	10	16

Note: In the above table, some of the numbers of serious electricity related accidents notified per million population differ from the figures given in previous reports on activities. These corrections resulted from a comprehensive review of statistics of serious electricity related accidents notified.

¹ Electrical shock incidents resulting in the person requiring assessment and/or treatment at a medical facility

The serious electrical accident rate for the reporting period was 10 serious accidents per one million population. While this represents a reduction from the previous reporting period, there has been an increase in fatalities. Further safety promotional activities are being planned.

The serious electricity related accidents included five fatalities in which electricity was found to be the cause:

- A tree lopper received a fatal electric shock when carrying out vegetation control work from the bucket of an elevated work platform. His pole mounted chain saw contacted 22,000 volt powerlines.
- An electrical contractor was electrocuted when he mistakenly identified a power circuit cable and isolated the wrong circuit when checking live cable junctions in a roof space.
- A person was electrocuted when working on a 415 volt movable hydraulic restricting machine that was plugged into a 415 volt socket outlet. The active and earth conductors of the flexible supply cable were transposed at the plug-top connections and the metal frame of the machine became live.
- A 14 year old person was electrocuted while dismantling a pedestal fan. He came into contact with exposed live terminals on the fan controller after he plugged the appliance supply cord in to the electricity supply.
- A person was electrocuted by a home made device which was connected to his body. The electricity source applied to his body was derived from an electric arc welder with a measured AC open circuit voltage of 17.2 volts

Gas related incidents and fatalities

The following were reported to EnergySafety during the year:

Incidents:	64
Serious gas related accidents (persons injured):	22
Fatalities:	3

Table 2: Serious gas related accidents notified per million population

Year	Serious Gas Related Accidents per Million Population	Five year average
1997-98	5	7
1998-99	6	6
1999-00	4	6
2000-01	9	6
2001-02	13	7
2002-03	10	8
2003-04	9	9
2004-05	9	10
2005-06	8	10
2006-07	10	9

Note: In the above table, some of the numbers of gas related accidents notified per million population differ from the figures given in previous reports of activities. These corrections resulted from a comprehensive review of statistics of gas related accidents notified.

The gas accident rate for the reporting period was 10 accidents per one million population, an increase over the previous reporting period.

The number of accidents includes three fatalities in which gas may have been the cause:

- A two burner LP Gas camp stove and LP Gas cylinder found under rubble (collapsed roof) after a house fire appeared to have been in use prior to or at the time the fire was initiated. The fire trapped a mother and her two children in the house and they subsequently died.

Corporate Activities

Industry funding for EnergySafety

During 2006-07, EnergySafety was for the first time fully industry funded through a combination of:

- a levy on electricity and gas distributors; and
- revenue from the licensing of electrical contractors, electrical workers and gas fitters.

This scheme came into effect on 1 July 2006, following passage of legislation in the preceding months. This new arrangement is a major improvement as it provides EnergySafety with a stable and predictable funding basis.

Transfer to portfolio of the Minister for Employment Protection

One of the final parts of the “Machinery of Government” initiatives of 2001 took place when EnergySafety and the legislation it administers were transferred from the portfolio of the Minister for Energy to the Minister for Employment Protection. This means that EnergySafety, which handles most of the technical and safety regulation of the State’s energy industry, is now reporting to the same Minister as WorkSafe and Resources Safety. EnergySafety continues to provide technical support to the Energy Ombudsman and the Economic Regulation Authority. As part of the changes, EnergySafety developed and agreed with the Office of Energy (which remains in the portfolio of the Minister for Energy) a Memorandum of Understanding on the administration of certain legislation and other functions which have areas of mutual interest.

New Electrical Licensing Board

A new Electrical Licensing Board was inducted during December 2006. Members are appointed to the Board for a three-year term by the Minister for Energy, following nominations from industry and the community. The structure of the board includes persons who have industry interests and others who have consumer interests. In particular, one board member must be a person representing the interests of residential consumers.

Office relocation for EnergySafety

Early in September 2006, EnergySafety (including the Licensing Office) relocated its Perth-based office from West Leederville to a new location at 303 Sevenoaks Street (corner Grose Ave), Cannington. The transition to this new location was carried out during one weekend and it was business as usual at the start of a new week. Telephone and facsimile numbers remained the same, so the disruption to normal business was minimal.

Financial Outcome

During the 2006-07 financial year, EnergySafety received total revenues of \$8.248m from levy contributions of \$4.481m and licensing revenues of \$3.767m.

Total expenditures were \$5.922m, resulting in a carry forward into 2007-08 of \$2.326m.

It had been forecast prior to 2007-08 that \$1.243m would be carried forward into 2007/08 in order to smooth the annual levy amount (over a rolling 5 year forecast period), however the actual amount was \$2.326m, principally due to increased licensing revenues and reduced expenditure due to staff vacancies.