

Annual Report
2007-08
Operations
Implemented under
the *Gas Act 2000*

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VISION

To provide leadership in gas infrastructure safety and technical standards to ensure the evolving natural gas and LP Gas industry achieves levels of excellence in construction, operations, reliable supply, acceptable public risk and energy efficiency.

The Director of Gas Safety will:

- Ensure that gas infrastructure operations achieve high standards of safety and reliability.
- Coordinate gas fitter competency and technical gas safety standards to ensure safe gas installations.
- Provide advice to the gas industry to achieve best practice in gas safety.
- Develop products and promote consumer understanding of gas safety through education and service to the industry.
- Work with industry stakeholders to ensure the efficient and safe evolution of gas technology for Tasmanian consumers.
- In conjunction with national jurisdictions, work to achieve desired levels of uniformity in the regulation of gas safety technical standards.

We achieve our vision through our values expected from our team at all times.

Excellence

We strive for quality and excellence in our functions.

Accountability

We take responsibility for our actions and decisions.

Integrity

We make decisions on merit, based on facts, logic and due process.

Commitment

We work cooperatively, mentor and support other team members.

OVERVIEW and ADMINISTRATIVE ACTIVITIES

The administration of the Gas Act 2000 has been undertaken by the Gas Standards and Safety Unit of Workplace Standards Tasmania, under the direction of Mr Roy Ormerod, who is the appointed Director of Gas Safety pursuant to section 9(i) of the *Gas Act 2000* and managed by the Manager of Gas Safety, Mr Jeff Eastoe.

The Gas Standards and Safety unit encompasses the Office of the Director of Gas Safety six “Authorised Officers” and two Administrative Officers.

Administrative and policy functions are centralised in Launceston with compliance program capability in each region. Specialist function for appliances is centred in Launceston and supply specialisation in Burnie. The unit operational structure and activities are shown in *Figure 1* below.

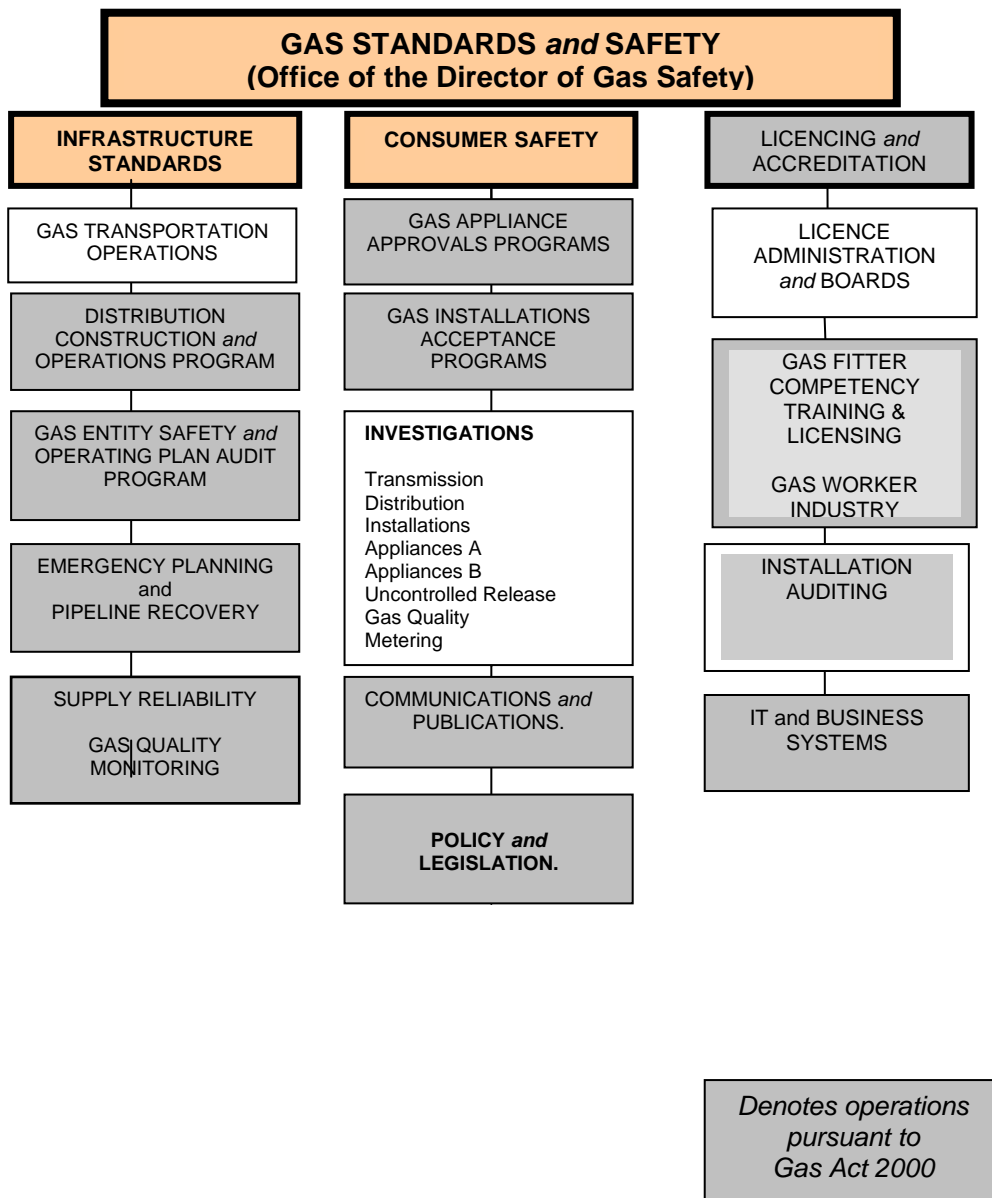


Figure 1

INTRODUCTION

It is satisfying to report that seven natural gas (NG) networks have provide a reliable supply of natural gas to a increasing number of consumers through natural gas distribution facilities operated by Powerco Tasmania Pty Ltd (Powerco).

Natural gas is retailed by licensed gas entities; Aurora Energy Pty Ltd, Country Energy Pty Ltd, Option One Pty Ltd and TRU Energy Pty Ltd to industrial, commercial and retail consumers.

Primary construction of the network gas mains as part of the stage 2A gas development agreement, between Powerco and the Tasmanian government is complete.

The installation of gas “service connections” to supply new consumers is continuing in suburban, commercial and industrial areas, with significant proportion of commercial and industrial uptake.

The continuing service connection program has seen an ongoing demand for the Directors acceptance program for prescribed standard gas installations and complex installation design and commissioning acceptances. *Refer Table 7,pp19.*

Trials of compressed natural gas (CNG) sourced from the Hobart natural gas mains to fuel a private transport operator’s fleet is continuing. Gas compression and storage facility safety standards have been approved to enable this project.

Stakeholder consultation has identified a need for specialised licensing of vehicle mechanics who convert vehicles to CNG fuel for this industry to expand. Planning of a new competency training package by TAFE and licensing by Workplace Standards Tasmania (WST) has commenced through the Occupational Licensing project.

A pleasing outcome of the LP Gas installation acceptance program has been an observed improvement in gas safety standards and compliance. The Gas Act Amendment Bill 2008 which now gives authorised officers similar powers for all fuel gases will require a future diversification of our resources into the LP Gas installation industry in 2009.

Advice and procedures for gas fitters and consumers for the conversion of safety certified appliances from LPG to natural gas is continuing. Entry of additional certifying bodies in Australia will enhance that industries market capability. The modification of gas appliance combustion technology to achieve energy efficiency is increasing significantly.

No serious property damaged or personal injury has occurred from a number of uncontrolled gas escapes from distribution mains. Investigations found a level of low threat from these, gas escapes from distribution infrastructure. *Refer Table 8,* The director has commenced coordination of gas infrastructure risk identification from uncontrolled gas escapes for enhanced emergency management planning.

The Office of the Director of Gas Safety is experiencing continuing service requests and remains the central focus in ensuring safe, gas infrastructure technical standards for the pipelines and gas installations supplying the Tasmanian community.

SUMMARY OF ACHIEVEMENTS

ACTIVITY	FUNCTION	SAFETY OUTCOME
GAS DISTRIBUTION		
Investigated uncontrolled gas incidents and appliance incidents.	Identify causation of incidents and review operational standards.	Prevent reoccurrence of uncontrolled gas incidents, produce safety publications and implement product withdrawal.
Conduct a compliance program for gas service installations.	Ensure safe installation of service connections to domestic commercial and industrial premises.	Maintain intrinsic supply safety and control public risk.
Implement an emergency incident management response plan.	Ensure timely response to any major loss of containment incident or supply emergency.	Manage public risk and minimise interruption to supply.
GAS FITTER Licensing <i>and</i> GAS WORKER Accreditation		
Collaborate with stakeholders to identify required training and skills development for Occupational Licensing.	Ensure that comprehensive standards for training reflect national competency standards.	Ensure that competent persons undertake gas fitting work in the gas industry.
Investigate non compliant gas installation and resultant safety issues.	Issue gas entity, gas fitter and consumer disconnect notices.	Ensure gas licensing and installation safety integrity standards.
GAS APPLIANCES AND INSTALLATIONS		
Develop process for approval of persons to certify high pressure gas installation designs.	Ensure a robust assessment model is implemented.	Minimise the likelihood of inadequate design and testing.
Implement “major” type B gas appliance approval program.	Ensure robust approval and commissioning verification standards for major appliances.	Minimise the likelihood of unsafe appliances.
Identified and collaborated with the training provider, requirements for appliance safety certification training.	Ensure adequacy of gas appliance safety certification.	Improve commercial gas appliance safety standards for the community.
Implement management standards for high pressure gas installations.	Ensure high pressure gas installation quality control and safety standards.	Ensure community safety and continuity of supply to critical infrastructure.
GAS TECHNICAL STANDARDS & WORKING GROUPS		
Review and adopt relevant technical safety standards and codes for gas high pressure installations.	Ensure consistent national standards apply to Tasmanian gas industry.	Maximise the intrinsic safety in the gas industry.

ACTIVITY	FUNCTION	SAFETY OUTCOME
Review national draft technical standards for gas distribution networks	Ensure Tasmanian gas networks comply with amended national standards.	Minimise public risk and maximise consumer reliability.
Review national draft technical standards for type B gas appliances.	Ensure Tasmanian type B gas appliances (including turbines) comply with national standards.	Minimise public risk and maximise consumer reliability and energy supply.
STAKEHOLDER RELATIONS		
Member of the Occupational Licensing Act development committee.	Development of contemporary statutory licensing standards.	Ensure accountability and competency arrangements deliver maximum consumer benefits.
Contribute to national Gas Technical Regulator Committee programs and issues management.	Development of uniform national gas industry technical standards.	Harmonise product and legislative outcomes to national standards.
Member of the Gas Industry Working Committee.	Identify and review evolving Tasmanian industry issues.	Resolve current gas issues to provide safe & reliable consumer natural gas supply.
COMMUNICATIONS & EDUCATION MANAGEMENT		
Administer a gas specific Inter net site and safety publications.	Facilitate access to gas technical standards and consumer safety information.	Maximise the delivery of industry communications products.
STAFF DEVELOPMENT		
Identify continuous professional development, and training opportunity.	Develop contemporary technical and management procedures.	Maintain currency of director of gas safety role and monitoring obligations to Tasmanian gas industry and legislative capability.
BUSINESS ADMINISTRATION		
Administer, review and identify opportunity for business management improvement.	Develop improved business management procedures.	Efficiently administer processes for industry stakeholders.
POLICY DEVELOPMENT		
Develop legislation in conjunction with Dept Infrastructure Energy and Resources.	Introduce amendments to Gas Act.	Enable an adequate regulatory framework for the LP gas industry, powers of inspectors and legal definitions.

Table 1

REVIEW OF OPERATIONS

1.0 GAS DISTRIBUTION

1.1 Natural Gas Rollout

Previously design approved 1000kPa extensions to natural gas networks at Devonport (Wesley Vale) and Bell Bay (Georgetown) have been constructed. Completion of testing and commissioning programs now enables supply to major industrial and commercial consumers who rely on natural gas for their thermal energy needs. Refer to table 2 for new network detail.

1.2 Network Audit

Powerco's gas service connection program is subject to ongoing WST safety standards inspection and internal Powerco audit.

An extensive regional service's audit program detected a number of service installations which required rectification to meet technical and safety standards. A new threat and consequences model has now been introduced by the distribution gas entity to meet required technical standards.

The Director implemented a strict monitoring and audit program for the repair of the Hobart primary steel gas supply main at Rosetta. A reduced maximum allowable operating pressure remains.

1.3 Incident and Accident Reporting

Incident and accident reporting by the distributor has been ongoing with investigations by authorised officers on a incident level and needs basis. There was one incident of third party damage to gas mains causing a level 3 uncontrolled gas escape requiring public evacuation.

Investigations have resulted in modifications to municipal contractors operating standards and procedures and emergency response education.

1.4 Disputes

The director undertook conciliation between the gas entity Powerco and Glenorchy City Council to achieve agreed work standards in the vicinity of gas mains.

1.5 Gas Distribution Standards Development

A staff member attended the national industry forum for the review and amalgamation of Australian Standards AS 1697 *Gas Distribution Networks*, AS 3723 *PE Pipelines* and AS 4645 *Gas Distribution Network Management*.

The final edition of the new Australian Standard, AS 4645 – 2008 *Gas Distribution Networks* is expected to be released in late 2008.

This new standard will be prescribed by the Director pursuant to the Gas (Safety) Regulations 2002 but will not require gas entities to retrospectively comply.

TASMANIAN – LOCATION OF OPERATIONAL NATURAL GAS DISTRIBUTION FACILITIES and ISOLATED LP GAS NETWORKS

NATURAL GAS DISTRIBUTION FACILITY	SUBURB / TOWN RECEIVING GAS SUPPLY	GAS FACILITY, NEW EXTENSIONS COMMISSIONED 2007/08
BURNIE	Brooklyn Downlands Havenview Romaine	Nil
BELL BAY	Bell Bay Industrial Estate	Georgetown (1000 kPa)
DEVONPORT	City East Devonport West Devonport	Devonport Airport, Wesley Vale (1000 kPa)
HOBART	Hobart City Battery Point Bridgewater Derwent Park Gagebrook Glebe Glenorchy Goodwood Lenah Valley Lutana Mt Stuart Moonah Montrose North Hobart Newtown Old Beach Sandy Bay Salamanca West Hobart West Moonah	Nil
LAUNCESTON	Launceston City Mowbray Invermay South Launceston Sandhill Kings Meadows Youngtown Prospect West Launceston	Nil
LONGFORD	Restricted mains access	Nil
WESTBURY	Industrial Connection only	Nil
WYNYARD	Wynyard restricted mains access	Nil
LP Gas ISOLATED GAS FACILITY		
LAUNCESTON Glenara Lakes	LP Gas reticulation	na
ST HELENS Sunhaven Villas	LP Gas Reticulation	na

1.5 Service Connections, Technical Training Standards

An increase in service connections and meter installations has resulted in identified industry skills shortages in Tasmania. The unit has collaborated with TAFE and the distributor to review gas worker training and availability. Additional training needs are now being delivered.

1.6 Gas Installation Approval, Notifications and Procedures

A review of the directors consumer installation “connections process”, has improved the efficiency of the connection procedure.

Almost 100% of new gas services to prescribed standard and complex gas installations are field inspected for compliance.

1.7 Emergency Response Capability

The distributor Powerco Tasmania Pty Ltd response times for control of uncontrolled gas escape incidents has been satisfactory.

The Director has commenced a monitoring project to determine emergency response capability for LP Gas suppliers in Tasmania.

1.8 Distribution Facility Equipment Failure

A small number of low flow leaks, on polyethylene strategic mains, fused coupling joints is being investigated and monitored by the Directors office.

2.0 **GAS INSTALLATIONS**

2.1 Installation Safety Standards > 200kPa

A guide for high pressure gas installation technical standards has been introduced and is in use to manage technical standards on the high pressure installations supplying the Rolls Royce and Mitsubishi gas turbines at the Tamar Valley Power Station at Bell Bay.

High pressure installations are project managed by the director’s office for each stage of design, installation, functionality, testing, pre commissioning and commissioning.

2.2 Gas Installations, Notification and Certification

The Gas Act 2000 installation notification and certification procedures used by gas fitters to certify work compliance is working effectively. Modifications to certification notices to meet new Occupational Licensing work classes will be required.

2.3 Major Gas Appliance, Acceptance Approvals

Implementation of specialised acceptance procedures for major type B gas appliances is complete. Individual certifications by persons approved by the director will be permitted at design, manufacture, strength and leak testing and commissioning stages in accordance with the regulations and to meet the requirements of Australian Standard 3814 Industrial and commercial gas – fired appliances for unique equipment or components.

2.4 Major Industrial Installations

Major industrial installations and appliances have required significant staff resource.

Design acceptance programs, with proponents and their equipment suppliers for the proposed Alinta Energy Pty Ltd (Tamar Valley) Power Station has been ongoing during 2007-08.

Design approval programs for the proposed high pressure installations are expected to be complete in third quarter 2008. Construction and commissioning approvals will be ongoing into second quarter 2009.

2.5 Gas Installation Design Acceptances

Staff completed the design assessment of 194 complex gas installations and 54 prescribed standard installations. All components are assessed for functionality, pressure rating and currency of component safety certification. Testing and commissioning plans are also assessed by the Directors office.

2.6 Prescribed Appliance Standards

The process for high pressure, unique gas component certification standards adopted by the technical regulator is under review by the Director's office through a consultative process with the technical committee of the Australian Standard 3814 *Industrial and commercial gas fired appliances*.

3.0 **GAS RETAILING**

3.1 Emergency Gas Curtailment Planning

Implementation of the Tasmanian Gas Supply Emergency Coordination Plan (TGSECP) to manage Australian mainland and local supply curtailment issues, emergency incidents, industry and public notification protocols has been ongoing. The requirements for natural gas retailers are now embedded in the TGSECP.

3.2 Gas Retailers

Two new gas entities Country Energy and TRU Energy have been licensed as natural gas retailers in Tasmania.

3.3 Gas Retail Supply

A small number of high consumption (above 10TJ) Tasmanian industrial consumers have contracted gas supply commercial arrangements through Victorian retailers. The director is satisfied that current gas quality control arrangements do not create any risk to other Tasmanian consumers through current pipeline transport arrangements.

4.0 **GAS TECHNICAL STANDARDS**

4.1 Technical Standards Development

Development of standards for the Tasmanian gas industry is ongoing. Consultation between WST and industry stakeholders, end users, interstate regulators and gas industry organisations is ongoing to ensure currency, relevance and completeness of Tasmanian standards.

Natural gas industry and regulatory committees involved in the ongoing development of natural gas programs meet through the Gas Industry Working Committee. Stakeholders in the LP Gas industry have expressed a desire to be participative members in a technical committee the director is currently planning.

4.2 LP Gas Standards

Consultation has commenced with LP Gas suppliers and stakeholders on technical and safety standards for gas storage systems and isolated gas distribution networks to coordinate recent legislative amendment contained in the Gas Act Amendment Bill 2008.

4.3 Gas Technical Regulators Committee

Membership of this national committee regularly provides Tasmania with current appliance and gas technical and safety information exchange. Two matters have resulted in product warnings to the Tasmanian public.

The committee is currently coordinating gas appliance national standards and certification scheme developments directed from the Council of Australian Government (COAG) and the Ministerial Council of Energy (MCE).

COMMITTEE	MEMBER ORGANISATIONS	COMMITTEE PURPOSE
Occupational Licensing	Workplace Standards Tasmania (WST), Office of Post Compulsory Education & Training, TAFE School of Gas Fitting.	Development of Occupational Licensing Regulations and implementation of the Occupational Licensing Act.
Gas Industry Working Group (GIWG)	Office of The Energy Regulator; DIER (Office of Energy; Planning and Conservation); WST; TAFE; Dept of Economic Development; Licensed Gas Entities.	Facilitate issue resolution for gas industry and consumer up take. Development of gas policy, codes and standards for the gas industry.
Gas Technical Regulators Committee (GTRC)	All AUS states and New Zealand Gas Technical Regulators.	Development of national gas safety standards and implementation of COAG decisions.
National Gas Emergency Response and Coordination Committee (NGERAC)	Infrastructure Owners, WST, DIER (Office of Energy & Planning), Vencorp, Office of Energy Safety VIC, National Energy Regulator.	A functional committee to coordinate across jurisdiction emergency gas supplies.

GSS work groups- committee functions

Table 3

5.0 GAS APPLIANCES & COMPONENTS

5.1 Appointment of Appliance Certification “External Authorities”

The Director of Gas Safety is currently reviewing an application for a third appliance certification body in Tasmania.

Along with the current applicant and both the Australian Gas Association (AGA) and SAI Global, gas appliance class certification schemes, Tasmania has a comprehensive system of gas appliance “class” certification for mass produced equipment.

The AGA has introduced a separate certification scheme for refurbished appliances where an applicable Australian technical standard is available.

5.2 Appliance and Component Certification Standards

Technical and safety compliance standards for gas appliances and components are periodically reviewed, declared and gazetted by the Director.

WST has reviewed the draft “essential safety requirements for gas appliances” Australian standard. This standard is expected to be published in 2008 by Standards Australia.

The “essential safety requirements” standard will provide a performance based standard to support prescriptive gas appliance safety standards for new and unique appliances with no prescribed safety standard in Australia.

5.3 Gas Appliances - Class and Individual Appliance Certification Schemes

The Director has approved the Australian Gas Association new safety certification services for new non certified individual appliances imported in to Tasmanian.

Progress towards the appointment of “restricted external authorities” to assess existing installed non-approved gas appliances is awaiting the development of a training package by training providers.

Scoping for a training package with TAFE is complete.

Administrative arrangements by the director’s office for certification of appliances and external authorities are similarly complete.

5.4 Products Withdrawn from Market

A model for notification of gas appliance product suspension, and products withdrawn from market is operational.

Information is regularly provided to gasfitters through the Directors web site and gas bulletin.

Two public safety alerts for Tasmanian vehicle owners of LPG fuelled vehicles, warning of unsafe LPG plastic hoses and portable gas cookers explosion hazards have been developed for public release.

5.5 National Gas Appliance Certification Standards

The director is continuing work through the national Gas Technical Regulators Committee to meet the requirements of the Ministerial Council on Energy to

implement an Australian and New Zealand uniform model for gas appliance safety certification by the end of 2009.

This Trans Tasman Mutual Recognition Agreement is anticipated to require Tasmanian legislative amendment to the Gas Act 2000 to accommodate this COAG outcome.

5.6 Prohibition of Sale and Recall of Gas Appliances

The Director of Gas Safety was delegated responsibilities by the Director of Gas pursuant to sec 79A-C for prohibition of supply and recall of unsafe gas appliances. This delegation has enhanced appliance recall processes for the Director of Gas Safety.

5.7 Sale of Gas Appliances

The Director issued an order to a national retailer prohibiting the sale of an un-certified gas appliance in Tasmania. Appropriate procedures were implemented to prevent a reoccurrence nationally.

5.8 Acceptance of type B Gas Appliances

The office completed acceptances for 91 type B gas appliance design and commissioning reviews. Requests for equipment designs and the Directors requests for additional information for the Tamar Valley Power Station commenced in July 2007. Work is continuing to achieve component certification verification to ensure compliance of the gas turbine and gas train components with the prescribed Australian Standards.

5.9 Internet Sales of Gas Appliances

Sale of new non certified products, imported or purchased via the internet continues to be difficult for gas regulators and to administer. Some progress on handling safety matters has been accomplished through one major internet web sales compliance office.

6.0 GAS EMERGENCY MANAGEMENT

6.1 High Pressure Gas Installations

These installations have been identified for auditing to ensure adequacy of gas emergency preparedness and management of operating and maintenance standards.

6.2 Emergency Management Embedded Networks

The development of embedded network policy is under consideration. This is proposed to allow the director to focus on consumer management responsibility for gas emergency planning in multiple consumer managed complexes.

6.3 Tasmanian Gas Supply Emergency Coordination Plan

The Tasmanian Gas Emergency Supply Coordination Plan (TGESCP) has been reviewed after a training exercise by industry participants. The director has implemented Emergency *Supply* Response Management plans and an "availability roster" for after hours response to onshore, interstate or offshore supply incidents.

Planning is continuing on gas consumer recovery planning with distribution entities and the Department of Infrastructure Energy and Resources, Tasmanian Jurisdictional officer.

The TGESCP defines Tasmanian procedures for stakeholders and has now been coordinated with the National Gas Emergency Response and Coordination Plan (NGERAC) for inter jurisdiction emergency supply issues.

6.4 Emergency Incident Coordination

The Director has developed management plans and internal procedures for WST “on shore”, emergency incident response protocols. Emergency *Incident* Response Management plans and staff availability roster for after hours response has been introduced.

6.5 LP Gas Emergency Protocols

The Director’s office has implemented internal emergency communication protocols for Tasmanian based LP Gas suppliers as part of the Directors emergency management planning process.

7.0 STAFF DEVELOPMENT

7.1 Professional Development

Continuous professional development is encouraged by all authorised officers. Staff development and mentoring has been restricted this year by staff resignations. Officers have attended intrastate and interstate specialised gas training, education courses and seminars.

Additional staff training requirements have been identified for:

- major and unique appliance combustion engineering
- unique gas component safety certification standards
- gas appliance energy efficiency and environmental standards
- auditing models for life cycle and reliability management of gas networks
- liquefied natural gas technical and safety standards

Specialised training will be developed or sought to meet expected gas industry and energy efficiency and energy generation requirements.

A review of the regional program capability and role responsibility has been progressed with the appointment of a specialist installations and appliances officer.

The appointment of a supply and reliability specialist is planned for 2008-09. To ensure suitable unit capability in each region to advance succession planning this program is ongoing.

7.2 Type B Appliance, Design Assessment Capability

Ongoing staff training in type B gas appliance, design assessment, combustion engineering, and modulating energy efficiency control systems has been implemented. A southern regional capability is required to continue southern efficiency in the type B appliance acceptance program following a staff resignation.

7.3 Diploma of Government

Gas inspection staff, are undertaking the TAFE, Diploma of Government (Inspection - gas) award program. This program is especially developed to meet the gas industry inspection procedures. One staff member has completed all requirements.

8.0 **DISTRIBUTION “GAS WORKER” TRAINING and ACCREDITATION**

8.1 Gas Distribution Training

There has been limited collaboration with the natural gas distribution industry to ensure that relevant safety standards are adopted into the gas industry, training package.

Development of training programs within the nationally recognised Australian Training Framework has involved TAFE, Powerco Tasmania Pty Ltd and stakeholders.

Delivery of the Gas Distribution, certificate II and III program in its entirety remains a concern for Tasmanian natural gas industry. Significant reliance remains on recruiting scarce experienced operatives.

8.2 National Training Harmonisation

Energy Networks Australia, through COAG is proposing a nationally recognised gas license for gas distribution workers. The director is currently assessing these proposals with other regulators for national recognition.

9.0 GAS FITTER TRAINING and ACCREDITATION

9.1 Gasfitter Licensing

In total 272 gas fitters have certificates of competencies for natural gas, gas fitting, issued by the Director of Industry Safety under the *Workplace Health and Safety Act 1995*. The licensing requirements apply to natural gas, consumer installation gas fitting work, pursuant to the Gas Act 2000. Refer Table 4.

This interim arrangement that will cease when the Occupational Licensing Act 2005, administrative gas regulations are introduced, coordinating natural and LPGas licensing under one legislative instrument.

Work on the development of gas fitting regulations pursuant to the Occupational Licensing Act is ongoing and is scheduled for completion by December 2008.

Licenses Issued for Gasfitter License Category	04/05	05/06	06/07	07/08
Type A gas fitting (natural gas)	28	39	52	31
Type B restricted gas fitting (natural gas)	23	11	4	11
Type B unrestricted gas fitting (natural gas)	4	3	5	-
Examination conducted for type B licenses	na	15	5	13

Table 4

Additional administration processes and IT capability are required to support the administrative procedures for Occupational Licensing of gas fitters.

9.2 Gas Fitter Examinations

Successful completion of TAFE training packages in Type B appliances enables a gasfitter to undertake competency examinations conducted through the director's office.

A continuing alliance is maintained with the Victorian, Plumbing Industry Commission for access to an electronic examination system.

Future Type b gas fitter competency assessment is planned for recognition under the national training package and assessment by registered training organisations.

9.3 Gas Fitting, Work Certification Monitoring

A management database for recording all gas fitting certifications is maintained. Work on developing interpretative and administrative systems for monitoring the performance of licensed gas fitters is ongoing to meet administrative requirements for self certified standard gas installations.

10.0 COMMUNICATIONS AND GAS SAFETY EDUCATION

Emphasis is placed on the development of policy and educational information to inform stakeholders of legislative and technical matters. *Table 5* summarises these activities.

COMMUNICATION PRODUCTS

PROGRAM	NEW or MANAGED OUTPUT 2007-08	TARGET AUDIENCE
Gas Standards and Safety "Internet site"	Maintained a "gas safety & technical standards" web site	<ul style="list-style-type: none"> • Gas Consumers • Gas Fitters • Gas Workers • Gas Distributors • Community • Rural landowners • Infrastructure owners
Gas Standards and Safety "Gas Bulletin "	Delivered the 4th Ed of the "Gas Bulletin" advising of prescriptive gas legislation requirements and appliance safety issues	<ul style="list-style-type: none"> • All Licensed Gas Fitters • Gas Distributors • Gas Retailers • Gas Stakeholders
Gas quality curtailment standards	Director's draft guide for Emergency Natural Gas Supply Quality Limits has been released for comment	<ul style="list-style-type: none"> • WST • Director • Distribution entity • Retailers
Emergency response standards	Directors Emergency <i>Incident</i> Management Plan	<ul style="list-style-type: none"> • Staff of the Office of the Director of Gas Safety
Emergency supply management	Directors Emergency <i>Supply</i> Management Plan	<ul style="list-style-type: none"> • Staff of the Office of Gas Safety
Gas safety and technical publications.	Requirements for Gas Installations Operating In Excess of 200kPa	<ul style="list-style-type: none"> • Gas fitters • Consultants • Inspectors
	Requirements for 500kPa Service Connection assessments	<ul style="list-style-type: none"> • Inspectors
	"If You Smell Gas" warning.	<ul style="list-style-type: none"> • Public
Gas Fitter licensing information	Implemented a pro forma for gas fitter experiential log.	<ul style="list-style-type: none"> • Gas Fitters
	Developed guidelines for International trade licensing recognition.	<ul style="list-style-type: none"> • International Gas Fitters • Director

Table 5

11.0 PROGRAM OUTPUTS

11.1 Policy Development and Legislation

Issues identified by the gas industry working group, resulted in a review of the *Gas Act 2000*.

The Gas Amendment Bill 2008 was passed by parliament in March 2008 giving powers to authorised officers for enforcement of LP Gas installation standards, regulation of safety cases and technical standards for isolated gas distribution facilities distributing LP Gas.

The natural gas exemption order for isolated gas networks was rescinded in April 2008.

Department of Infrastructure Energy and Resources and the Director's office are currently developing policy for "embedded gas networks". This policy is designed to allow administration of installation safety, gas quality and consumption metering of commercial supply reliability obligations on multi consumer sites where the gas supply is retailed by an individual property owner or manager.

Significant resources were allocated to the development of gas regulations and training determinations pursuant to the *Occupational Licensing Act 2005*. These regulations will align legislative requirements with the *Gas Act 2000*.

Some delays have occurred in resourcing and coordinating administrative development procedures and identifying specialised gas fitter competency standards against TAFE delivery capability.

11.2 Business Administration, Office of the Director of Gas Safety

Operation and maintenance of administrative systems have been stretched with staff movements and administrative work hours available. Primary outputs are identified in Table 6.

BUSINESS MANAGEMENT SYSTEM	OUTPUTS	REASON
Business Document Control	Administer the document and publications register.	Maintenance of document and publications standards.
Web Development and Management	Review and update the gas web site.	Quality control of public documents.
Certificate of Competency Examinations	Administer applications, licensing, records and databases.	Administer the licensing examination program.
Gasfitter licensing	License assessment and renewal.	Verification of training and license standards.
Gasfitter installations notification database	Gas fitter certification data.	Verify gas fitter certifications of gas installations.
Gas statistical data management systems	Manage statistical collation and operations review	Manage gas resources.
Communications Management System	Internal deliver of relevant and timely publications.	Identification of, safety, training and educational needs and stakeholder expectations.
Staff Training Data Base	Relevant and timely training information and delivery of the Dip of	Maintenance of essential technical and contemporary procedural skills and

BUSINESS MANAGEMENT SYSTEM	OUTPUTS	REASON
	Government. (Inspection – Gas).	knowledge.
Staff competency standards	Implement relevant gas inspection competency standards.	Ensure essential procedural competency against technical standards.
Bi-Monthly Gas Standards & Safety Unit Meetings	Management of business planning.	Gas issue identification, decision making, planning and review.
Gas distribution commissioning and services program	Deliver 3 regional distribution infrastructure, approvals and inspection program.	Control public risk.
Gas installations Acceptance program	Deliver 3 regional installation technical compliance programs.	Consumer safety.
Gas appliance (type A) safety management	Identify and implement unsafe gas appliance notifications.	Consumer safety.
Gas appliance design and installation acceptance (type B)	Deliver 3 regional Type B appliance technical compliance programs.	Consumer safety.
Gas appliance approval (type A) program	Conduct safety approval procedures for appliances and establish national alliances.	Consumer safety.
Accident and incident investigation program.	Respond to risk to supply and public safety on gas transmission, distribution and installations.	Community safety.
Installation disconnections and reconnection procedures.	Deliver timely disconnection orders.	Control unsafe or non compliant gas installations.
Undertake “commercial sensitivity” assessment of gas infrastructure information records.	Deliver timely “Freedom Of Information” requests.	Preserve information confidentiality.
Management Reporting	Deliver management reports, quarterly and annual reports.	Report operations of the Office of the Director of Gas Safety.

Table 6

11.3 Field Operations Gas Inspectorate Unit

11.3.1 Statistical Information

General statistical information on the field operations is attached. Refer to table 7.

11.3.2 Complex Gas Installations Standards

The trend for acceptance of new complex gas installation has reached a plateau in line with natural gas mains construction activity.

LP Gas monitoring and approval programs are expected to increase with the introduction of the Gas Amendment Bill 2008. Monitoring and acceptance programs are expected to be highest in rural and country regions where regulatory activity has been restricted in recent years.

It is pleasing to report from field inspections activity that new gas fitting work and appliance conversions have a high level of technical compliance, to current safety standards.

11.3.3 Multi Residential Installations

A four fold increase has occurred in acceptances of gas installations for prescribed standard installations (multi residential premises) as the natural gas networks now reach into 39 residential suburbs.

One staff member now handles all approvals to enhance uniformity.

FIELD OPERATIONS (Gas program criteria)	07/08	06/07	1/6/05 to 31/5/06	04/05	03/04	02/03
Gas Installations						
<i>Complex Gas Installations Design Accepted.</i>	137	188	169	113	68	27
<i>Complex Gas Installation Design Modification Accepted</i>	57	64	34	na	na	na
<i>Complex Gas Installation Field Assessments</i>	na	211	222	156	114	120
<i>Prescribed Standard gas installation design Accepted.</i>	51	16	1	na	na	na
<i>Prescribed Standard gas installation design modification accepted.</i>	3	nil	na	na	na	na
<i>Prescribed Standard gas installation field inspections.</i>	na	11	na	na	na	na
<i>Standard gas installation disconnection inspections</i>	11	13	na	na	na	na
Gas Appliances						
<i>Type "B" Appliances Designs accepted.</i>	68	73	120	83	44	41
<i>Type "B" Appliance Modifications accepted.</i>	23	14	23	-	-	-
<i>Type "B" field commissioning.</i>	96	111	141	111	83	167
<i>Type A appliance approval by director</i>	1	4	na	na	na	na
Gas Fitter Licensing						
<i>Number of Type A and / or Type B certificate of competency/natural gas issued.</i>	32	59	51	54	12	20
<i>Total Tasmanian certificated natural gas, gasfitters</i>	272	241	180	112	58	na
<i>Total licensed LP Gas fitters</i>	333	na	na	na	na	na
Gas Distribution Mains, Services & Installations						
<i>Gas mains construction / commissioning audits.</i>	4	8	18	147	24	-
<i>Natural gas service installations regional audits</i>	3	1	nil	na	na	na
<i>Natural gas service installation inspections.</i>	276	232	na	na	na	na
<i>Gas mains construction inspections.</i>	44	128	342	na	na	na
<i>Gas transmission receiving station construction audits.</i>	2	0	1	90	28	na

FIELD OPERATIONS (Gas program criteria)	07/08	06/07	1/6/05 to 31/5/06	04/05	03/04	02/03
Gas transmission receiving station inspections.	7	1	6	na	na	na
Gas Disconnection Orders to a gas entity.	3	5	1	na	na	na
Gas distribution incident investigations. (all networks)	4	19	na	na	na	na
Uncontrolled gas leaks investigated. (all networks)	10	9	na	na	na	na
Gas Installation Incident investigation. [LPG & NG]	14	9	na	na	na	na

Table 7

General Statistical Data 2007 - 08 na = not available or applicable.

11.4 Distribution Networks Accidents and Incidents

11.4.1 Gas Networks Incidents

A number of gas networks mains pipeline accidents and incidents have resulted in a loss of containment and gas supply to consumers. No injuries to employees or the public have resulted from these incidents.

A small number of 1050kPa gas mains coupling joints have experienced minor leaks. The distributor is investigating the cause of these incidents. The director is monitoring these engineering assessments to identify the root cause.

The director has required quarterly, mandatory incident reporting with Powerco Tasmania Pty Ltd since January 2008. Incident trend and causation data is becoming available for analysis.

Incidents involving gas leaks from failed components, third party interference, deliberate third party damage, or design or equipment failure are being monitored for causation and level of emergency.

Refer *Table 8*

11.4.2 Infrastructure Construction Records

Incidents with potentially high risk have occurred due to local government construction crew damage as a result of work procedures or inaccurate infrastructure owner's historical 'as built' construction records of the gas infrastructure. Awareness training development is proposed to modify work methods.

The policy of the Director continues to encourage the use of the Dial Before You Dig 1100 service by all infrastructure owners and contractors undertaking civil excavations in the vicinity of gas mains.

The director is facilitating Tasmanian Fire Service cooperation in monitoring the management of uncontrolled gas mains emergency response by the distributor.

11.4.3 Civil Contractor and Land Owner Education

Civil contractor and landowner education to improve gas infrastructure identification, prior to excavating in proximity to live gas mains continues to be a priority. This was part of the exhibition at a successful "Agfest" public safety exhibition.

11.4.4 Mains and Service Connections

The proportion of WST inspections on mains service connections to installed pipeline is high. Mains pipeline construction activity has reduced significantly.

11.4.5 Gas Entity Life Cycle Auditing

Refining of audit models for the life cycle audit of gas networks maintenance management plans and cathodic protection management is continuing.

The director's first five year review of gas entity steel mains operations will commence in second quarter 2009 in accordance with the approved safety and operating plan and technical standards.

Gas Incident Reports

Gas Facility Location	3 rd Quarter level 4 reported gas escapes	4 th Quarter level 4 reported gas escapes	Uncontrolled gas incident Investigated 07/08 (NG)	Installation Incident Investigated 07/08 (NG)	Total Incidents Reported 07/08 (LPG)
Bell Bay	0	0	-	1	-
Burnie	4	1	1	-	-
Devonport	4	5	1	-	-
Hobart	28	31	4	-	2
Launceston	9	7	2	1	1
Longford	1	0	1	-	-
Westbury	0	0	-	-	-
Wynyard	0	0	1	-	-
Other area	0	4	-	-	3
Total	46	44	10	2	6

Table 8

Note: LPG incidents are site specific and not connected to gas facilities.

Conclusions

I am pleased to advise that the Director of Gas Safety has achieved completion of the planned outputs for the Gas Act 2000 operational programs:

- administration
- gas installations
- gas distribution
- gas appliance and components.

This has been achieved in parallel with continuing natural gas and LPG industry initiatives, technology development and major energy generation expansion projects.

Due to staff retention issues, some delays have been experienced in the communications, policy development and investigations programs pursuant to the *Gas Act 2000*.

Ongoing staff development and training and increased role responsibility is required to deliver an enhanced gas inspectorate capability for specialist programs.

Greenhouse issues and commercial demand for control of costs in energy generation are expected to generate an increase of new technology and appliances requiring administrative

and prescriptive gas safety functions. This demand is also recognised and is being addressed through the national gas technical regulators committee.

Demand for new natural gas appliances and gas technology will increase needs to continue legislative development, technical standards development, national uniformity in appliances standards and new appliance certifying models.

Australian government greenhouse policy has a potential to reduce mainland Australia coal fired electricity generation capacity.

Reduced coal fired electricity generation capacity would increase the demand for natural gas in the south east Australian states having a potential to affect Tasmanian natural gas supply, especially at peak demand periods. The Director will monitor national policy and developments likely to affect Tasmanian gas supply.

Council of Australian Government [COAG] through the Ministerial Council of Energy [MCE] is driving national reforms for harmonised legislation in the areas of appliance standards, gas fitter licensing, gas industry skills passports and upstream gas transmission jurisdictional uniformity for technical standards and public safety.

The National Energy Regulator [NER] functions will continue to have effect on Tasmanian gas legislation and administrative operations of the regulators of jurisdictional regulators the gas markets.

Proposed and recent amendments to the *Gas Act 2000* will see a partial refocus of resource towards compliance and performance for the storage and use of gaseous liquids in the LPG, LNG and CNG sectors.

A comprehensive legislative reform package in the gas storage industry is in development to create equal technical and safety standards within all phases of the gas industry. This will be delivery through the *Gas Act 2000* and alignment of the Occupational Licensing Act and Hazardous Substances legislative requirements.

The director also anticipates the development of a LNG processing, transportation, retail supply and vehicle gas fitting industry to evolve in Tasmania due to the increased costs of traditional fuels.

The Directors 2007-2010 three year strategic plan will focus development of gas fitter licensing into one legislative framework with planned administrative efficiencies, removing current administrative duplicity within the gas industry.

Strategic planning has identified anticipated industry, greenhouse and energy developments and increased activity of Council of Australian Government and National Energy Regulatory reforms impacting on the Office of the Director of Gas Safety programs and resources.

Roy Ormerod
DIRECTOR of GAS SAFETY