



**Submission from the Queensland Department of
Mines and Energy and Department of
Employment and Industrial Relations**

**Discussion Paper – Harmonisation of Energy
Supply Industry Technical and Safety
Regulation**

Ministerial Council on Energy
Energy Technical and Safety Leaders Group

20 March 2009

PART A: OVERVIEW OF DEPARTMENTAL SUBMISSION

The Ministerial Council on Energy (MCE) Energy Technical and Safety Leaders Group (the Leaders Group) has developed and released a *Discussion Paper - Harmonisation of Energy Supply Industry Technical and Safety Regulation* (the Discussion Paper) for public comment.

This interdepartmental submission is based on issues raised by the Petroleum and Gas Inspectorate of the Queensland Department of Mines and Energy (DME) who regulates safety for the gas industry and the Electrical Safety Office of Department of Employment and Industrial Relations (DEIR) who regulates electricity safety in Queensland.

The DME and DEIR support in principle a harmonised legislative framework within which State and Territory energy supply industry (ESI) technical and safety legislation will operate. However, the future approach should not compromise the existing standards, nor should it increase the regulatory burden for industry, with no additional benefit being gained.

The Discussion Paper has a distinct electricity focus and throughout general statements are made which do not apply to gas. Both DME and DEIR believe there are differences between gas and electricity and comment is provided separately where necessary, to the proposed regulatory changes in each industry.

The Discussion Paper does not provide substantive evidence that there is a problem with the current State based safety regulation of gas distribution networks and pipelines particularly in regard to Queensland.

Within Queensland, both the workplace health and safety and electrical safety legislation is performance-based and outcomes focussed. These pieces of legislation contain broad over-arching general duties to provide and maintain safety. This approach to regulation has been extensively adopted internationally in modern Occupational Health and Safety (OHS) legislation.

The Departments note that the following three concurrent Government reforms are also occurring at this time:

- the Workplace Relations Ministerial Council (WRMC) Review into Model OHS Laws;
- the ongoing energy market reforms; and
- the Council of Australian Governments' (COAG) decision to introduce a National Licensing System for some occupations (including line workers, cable jointers, electricians and gas fitters).

The Discussion Paper seeks to implement a national regulatory framework with ongoing implications for the technical regulation of the ESI. Therefore MCE needs to ensure that the proposals and findings that come from this Discussion Paper are consistent with, and are aligned as closely as possible to, these other key reforms.

The National OHS Review Final Report, completed on 30 January 2008, recommends an optimal structure and content of a model OHS Act which is expected to be adopted by all jurisdictions. The WRMC released the COAG initiated *National Review into Model OHS Laws: Second Report to WRMC* (the OHS Report) mid February 2009.

The OHS Report proposes uniform OHS legislation that is nationally consistent across sectors to be administered by the States. The Report proposes that a single OHS legislative system should be the foundation for reform in this area. Where separate regulation of OHS is contemplated or proposed to be continued, it is to be demonstrated that it would produce better OHS results than coverage by the nationally implemented model legislation. Even where this may be demonstrated, there is to be an on-going, legislative and administrative inter-relationship between the two frameworks. Such an approach, subject to agreement, could be achieved by a decision of the Council of Australian Governments (COAG).¹ The specific legislation for electrical and gas industries would fall into the later categories and would continue with review to ensure consistency.

The Departments are supportive of the proposed regulatory framework and governance arrangements being consistent with what is proposed in the National OHS Review. The OHS Report does not propose a single national energy safety regulator and in this regard the Discussion Paper is inconsistent with the regulatory model proposed under the OHS Report. For this reason along with others expanded on later, the single national regulator proposal is not supported by either DME or DEIR.

¹ Recommendation 76 of the *National Review into Model OHS Laws: Second Report to WRMC – January 2009*:

Ministers agree that:

- a) in developing and periodically reviewing the model OHS Act, there should be a presumption that separate and specific OHS laws, (including where they form part of an Act that has other purposes) for particular hazards or high risks industries that are within the responsibility of the Ministers, should only continue where they have been objectively justified;
- b) even where that justification is established, there should be an on-going, legislative and administrative inter-relationship between the laws and, if there are different regulators, between those regulators;
- c) as far as possible, the separate legislation should be consistent with the nationally harmonised OHS laws;
- d) where the continuation of the separate legislation is not justified, it should be replaced by the model Act within an agreed timeframe;
- e) where specific provisions are necessary, they should normally be provided by regulations under the model Act relating to matters previously regulated by the separate legislation to be kept to a minimum; and
- f) this approach should be recommended to COAG so that, subject to COAG agreement, it is extended within a reasonable timeframe to other legislation that pertains to OHS but which is within the responsibilities of other Ministers.

Electricity Issues

The Electrical Safety Office (ESO) administers the *Electrical Safety Act 2002* which establishes the legislative framework for electrical safety in Queensland from generation at the power stations to point of use. Energy efficiency and the performance of electrical equipment provisions of the *Electricity Regulation 2006* are also administered under delegation from the DME.

To ensure Queensland homes, workplaces and other environments are electrically safe, the ESO:

- develops and implements a legislative and policy framework for electrical safety;
- delivers inspection and enforcement services;
- approves and registers electrical equipment, electrical systems and energy efficiency labels;
- maintains a licensing regime which ensures only suitably qualified persons perform electrical work and provide electrical services to the public;
- manages accreditation systems under the electrical safety legislation; and
- provides information, education and advisory services to encourage compliance with electrical safety legislation and reduce the risk of death, injury and destruction caused by electricity.

ESO administers the following legislation:

- *Electrical Safety Act 2002*;
 - *Electrical Safety Regulation 2002*; and
 - *Electrical Safety (Codes of Practice) Notice 2002*.

The proposals contained in the MCE Discussion Paper effectively propose the removal of the Energy Distribution Network Operations from the general electrical safety and OHS frameworks. This will create additional, specific regulation for this industry segment. This approach is inconsistent with the National OHS Review, which seeks to minimise specific industry regulation and requires consistency with the proposed generic OHS legislative framework.

DEIR is also strongly opposed to the move to a national regulator as this does not present the best option for government from a regulatory point of view. DEIR contends that a move to a national regulator would involve a range of additional costs, which could be saved by progressing national harmonisation via the existing State and Territory based regulators. Given the level of expertise which is available on a local level, and the synergies that currently exist across industry via the local regulators, DEIR believes that it would be hard to justify the move to a national regulator.

These synergies include the co-location of the electrical network safety regulator with the electrical appliance and electrical contractor and worker safety regulator so that all inter-related segments of the industry are monitored and regulated appropriately and consistently. This is currently the case in Queensland where the DEIR made a conscious decision to centralise all electrical safety functions into the Electrical Safety Office in 2002. This

approach has since been shown to provide improved safety outcomes over other jurisdictions where these functions are splintered. Any move to separate the ESI into a separate regulatory function would be seen by the DEIR to be detrimental to safety.

Local regulators also work more closely with electrical entities on safety taking into account local issues such as environmental, climatic and geographic factors. An example of this is the maintenance of thousands of kilometres of electrical assets supplying Queensland's decentralised regional and rural communities. These lines are supported by thousands of poles being maintained in a variety of climates which presents different challenges to those of centralised urban communities. A national regulator using mandatory standards would result in a one size fits all approach to this type of safety issue.

Given the current environment, DEIR firmly believes that it would be much more cost-effective to pursue national harmonisation via the existing State and Territory regulators.

In regard to mandatory national standards, the Queensland electrical industry has advised it is not in favour of mandated standards, and instead wants national standards that are recognised as a means of compliance (not the only means of compliance). This approach is largely provided for under current Queensland legislation.

A mandatory requirement for an Energy Network Safety System (ENSS) that refers to national standards which are deemed to comply solutions to safety issues is supported. Alternate compliance paths should also be available provided equivalent or better safety outcomes are achieved.

Should mandatory standards be adopted by the new national framework, then Queensland would only support a limited number of mandatory standards relating to critical electrical safety issues including:

- Overhead powerline exclusion zones;
- Overhead powerline ground clearances; and
- High voltage live line work.

Gas Issues

Safety in the petroleum and gas industries is regulated by the *Petroleum and Gas (Production and Safety) Act 2004* and *Petroleum and Gas (Production and Safety) Regulation 2004*. This is undertaken by the Petroleum and Gas Inspectorate of the DME.

The legislation covers naturally produced petroleum and natural gas, fuel gases such as Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG) and related products, and sewage and other bio-gases.

Safety regulation covers a range of industries from production to use along with general safety in the community. Industries covered by the legislation include petroleum exploration and production, petroleum pipelines, gas distribution (including reticulation and gas cylinders), automotive LPG, gas users (from power stations to pottery kilns) and the installation, servicing and use of domestic, commercial and industrial gas devices.

The Petroleum and Gas Inspectorate is responsible for:

- administering the safety and health, measurement and gas quality components of petroleum and gas-related legislation;
- licensing gas work and making approvals and exemptions to maintain safety standards;
- conducting regular audits and inspections of petroleum and gas plant and activities including drilling operations of related sectors;
- investigating accidents and incidents, and providing emergency response capability for petroleum and gas incidents in the general community, and
- delivering education programs to people involved in the gas industry, senior emergency service personnel, TAFE college students and the community.

DME is strongly opposed to a move to a national regulator. From an industry perspective a move to a national regulator may be preferred; however this does not present the best option for government from a regulatory point of view. DME contends that a move to a national regulator would involve a range of additional costs, which could be saved by progressing national harmonisation via the existing State and Territory based regulators. Given the level of expertise which is available on a local level, and the synergies that currently exist across industry via the local regulators, DME believes that it would be hard to justify the move to a national regulator.

These synergies include the regulation of gas installation, gas fitter licensing, appliances certification and upstream petroleum and gas exploration and production so that all inter-related segments of all related industry sectors are monitored and regulated appropriately and consistently. In Queensland these activities are undertaken by DME Petroleum and Gas Inspectorate inspectors who cover more than one industry sector. Moves to split jurisdictional regulation would remove these synergies and create differences in approach between related industry sectors.

Local regulators also work more closely with gas entities on safety issues taking into account local issues such as environmental, climatic and geographic factors. A national regulator using a single regulatory framework would result in a one size fits all solution to this type of safety issue and would not result in a better outcome.

Given the current environment, DME firmly believes that it would be much more cost-effective to maintain existing regulator jurisdictions and separate legislation but pursue national harmonisation in line with model frameworks via the existing State and Territory regulators.

Proposals for a uniform “Energy Network Safety System”, have support in principle but key questions of the detailed requirements of such a system and how compliance is to be achieved remain. In particular with respect to gas Queensland does not currently “approve” such systems and considers reliance solely on third party “certified” audit as inadequate. The ability to undertake inspection, audit and investigation should remain with the local jurisdiction.

More detailed comments in response to the specific issues and questions highlighted in the Discussion Paper are contained in Part B.

For the reasons contained above, DME and DEIR believe that should the MCE wish to continue to pursue a separate regulatory model, MCE should refer the proposals contained in any Draft Harmonisation Plan to COAG as a business case for an industry-specific OHS system. This should be done prior to proposing a National Regulation Impact Statement (RIS). DME and DEIR also believe that any proposals contained in the Draft Harmonisation Plan should be aligned as closely as possible to the National OHS System, as contained within the OHS Report.

PART B: RESPONSE TO SPECIFIC ISSUES RAISED IN THE MCE DISCUSSION PAPER

General Issues/Background

While the Discussion Paper puts forward options on the harmonisation of the safety regulation of the energy supply industries including gas, the Discussion Paper has a distinct electricity focus. It appears that gas is addressed as an aside or add-on in many areas and general statements are made which do not apply to gas.

It is not considered that there is substantive evidence provided that there is a problem with the current State based safety regulation of gas particularly with regard to Queensland.

The Petroleum and Gas Inspectorate of DME currently administers a wide range of petroleum and gas industry sectors and gas use in the community. This enables the Inspectorate to provide a one stop shop of petroleum and gas safety regulation. Removal of some of the industry sectors would create some confusion for stakeholders and create interface issues with the upstream petroleum production and transmission pipelines and also at the downstream end when the distribution network supplies to consumer installations.

If a national regulator model was followed there would also be a significant impact on the inspectorate's ability to regulate the remaining sectors due to the loss of synergies utilising the inspectorate skills and systems which are currently used across all sectors. In addition, Inspectors are currently regionally based providing the ability for localised industry inspection, audit and investigation and emergency response.

Scope

The Discussion Paper mentions electricity generation and 'gas plants'. Gas plants are not defined and it is unclear whether this intended to include upstream on-tenure petroleum and gas processing facilities and/or petroleum and gas refineries. In either case these are outside the scope of pipelines and distribution networks and should not be included.

The Discussion Paper makes little or no mention of LPG reticulation networks of which there are a number in Queensland.

The scope suggests that the harmonisation and nationalisation of gas metering regulation would be included however it is understood that this may be occurring separately as part of national metering agendas.

DEIR is of the view that the scope should apply to network operators only, therefore power generators should be excluded from the scope.

Current arrangements

Corrections to the information provided in Appendix 3 and 4 of the Discussion Paper are provided in Attachments 1 & 2.

Problems

The purported problems outlined in the Discussion Paper in regard to State and Territory differences in practice, regulation and training issues should be separated into gas and electricity industries as the issues and concerns (where they exist) can vary across the industries.

The Discussion Paper raises issues with regard to “limits on workforce mobility”. DME is not aware of any regulatory impingement in the Queensland gas industry. Gas network and transmission pipeline workers are not licensed nor are specific operating procedures prescribed.

With regard to “limits to cross border emergency response” there are no gas issues raised in the Discussion Paper, and at this time, DME is not aware of any regulatory impingement on this issue.

In regard to “regulatory inconsistency and compliance burden” the Discussion Paper makes a number of generalised and unsubstantiated comments such as in paragraph 86 ‘Queensland has some prescriptive and minimal performance based requirements’. This is incorrect as the safety management plan requirements for petroleum and gas are part of risk based safety outcome legislation. Further in paragraph 90 it states ‘However in NSW and Queensland a certificate of compliance from an independent auditor is required.’ This is also incorrect as no third party compliance is required.

Current Arrangements

It should be pointed out that DEIR and DME do not support energy safety regulation to be incorporated into general OH&S legislation. For both electrical safety and petroleum and gas safety regulation, DME and DEIR supports separate State legislation as is currently in place due to the unique hazards and significant energy sources involved in these industries where specialised knowledge is needed to deal with these issues and the lowering of safety standards could be an outcome of the process.

A national mines safety framework is currently being developed by the National Mines Safety Taskforce where harmonised specialised mines legislation is being pursued, not a single national regulator or incorporation under a national regulator.

Legislation

Single national legislation is not supported but harmonisation of current State and Territory legislation should be pursued that is consistent with the model

OH&S framework but allows for specialised legislation to address specific industries or local issues.

States and Territories also need to retain their ability to inspect, audit, investigate and take compliance action against operators, if required.

More information is provided under 'Potential Legislation Implementation' below.

Energy Network Safety System

The key regulatory instrument proposed in the Discussion Paper is the Energy Network Safety System (ENSS), which is consistent with the performance-based safety management systems (also known as 'safety cases' in some jurisdictions) which currently operate in most States and Territories.

DEIR is supportive of the proposed ENSS and its coverage insofar as it is performance-based. A common generic standard covering the management systems of the electricity networks and to facilitate a common ENSS standard for network operators would be beneficial to the electricity industry. A safety management systems approach should:

- be performance-based and allows alternate solutions to "deemed to satisfy" prescriptive standards;
- adopt contemporary risk management principles; and
- be consistent with and aligned to the proposed National OHS framework.

DME supports moves to harmonise safety management system requirements in principle, although the Discussion Paper does not provide substantial evidence that current requirements are inconsistent. The fundamental difference for Queensland is that the existing legislation does not require the safety management system to be approved or 'accepted' upfront. This issue is discussed in more detail under the 'Acceptance/Certification' heading.

Currently, operators of gas pipelines or gas distribution networks in Queensland require a compliant safety management system that address content issues (elements) listed under s675 of the *Petroleum and Gas (Production and Safety) Act 2004*. These elements are consistent with current Australian Standards (AS4801:2001 and AS4804) for safety management plans (SMP). These requirements are generally not prescriptive but are performance based and the plan itself has no prescribed format so that a new SMP document does not have to be made as long as all the elements are addressed.

Additionally, Australian Standards AS2885 and AS4654 also contain safety management plan obligations and the current regulatory requirements complement these. Any move to form a generic standard that covers electricity and gas is seen as unnecessary and would not be beneficial for the gas industry.

Small and Isolated Networks

Electricity Industry

There are a number of isolated grids in Queensland's more rural and regional areas however these are generally operated by Ergon Energy who have comprehensive safety management systems. There is an isolated number of very small (ie 30 connections) network operators, for example on Moreton Island. These very small network operators are not currently required to have a Safety Management System. They are required to ensure their works are electrically safe and comply with AS 3000. DEIR supports these current arrangements continuing.

Electrical entities such as QRail and Comalco may require alternate compliance paths, so DEIR would prefer for this option to remain open to them.

Gas Industry

With respect to gas there are many small or isolated networks in Queensland, particularly LPG networks. Flexibility is already provided in the Queensland legislation [see s675 (2) of the P&G Act] for these small networks.

Small and isolated networks would need to be defined and flexibility in approach is preferred over exemptions.

Issues with respect to "embedded networks" at single premises are currently being considered by DME. It is proposed that the definition of a distribution network would be modified such that the pipe work within the single premise is excluded and dealt with as a particular type of installation, subject to AS5601 'Gas installations' along with some additional emergency response and maintenance requirements.

Mandatory Standards

As the electricity and the gas industries in Queensland are quite dissimilar, each industry prefers a different option as outlined in the Discussion Paper. Within the Queensland electricity industry, Option 2 would be most valuable insofar as it provides for "deemed to comply" standards, provided that there are alternate compliance paths available. The DEIR believes this approach will ensure employers and employees will comply with all appropriate safety and consistency related standards. This will also produce a more positive and beneficial outcome than mandating standards.

Should mandatory standards be adopted by the new national framework then the DEIR would only support a limited number of mandatory standards relating to critical electrical safety issues which could include:

- overhead powerline exclusion zones;
- overhead powerline ground clearances; and
- high voltage live line work.

For the gas industry the current approach of relying on risk based SMP backed up with requirements to follow industry accepted standards is seen to be robust and well accepted. This approach is closest to Option 1. Current standards are mainly performance based and where prescription is provided it has been developed by a whole of stakeholder committee and is widely accepted. Currently AS2885 as a mandatory standard for transmission pipelines under Queensland legislation as pipelines cross State boundaries and so there should be a common approach. Gas distribution networks rarely cross State boundaries and currently AS4645 is a preferred standard under Queensland legislation.

A preferred standard means there is a need to comply with the standard or comply by another means that provides for an equal or lesser risk. If an alternative method is used the person will need to be able to substantiate this requirement [see s7(4)(b) of the *Petroleum and Gas (Production and Safety) Regulation 2004*]. That is, having a risk assessment undertaken by a competent person and providing notice to the Chief Inspector. The Chief Inspector may permit the alternative method to be used, require further information or may require the standard to be followed.

This preferred standard process provides sufficient flexibility to allow for alternative methods to comply within the gas industry although consideration could be made to making this a mandatory standard given it is largely performance based.

Acceptance/Certification

Option 2 currently operates in the Queensland electricity industry where the network operator is required to submit their ENSS and audit report to an independent auditor.

Although Option 2 is currently operational in Queensland, the DEIR would be willing to accept Option 3 (with Option 2 being implemented initially, with Option 1 coming in as an alternative to Option 2 after a period of time).

Currently for Queensland gas networks and pipelines there is an obligation to make, implement and comply with a safety management plan. These plans are not “approved” by the regulator, however, the regulator has the ability to require revision and issue directions. The regulator undertakes inspections and audits to ensure compliance with the plan. One reason this approach has been taken is to limit the liability of Government in approving a safety plan/system.

It could be considered that allowing third party certification also limits that liability but the problem arises as to maintaining the standard of the third party audits as the regulators would still have to audit the auditors. Thus the issue of requiring third party audit as proposed by the Discussion Paper has some merit as an enhancement to regulator review but is not considered as a substitute for regulator involvement.

None of the options proposed is considered ideal and they do not fit with the current approach for gas in Queensland as safety systems are not “approved”. Option 1 could be used to enhance the assurance the regulator requires that the organisation has a compliant safety system particularly if it was required as an up front certification audit before operations commence. However, DME considers that the regulator should always have the right, and should undertake, inspection, audit and investigation as it sees fit.

The Discussion Paper makes no reference as to when audits would occur and what they comprise. An audit should have both a desk top study to ensure that the required documentation and systems are present and secondly verification via inspection, interview and review that the organisation is complying with their safety system.

An audit that merely confirms that a system exists and covers the elements required by the standards or regulation has only limited value. What is required is a verification audit which needs to be undertaken on an on going basis. In addition the sampling used in the audit needs to be undertaken across all facets and regions of the organisation. This would mean for an organisation operating in all States verification inspection/audit should occur broadly. The DME as a regulator in one State would not accept any audit that did not comprise verification across activities within that State.

In summary none of the options is supported for the Queensland gas industry as the jurisdictional regulator must retain the ability to inspect and audit at any time. Third party certification audits of safety systems prior to operations commencing are supported. The scope of any third party audits of operations must include verification components that sample all activities across all States.

Central ENSS Register

A central ENSS Register would be required under any national legislation and/or regulator model particularly if systems are to be “approved” up front.

If third party auditors are to be certified these details would need to be included.

The details of any subsequent audits inspections or investigations could also be included. Details of incidents could also be recorded.

Maintenance of this register and access to it will be significant issues if such a register is to be current and effective.

Passport and Licensing

The electricity and gas industries in Queensland have different licensing regimes/requirements for workers in their respective industries.

DEIR agrees that the overall direction needs to be consistent with the COAG Review of the National Licensing System as outlined in the Discussion Paper. Additionally, the concept of a National Energy Skills Passport is supported but only as a supplement to (and not replacement for) the proposed national licensing system.

The retention of a licensing system in the electrical safety industry is an important public interest matter, ensuring the development and maintenance of appropriate competencies and the operation of a consistent tradesperson disciplinary process.

The Queensland electricity industry is currently a participant in a pilot of the passport system where it is being used as a supplement to licensing to guide entities on the transmission and distribution tasks undertaken by workers.

In the Queensland gas industry, gas pipelines and gas distribution network workers are not licensed but work under a safety management plan which requires the person to be competent to undertake the tasks they have to do as part of their work. This is achieved by undertaking a training needs analysis and putting in place a training program. DME does not consider that there is any need to license workers for this type of gas work.

However DME is currently working with Energy Skills Queensland and industry stakeholders with a view to the possible introduction of minimum competency requirements for identified workers types in gas distribution networks. These would be based on national competencies and would provide a minimum competency requirement for all workers. A similar requirement has already been introduced in Queensland for petroleum drilling rig workers. The requirement would provide a minimum competency or entry level and the assessment of skills and training required for a particular role still needs to be assessed under the safety management system. This proposal would allow for greater mobility of workers, particularly as many are contractor based.

Standards Development

The Leaders Group identifies a number of options for the development of standards and other normative documents necessary for the harmonisation of ESI safety and technical regulation.

DEIR's preference is for the National Standards approach, which is similar to the current approach, where national standards are developed by the Energy Networks Association (ENA) and adopted by their members to achieve the safety outcomes prescribed in legislation – an example of this approach is the National Electricity Network Safety (NENS) Code.

However, it is critical to ensure that any standards development process, whether by ENA or Standards Australia, incorporates adequate regulator participation to balance and control industry interests to ensure high safety outcomes are maintained.

From a gas perspective there have been instances on standards committees where industry business imperatives have sought to override safety outcomes. Allowing an industry body (such as ENA or even the MCE leaders group which only has 2 regulators on it) to develop standards raises similar issues and is not supported.

Governance

In Queensland, DEIR administers electricity safety under the Electrical Safety Act 2002. In addition, DEIR administers energy efficiency under delegation from DME. Gas safety and technical regulation is administered by DME.

Advisory/Regulatory Committee

Queensland supports Option 2, which involves having a Regulatory Committee consisting solely of State and Territory regulators. This option would ensure that the regulators who are responsible for safety have oversight and maintain responsibility with clear reporting lines to the MCE. This option also provides industry with a formal avenue for representation to the Committee.

Enforcement and Compliance Bodies (Regulators)

The bodies that regulate energy safety issues across Queensland agree that Option 2 would be most appropriate.

At present there are multiple energy safety regulators across States and Territories and many of the activities of a technical and safety regulator require a local presence. Option 2 maintains the existing multiple jurisdictional regulators operating under new, uniform (or harmonised) legislation. Additionally under this Option, a ministerial agreement would be implemented to ensure that regulators operate in a highly harmonised way.

The Queensland regulators also believe that there should be separate gas and electricity representatives on separate committees or at least subcommittees to ensure there is full representation on the two proposed national management committees.

It is noted that Gas Technical Regulators Committee (GTRC) has a function mainly focussed on the downstream end of gas work and does not have network and pipeline transmission regulator representatives from all States. Under Option 2, GTRC should continue to have a function in relation to consumer and community gas safety issues.

Potential Legislative Implementation

The legislative architecture of energy technical and safety regulation needs to be aligned as closely as possible to the OHS Review and the ongoing COAG

work on the national licensing system. This is supported in line with Option 2 as outlined in the Discussion Paper.

Under Option 2, States and Territories must be able to retain the ability to pass localised regulation to address local issues in support of but consistent with the overarching legislative framework. States and Territories also need to retain their ability to inspect, audit, investigate and take compliance action against operators, as required.

In the Queensland gas industry, regulation of gas distribution network and pipeline transmission is inherently linked to regulation of other gas industry sectors under the *Petroleum and Gas (Production and Safety) Act 2004*. Separating out the legislative framework from these other sectors would lead to differences in approach in dealing with these industries and loss in synergies that the current Petroleum and Gas Inspectorate has in regulating all petroleum and gas safety issues.

Next Steps

While greater harmonisation in technical and safety regulation in the energy supply industry across Australia is generally supported, a number of key issues have been identified in the Discussion Paper which may require resolution and clarification prior to a comprehensive Harmonisation Implementation Plan being developed.

The issues identified include:

- The need to be consistent with Recommendation 76 of the *National Review into Model OHS Laws: Second Report to WRMC*. Any proposals contained in a Draft Harmonisation Plan should be referred to COAG as a business case for an industry-specific OHS system. This should be done prior to proposing a National Regulation Impact Statement (RIS). It is important that any RIS proposed for release with the Draft Harmonisation Plan provides comprehensive analysis of the costs and benefits associated with all proposals and options presented in the Discussion Paper.
- Other national agenda reforms currently taking place such as the national licensing scheme would also need to be considered at the RIS stage as this may place further significant burdens on the existing regulators.
- The failure to elucidate a problem within the gas industry and yet the proposed solutions that would be costly to implement and could have significant impact on the regulation of safety of other gas industry sectors. These impacts have not been identified or considered. There has been insufficient differentiation made between the gas and electricity industries. In particular it is not clear why further harmonisation in the gas sector is required as Australian Standards already apply in this industry.

That all regulators responsible for regulating the electricity and gas industry sectors covered under the model are adequately consulted and actively involved in any future process. The current Leaders Group is industry based with only two regulator participants that is, only one of which represents gas. As previously advised GTRC does not represent all State and Territory regulators of the gas distribution and pipeline transmission networks.

ATTACHMENT 1 Corrections to Appendix 3: Use of Standards, Codes, Guidelines & Polices in Australian Legislation in relation to Energy Network Safety

QUEENSLAND	
<p><u>ELECTRICITY NETWORK LEGISLATION</u></p> <p>DEPARTMENT OF EMPLOYMENT AND INDUSTRIAL RELATIONS</p> <p>The <u>Electrical Safety Act 2002</u></p> <p>The Act and <u>Electrical Safety Regulation 2002</u> set down among other things safety/technical requirements for the works of electrical entities which does reference standards and a number of ENA guidelines.</p> <p>As an alternative it also establishes requirements for <u>safety management plans</u></p> <p>The legislative framework for electrical safety also establishes standards for industry and the public through <u>codes of practice</u>.</p> <p>A code of practice does not specify everything that should or should not be done to meet an electrical safety obligation. However, persons would fail to meet their obligations if they:</p> <ul style="list-style-type: none"> • went against or acted inconsistently with a code of practice, OR • did not adopt a method as safe as, or safer than, the code <p>The <u>Code of Practice for Working Near Exposed Live Parts</u> applies to non network workers such as crane drivers</p> <p>The <u>Code of Practice for Works</u> gives practical advice to electricity entities on ways of ensuring electricity networks are safe.</p> <p>The <u>Code of Practice Electrical Equipment - Rural Industry</u> applies to people whose business or undertaking includes rural industry work.</p>	<p><u>GAS NETWORK AND PIPELINE LEGISLATION</u></p> <p>DEPARTMENT OF MINES AND ENERGY</p> <p><i>Petroleum and Gas (Production and Safety) Act 2004</i></p> <p>Safety of the petroleum and gas pipeline and distribution industries is dealt with by the <i>Petroleum and Gas (Production and Safety) Act 2004</i> and Petroleum and Gas (Production and Safety) Regulation 2004.</p> <p>The <u>legislation</u> covers naturally produced petroleum and natural gas, fuel gases such as LPG, CNG, LNG and related products, and sewage and other bio-gases. It does not cover acetylene, ammonia, petrol, diesel and other 'refined gases or products'.</p> <p>Industries covered by the legislation include petroleum exploration and production, petroleum pipelines, gas distribution (including reticulation and gas cylinders), automotive LPG, gas users (from power stations to pottery kilns) and licensing the installation and servicing of domestic, commercial and industrial gas devices.</p> <p>Pipelines and distribution networks are deemed as operating plant and must have and comply with a safety management plan. the requirements of a safety management plan are detailed in the legislation (largely based on AS4801). The safety management plan is not approved by the regulator but is audited and inspected by the regulator and notices for revision and direction to address non compliance can be issued.</p> <p>Under the legislation, the pipeline Standard AS2885 is a mandatory standard but all other pipeline and gas reticulation standards such as AS4645, are listed as preferred where they are referenced in the legislation.</p>
<p><u>OHS LEGISLATION</u></p> <p>DEPARTMENT OF EMPLOYMENT AND INDUSTRIAL RELATIONS</p> <p><u>Workplace Health and Safety Act 1995</u></p> <p>The Act establishes a framework for preventing or minimising exposure to risk. Under the Act, there are three types of instruments to help persons meet workplace health and safety obligations – regulations, ministerial notices and codes of practice.</p> <p>If a code of practice states a way of managing exposure to a risk, a person discharges the person's workplace health and safety obligation for exposure to the risk only by -</p>	

- adopting and following a stated way that manages exposure to the risk; **OR**
- doing all of the following -
 - adopt and follow another way that gives the same or greater level of protection against the risk;
 - take reasonable precautions; and exercise proper diligence.

ATTACHMENT 2 Corrections to Appendix 4: Safety & Technical Issues with Current Regulatory Arrangements

GAS						
ISSUE	STATE					
	VIC	NSW	QLD	ACT	WA	SA
1. Metering Accuracy	Covered by VENCORP - Victorian Gas Industry Market and System Operations Rules for meter installations at <i>systems points</i> (transmission) and Gas Distribution System Code for metering installations at distribution delivery points.	Covered by National Measurement Act 1960 and NSW Gas Supply (Gas Meters) Regulation 2002. Australian Standard AS4670 – Domestic diaphragm gas meters (up to 12m ³ (air) under development and due for release within approx 6 months.	Measurement scheme required under Chapter 8 of the Petroleum and Gas Measurement falls under Department of Mines and Energy (DME) For pipelines and gas networks - Safety management plan required and compliance with standards such as AS2885 & AS4645 under Petroleum and Gas (Production and Safety) Act 2004 (DME)	Gas: General Gas Metering Code 2000	Gas: EnergySafety	Metering Code established by local economic regulator - ESCOSA. Technical Regulator reviews and audits gas meter replacement program including approval of life extensions.
2. Service and installation rules	Gas Safety Act 1997 and Gas Safety (Gas Installation) Regulations 1999	Covered by NSW Gas Supply (Safety and Network Management) Regulation 2008, which calls up Australian Standards AS4564 – Gas Distribution, AS5601 – Gas Installations and Network Operators own gasfitting rules.		Gas: Utilities Act 2000 - Gas Network Boundary Code 2000	Gas: EnergySafety	This document is prepared and published by the utility and contains a number of aspects that are not safety related
3. Vegetation Management	Gas Safety Act 1997 & Gas Safety (Safety Case) Regulations 1999. Gas Pipeline and Distribution companies also have Environmental Management Plans.	Covered by network operators under their Safety and Operating Plans. Environmental Management Plans are commonly required for licensed transmission pipelines as a licence condition.	Environmental Protection Agency EPA	Gas: Utility Networks (Public Safety) Regulation 2001	Gas: EnergySafety (above ground)	N/A

4. Supply Standards eg 240v	Gas Safety Act 1997 & Gas Safety (Gas Quality) Regulations 2007. Also VENCORP Gas Quality Guideline and Specification for system injection points.	NSW legislation calls up Australian Standards AS4564 – Specification for natural gas and AS4670 – Commercial propane/butane for heating.	Australian standards such as AS4645 & 2885 called up under Petroleum and Gas (Production and Safety) Act 2004 (DME) Prescribed incidents listed in Schedule 2 of Petroleum and Gas (Production and Safety) Regulation 2004 must be reported to Chief Inspector (DME) No licensing required for pipeline and gas network workers; this is left to operators to demonstrate competencies of workers under their Safety Management Plans	Gas: Utilities Act 2000 – Gas Safety & operating Plan Code 2000	Gas: EnergySafety	Gas quality standards are called up in the Gas Act 1997. These provisions are administered by the Technical Regulator
5. Incident notification	Gas Safety Act 1997 and Gas Safety (Safety Case) Regulations 1999 sections 12, 25 & 31	Covered by NSW legislation and DWE Reporting templates.	Regulation 2004 must be reported to Chief Inspector (DME) No licensing required for pipeline and gas network workers; this is left to operators to demonstrate competencies of workers under their Safety Management Plans	Utilities Act 2000 Electricity Safety Act 1971 Gas Safety Act 2000	Gas: EnergySafety	Incident notification legally required to be lodged with the Technical Regulator. The Technical Regulator examines this data for any follow up activity.
6. Licensing of workers	NA - Gas	No licensing required for gas network workers; this is left to network operators under their Safety and Operating Plans and OH&S obligations.	Regulation 2004 must be reported to Chief Inspector (DME) No licensing required for pipeline and gas network workers; this is left to operators to demonstrate competencies of workers under their Safety Management Plans	Construction Occupations (Licensing) Act 2004	Gas: EnergySafety	Gas fitters are licensed by Office of Business and Consumer Affairs.
7. Emergency Management	Gas Safety Act 1997 & Gas Safety Case Regulations 1999 section 21. Also covered by the State Emergency Response Manual???	Covered by Network Operators Safety and Operating Plans, which include testing and auditing of emergency procedures. NSW EUSFAC, NGERAC and NSW Natural Gas Supply Disruption Response Plan are in place to deal with major supply issues.	Safety management plan requirements (s675) under Petroleum and Gas (Production and Safety) Act 2004 (DME) include requirements for emergency equipment, shutdown systems and emergency response procedures	Emergencies Act 2004	Gas: Office of Energy	Technical Regulator is a member of the State emergency management committee. Technical Regulator liaises with energy industry representatives during the course of an emergency, interpreting and feeding relevant information into the State emergency operations centre. Technical Regulator involved in energy rationing events where an energy shortage is beyond the ability of the market to manage.

8. Security of supply	Gas Safety Act 1997 & Gas Safety Case Regulations 1999	Network planning for levels of redundancy vs load groups under own Safety and Operating Plans. NSW Police work closely with the gas sector at local levels on security issues specific to the businesses.	Gas Supply Act 2003 (DME)	Electricity: Utilities Act 2000 – Electricity Distribution (Supply Standards) Code	Gas: EnergySafety / Economic Regulation Authority	The “Safety Case” approach adopted in SA is called a Safety, Reliability, Maintenance and Technical Management Plan (SRMTMP). This plan is required by legislation, and is recommended for approval by the Technical Regulator. The Technical Regulator deals with technical (equipment) factors that drive security and reliability of supply. There is considered to be a synergy in the investigation of equipment failures in terms of safety outcomes and these same failures in terms of the impact on security of supply.
9. LPG - Autogas Mobile (eg caravans) Fixed non-network	Gas Safety Act 1997 & Gas Safety (Safety Case) Regulations 1999. Note ESV is not responsible for Autogas, mobile, road vehicles or marine.		Petroleum and Gas (Production and Safety) Act 2004 (DME) including compliance with Australian standards such as AS5601 & 1596		EnergySafety	