11 May 2009

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235
Via email: submissions@aemc.gov.au

Dear Sir/Madam

REVIEW OF ENERGY MARKET FRAMEWORKS IN LIGHT OF CLIMATE CHANGE POLICIES

The Australian Pipeline Industry Association (APIA) welcomes the opportunity to make a submission to the Australian Energy Market Commission's (AEMC) Review of Energy Market Frameworks in light of Climate Change Policies May Discussion Paper.

APIA supports the view put forward in the AEMC's First Interim Report that existing gas and electricity market frameworks are able to cope with increased convergence and changes that may result from climate change polices such as the Carbon Pollution Reduction Scheme (CPRS) and the Renewable Energy Target (RET). APIA agrees that if the CPRS and the RET result in an increase in gas fired power generation there will be an increased interaction between gas and electricity markets. However, APIA considers that, as gas fired power generation currently comprises less than 12% of Australia's electricity generation, and that only about a third of all gas consumed domestically is used for power generation, other factors will influence the distinct gas and electricity markets more strongly and the potential for inefficiencies from the convergence of gas and electricity markets is low.

APIA also raises concern regarding the ongoing determination to converge gas and electricity infrastructure regulation, often justified by the perceived convergence of the gas and electricity markets. The AEMC has acknowledged that gas and electricity markets are very different in design, and these differences require separate regulatory mechanisms. Clearly, industries should be regulated on the basis that the regulation produces the best outcome for the economy and that industry, rather than on the basis that the regulation is used in another industry.

A more detailed submission is attached.

Yours sincerely

CHERYL CARTWRIGHT
Chief Executive

AEMC REVIEW OF ENERGY MARKET FRAMEWORKS IN LIGHT OF CLIMATE CHANGE POLICIES - MAY DISCUSSION PAPER

1. Introduction

The Australian Pipeline Industry Association (APIA) welcomes the opportunity to provide comment on the Australian Energy Market Commission's (AEMC) May Discussion Paper as part of its Review of Energy Market Frameworks in light of Climate Change Policies.

APIA is the peak national body representing the interests of Australia's transmission pipeline sector. APIA's membership is predominantly involved in high-pressure gas transmission, but also includes companies with broader petroleum and water interests. APIA's members include contractors, transmission pipeline owners, operators, advisers and engineering companies and suppliers of pipeline products and services.

APIA's members own, operate and service the gas transmission pipelines that supply today's gas market and are likely to be the key investors in new pipelines and capacity expansions of existing pipelines that will be needed in order to meet the growing needs of the energy market over the next 20 years and beyond. This investment in transmission pipeline infrastructure will be essential to Australia's economic growth and as part of Australia's strategy for reducing its greenhouse gas emissions.

In this submission APIA will provide brief comment on the AEMC's updated position on the convergence of gas and electricity markets, as outlined in section 3.2.1 of the discussion paper. APIA is working on a more detailed assessment of the challenges involved in the convergence of gas and electricity markets and will provided this to the AEMC in due course.

2. Case for Convergence of Gas and Electricity Markets

In the First Interim Report of the Review, the AEMC put forward the view that the gas and electricity markets were broadly robust enough to limit inefficiencies in the interactions between gas and electricity markets. The AEMC noted that:

"gas and electricity markets, although very different in design, both appeared to facilitate efficient trading and appeared to support efficient development of the respective network infrastructure"

APIA agrees with the AEMC acknowledgement that gas and electricity markets are very different in design, and the increasing **convergence of regulation** of these markets, often justified through the convergence of the markets themselves, is a source of significant concern to APIA.

In relation to the convergence of electricity and gas markets, APIA agrees that the CPRS may lead to an increase in gas fired generation, which will, in turn, lead to an increase in interactions between the two markets.

Natural gas fired generation in Australia currently provides approximately 12% of electricity production[1]. This amount is not insignificant, but is not comparable to the 80% of electricity generated from coal production. It is also not comparable to the 20% of electricity that is likely to be mandated from renewable energy sources in 2020 by the Government's Renewable Energy Target.

Further, only approximately 35% of Australia's current annual total gas consumption is for electricity generation.

It is APIA's view that the magnitude of the interaction between gas and electricity markets is not sufficient in relation to the total size of either market for there to be inefficiencies of major concern.

Finally, APIA again reminds the AEMC that the Victorian energy markets are substantially different from the other energy markets in Australia, particularly gas markets, so that any policy based on the extrapolation of the Victorian situation to the remainder of Australia will almost certainly be inappropriate.

The example provided in the advice to AEMC makes reference to the regulated price limit of the Victorian Spot Market, a market structure that does not exist outside Victoria. Whilst the proposed Short Term Trading Market (STTM) may have some of the characteristics of the Victorian Spot Market, the views presented in section 3.2.1 of the Discussion paper do not necessarily apply to other States.

Perhaps it is a little too soon, in a review of **existing** market frameworks, to discuss the potential inefficiencies in the design of the not-yet-implemented STTM.

3. Reasons Convergence of Gas and Electricity Infrastructure Regulation is not Appropriate

It is APIA's experience that, in pursuing energy market reform, government bodies take the position that convergence, particularly in the regulation of gas and electricity infrastructure, delivers efficiency in all cases and is to be driven forward at every opportunity.

In particular there seems to be a view among policy makers that, as gas and electricity are both provided to residential dwellings by means of distributed infrastructure, they are fundamentally similar industries and the infrastructure should be subject to identical regulation. However, the electricity industry is larger than the gas industry, so it should not be assumed that gas industry infrastructure regulations should be amended to fit a regulatory template based on the electricity industry infrastructure regulations.

Electricity regulatory mechanisms are being inappropriately applied to the gas transmission market. Market structures and processes such as the planned gas Short Term Trading Market (STTM) and

[1] Energy in Australia 2009, ABARE

Gas Statement of Opportunities (GSOO) seek to replicate electricity market structures and procedures in the gas market where no inefficiencies or market failures have been identified in the gas market to justify these policies.

For example, when the initial independent forecast of quantifiable benefits of the STTM is compared against the costs incurred in its implementation to date, it is debatable whether any net benefit will arise. Initiatives that result in a debatable net benefits are not the best use of government or industry resources, and should be set aside in favour of reforms that have clearly identified and agreed benefits

The assumption that gas and electricity infrastructure are fundamentally similar industries is incorrect. While the residential retail interface with the gas and electricity industries may be similar to some extent, at other points in the supply chain the differences between the two industries are very clear.

A simplistic view that favours gas and electricity infrastructure regulatory convergence ignores the reality that the broad energy sector comprises several distinct industries with each component having many unique characteristics and issues. In particular, there are clear differences between the gas and electricity markets and between gas transmission and electricity transmission.

The differences between the gas and electricity industries and infrastructure outlined in Attachment A mean that regulatory convergence will result in inappropriate regulations, and consequently inappropriate and distorted policy outcomes, as a “one size fits all” policy is not appropriate for different industries. **Industries should be regulated on the basis that the regulation produces the best outcome for the economy and that industry, rather than on the basis that the regulation is used in another industry.**

The imposition of inappropriate regulation on the gas infrastructure industry will discourage investment, as, unlike the electricity infrastructure industry, investments in gas infrastructure are underpinned by long term contracts.

There is no evidence or analysis that regulatory convergence of the gas and electricity industries will provide benefits to the industry sectors or the economy.

APIA puts forward the analogy of regulation and management of the transportation sector. Air, road and rail transport ultimately have the same purpose, moving goods and people from A to B. However, they are entirely different industries and, therefore, have different economic and technical regulatory regimes and markets. There is little talk of convergence in this sector. While electricity and gas are both parts of the energy sector, in the same way that air, road and rail are industries in the transport sector with similar businesses and occasional competition, there is sufficient difference in these markets that there are little or no efficiency gains to be made through convergence. Indeed, the imposition of electricity style regulatory mechanisms on the gas market can result in significant inefficiency being introduced to the gas market.

ATTACHMENT A – SOME FUNDAMENTAL DIFFERENCES BETWEEN GAS AND ELECTRICTY MARKETS

The differences between the gas and electricity industry cover virtually all aspects of each market and include:

- Relationship between the two industries - gas is an input into the electricity and as such has more in common with other inputs such as coal, with which it competes, rather than electricity – which is an output.

- Physical differences - gas and gas transmission pipelines have different physical characteristics from electricity and electricity assets. In particular:
    - Storage - pipelines act as major storage vessels for gas.
    - Flow - in a majority of transmission pipelines gas flows in one direction, while in electricity transmission, the electricity moves multi-directionally.
    - Recoverability - the provision of electricity is instantaneous whereas for gas there is a time lag. The ability of electricity to be available when a generation plant comes back on line is almost immediate; this is not the case for gas.
    - Compressibility - gas is physically compressible. This impacts on investment considerations relating to pipeline expansion.

- Location differences – gas transmission pipelines connect naturally occurring gas fields with end users. As such, there is little discretion as to where pipelines are located. However, as electricity is generated rather than extracted, there is greater discretion regarding the location of electricity generation and transmission assets.

- Market operations and arrangements differences – the gas market has a different role and structure from the electricity market.
    - Role of the grid - the role of the electricity grid in the operation of the market is significantly different from the role of gas transmission pipelines. The electricity transmission grid has a key role integrating the electricity market. In contrast, gas transmission pipelines have a lesser integration role as they tend to link individual production regions to market centres over long distances with varying degrees of interconnection.
    - Market dispatch arrangements - gas has less complicated market and dispatch arrangements as gas has more predictable flows and demand due to the contracting regime that exists in gas, the ability to use storage and fewer complex network interactions.

- Investment differences – gas pipeline investment (both greenfield and brownfield) is typically entrepreneurial in nature and is underpinned by commercially negotiated bilateral contracts for pipeline capacity. The commercial contracting approach results in pipeline companies being focused on ensuring new investment is economic and underpinned by emerging and existing contracted demand. Electricity transmission and distribution investment is more likely than gas investment to be driven by planning and regulatory obligations and is less likely to be underpinned by explicit contracts.

- End use markets – gas usage is dominated by power generation, including power generation for the mining sector, and major industrial users such as fertiliser plants and mineral processing plants. In most states, gas is generally an input into electricity production rather than a competing energy source. Electricity usage is much more widely spread across different

geographical and demographic markets. In addition, most gas end use markets have at least a degree of competition with alternative fuels or end user production options.

- Investment Recovery and Stranding
    - recovery of the majority of electricity transmission and distribution investment is achieved by including the investment in interconnected, regulated networks. Recovery of gas transmission investment is often more problematic due to the point-to-point nature of gas assets and the concentration of gas end users. These factors mean that non performing gas transmission investments are more easily identified and stranded. In addition, gas pipelines are also at risk of being stranded due to field depletion or large end-users seeking supplies from alternative fields, moving sites or closing sites;
    - the gas regulatory regime places transmission pipeline companies at the risk of having un-contracted capacity and thereby receiving no revenue.