

13 May 2011

The Chairman Australian Energy Market Commission Level 16, 1 Margaret Street SYDNEY NSW 2000

By email to submissions@aemc.gov.au

Dear Chairman,

AEMC Strategic Priorities Discussion Paper

AGL Energy welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) *Strategic Priorities Discussion Paper*.

As the leading investor in renewable energy and one of the largest energy retailers in Australia, AGL Energy (AGL) is well placed to comment on the *Discussion Paper*. AGL operates across the supply chain and has investments in coal-fired, gas-fired, renewable and embedded electricity generation. AGL is Australia's largest private owner, operator and developer of renewable generation in Australia with 1,073 MW of renewable capacity (at 30 June 2010). AGL is also a significant retailer of energy with over 3 million electricity and gas customers.

AGL congratulates the AEMC on initiating the *Strategic Review* process. The National Electricity Market has delivered significant economic benefits to Australian energy users since it was created over a decade ago. AGL strongly supports the three identified strategic priorities in the *Discussion Paper*. This submission addresses each of these priorities and provides guidance on the areas which AGL believes should be focused on.

A predictable regulatory and market environment for rewarding economically efficient investment

AGL agrees with the AEMC's view that, 'minimising policy uncertainty is an essential prerequisite for efficient investment to meet the investment challenge in the energy sector in ways that minimise costs for consumers'. AGL believes there are a number of ways in which certainty within electricity and gas markets could be enhanced:

• Removal of retail price regulation where competition has been demonstrated to be effective and the introduction of price monitoring. The continued regulation of retail pricing is a barrier to four key macroeconomic objectives: economic growth; innovation; environmental outcomes and new investment. Simshauser and Laochumnanvanit¹ noted that there is a direct correlation between market competition (i.e. churn), available headroom and historical price regulation outcomes. Their study also found that the NSW experience is a critical example where from 2004-2007 inappropriate price regulation essentially paralysed the competitive market, with switching rates as low as 5%. In addition, AGL agrees with the AEMC's comment that "the removal of price caps where competition is effective

¹ AGL Working Paper available at http://www.aglblog.com.au/wp-content/uploads/2011/01/No.20-Domino-Effect1.pdf

will be important for promoting investment in this sector."² AGL believes that the AEMC has a critical role in working with the Ministerial Council on Energy (*MCE*) in developing time frames for the completion of the outstanding reviews of effective competition (including in NSW and Queensland) and continuing to inform the MCE of the real and non-trivial costs associated with the continued regulation of retail prices where competition has been demonstrated to be effective.

- Introduction of a long-term climate change policy framework with a robust emissions trading scheme as its primary policy mechanism. There has been continuing uncertainty in relation to climate change policy since the evaporation of bipartisan support for emissions trading in 2009/10. AGL economists have demonstrated that the costs of this uncertainty by 2020 are likely to be in the order of \$2 billion per annum in relation to power system efficiency³. This analysis has been tested by Frontier Economics who found that while the study's conclusions were valid, the costs were likely to be lower⁴. The AEMC has a significant role to play in highlighting to all policy makers the ongoing costs associated with the lack of bipartisan agreement on climate change policy within Australia.
- Inappropriate recognition of policy change on previous investments. One of the critical issues facing the electricity generation sector relates to the impacts of an emissions trading scheme on the value of coal-fired electricity generators. AGL strongly supports the concept of an "Electricity Sector Adjustment Scheme". Such a scheme was proposed by the three main proposals for emissions trading considered over the past 10 years: the State-based National Emissions Trading Task Force (NETS); the Prime Minister's Task Group on Emissions Trading; and the Carbon Pollution Reduction Scheme. The rationale for such a scheme is clear. Over the past ten years, there have been a number of studies completed by businesses, governments, industry associations and non-government organisations on the impacts of carbon pricing on coal-fired power station asset values. Losses for National Electricity Market generators have been modelled at \$11.0 billion by ACIL Tasman (2011); \$16.7 billion by ACIL Tasman (2008); \$17.5 billion by ROAM (2008); and \$0.1 billion by MMA (2008). Privately owned brown coal generators have been forecast to experience losses of \$7.1 billion, \$7.9 billion and \$2.3 billion in the respective 2008 studies. Based upon these results, it is not surprising that the structural adjustment assistance proposed under the Carbon Pollution Reduction Scheme in 2008 by the Commonwealth Government involved \$7.3 billion in nominal terms.

Simshauser and Nelson recently published a working paper examining the public policy rationale for the provision of structural adjustment assistance to privately-owned coal-fired generators⁵. The study found that there is a clear rationale for the provision of a limited number of free emissions permits within an emissions trading environment for multiple reasons. Most importantly, in the absence of structural adjustment assistance being provided, economic efficiency losses of \$1.6 billion per annum in 2020 and \$8.6 billion in aggregate over the period 2015-2020 would materialise due to higher risk premiums being applied to the financing of all new electricity generation investment. Such an outcome is clearly unacceptable from a policy and welfare perspective. AGL believes that the AEMC has a significant role to play in advising the Commonwealth Government on the rationale for an Electricity Sector Adjustment Scheme, as proposed under the previous Carbon Pollution Reduction Scheme.

• Clarification of responsibilities for renewable energy policies in a Federalist system of government. Energy policy within Australia often suffers due to a lack of coordination between the States and the Commonwealth. This is not unsurprising given our Federalist system of government. However, the AEMC could play a

² AEMC (2011), "Strategic Priorities Discussion Paper" page 38

³ Nelson, T., Kelley, S., Orton, F. and Simshauser, P. (2010), "Delayed carbon policy certainty and electricity prices in Australia", *Economic Papers*, 29(4): 1-20.

⁴ Available at http://www.frontier-economics.com/_library/publications/frontier%20australia%20bulletin%20-%20cost%20of%20carbon%20uncertainty.pdf

⁵ AGL Working Paper available at: http://www.aglblog.com.au/wp-content/uploads/2011/04/No-26-Toxic-Debt-II-FINAL1.pdf

significant role in highlighting through the Ministerial Council on Energy the perverse outcomes that occur when policies are implemented without mutual consideration or coordination. The growth in incentives for small scale solar PV generation in recent years is a crucial example of how uncoordinated policy can lead to perverse policy outcomes. In a recent paper, Nelson, Simshauser and Kelley⁶ highlighted the regressive nature of Feed-in Tariffs and IPART⁷ in its recent draft pricing determination highlighted the problems associated with multiple support mechanisms for solar PV leading to higher overall electricity prices. In this context, AGL believes that renewable energy policy should be the responsibility of the Commonwealth and State Governments should gradually remove support mechanisms such as State-based Feed-in tariffs.

AGL strongly supports the AEMC continuing to work with and inform governments about the implications of policy settings on the energy sector. AGL notes the important role of the AEMC in assessing retail competition as part of the terms of the *Australian Energy Market Agreement* to remove retail price regulation where competition has been found to be effective.

Building the capability and capturing the value of flexible demand

AGL believes that energy efficiency can play a significant role in reducing the impacts on customers associated with increases in electricity and gas prices. The South Australian, New South Wales and Victorian Governments have already implemented a mixture of residential and commercial and industrial energy efficiency schemes and the QLD Government is understood to be considering the merits of implementing a similar scheme. A national approach to energy efficiency policy is likely to provide significant benefits for residential and commercial and industrial consumers of energy. AGL encourages the AEMC to inform the Ministerial Council on Energy and the Commonwealth Government about the benefits of amalgamating these schemes into a single national obligation on energy retailers. At the very least, such an outcome would significantly reduce transactions costs incurred due to different rules and regulations in each State.

AGL notes that one of the issues raised by the *Discussion Paper* relates to the responsiveness of electricity and gas demand to higher prices. AGL has completed a number of research projects on this topic. In particular, a working paper by Simshauser and Downer⁸ examined how the introduction of dynamic pricing would impact on electricity demand (particularly at peak times). The study demonstrated that an 8.2 percentage point improvement in the load curve could be achieved with the introduction of dynamic pricing. The paper's modelling showed that a flattening of the household load curve from 38.5% to 50%, indicated a reduction in unit costs of about \$32/MWh, and if applied unilaterally across the four primary NEM states, a reduction in costs of some \$1.6 billion pa in the household sector alone. The conclusions from this research are clear: the introduction of smart metering and dynamic pricing (with appropriate policies in place to ensure customers in hardship are not adversely affected) should be prioritised by energy policy makers.

One of the critical issues identified by the AEMC's *Discussion Paper* relates to the distinction between regulated and non-regulated activities in the context of demand side participation. AGL is concerned that businesses which operate primarily as regulated network operators are increasingly engaging in activities that are contestable. Where appropriately ring-fenced, this is not likely to create significant concerns. However, it is unclear that regulated income is not being used to fund business development activities in these emerging contestable markets. AGL firmly believes that only contestable businesses should be in contact with customers to provide demand side participation services. Regulated businesses by definition provide a monopoly service and have no need to be in contact with the customer in relation to new products and services. AGL strongly supports the AEMC ensuring that businesses with regulated revenues are appropriately ring-fenced

⁶ AGL Working Paper available at: http://www.aglblog.com.au/wp-content/uploads/2011/04/No-25-FiT-FINAL.pdf

⁷ Available at: www.ipart.nsw.gov.au

⁸ AGL Working paper available at: http://www.aglblog.com.au/wp-content/uploads/2011/03/No.24-Limited-Form-Dynamic-Pricing.pdf

from any activities that require 'involvement' with the customer (as outlined on page 43 of the *Discussion Paper*).

AGL supports the DSP3 review that the AEMC will be undertaking and believes it is critical that smart metering and dynamic pricing be gradually introduced with appropriate customer safeguards in relation to hardship.

Ensuring the transmission framework delivers efficient and timely investment

AGL contends that transmission policy should be set in a way which ensures economic efficiency (including allocative, dynamic and productive efficiency) is maximised while security of electricity supply is maintained. In a previous submission on the original SENE concept, AGL prepared the following principles. They are considered to be consistent with the objectives of the National Electricity Rules and provide for a competitive market.

- 1. Transmission policy should deliver efficient transmission prices which incentivise generation proponents, all other things being equal, to locate their investments as close to load centres as possible.
- 2. All parties that connect to the network, after meeting minimum technical requirements, should benefit from any savings that they can provide to the network and contribute the full cost of any additional costs they create on the network. These costs and benefits should be provided to the connecting parties at the time investments in plant are determined.
- 3. Extensions of transmission networks should be financed solely by the benefiting entities. Only where existing infrastructure is upgraded to the benefit of other participants as well as connecting entities can the costs be appropriately shared across all the benefiting parties. Impacts of additional charges on existing generators should be minimised unless those generators are the proponents of the augmentation.
- 4. The risks and returns of developing infrastructure should be appropriated on the same entities. In other words, policies that ensure economic returns flow to generation proponents and transmission network service providers (TNSPs) for investments made should ensure that the risks of failure are apportioned towards these same entities. The risks apportioned to connecting parties should be identified and agreed at the time of connection
- 5. Electricity customers should not be required to underwrite the development of transmission services as customers do not receive any share of the profits, should the investments generate economic returns. In other words, policy settings should not privatise profits and socialise losses.

In the context of the current transmission debate, AGL strongly supports the AEMC's draft rule determination on *Scale Efficient Network Extensions* (SENE). AGL believes that the determination is consistent with the principles for transmission policy outlined above. Furthermore, AGL notes that the gas industry routinely manages the situation that the SENE concept is seeking to address, that is, a large fuel source with a number of users who are competing with each other to get the fuel to a common location. In that industry, participants jointly arrange the construction of necessary facilities to service their needs without recourse to public subsidy or regulatory intervention. The Draft Rule acts to facilitate such joint investment by ensuring the adequate and transparent information is made available.

In the context of remote generation and transmission policy, AGL strongly believes that if proponents of remote clusters have more cost effective projects (including transmission connection costs) than resources closer to the existing grid, there is no regulatory impediment related to their financing a connection. The actual impediment is likely to relate to the total project costs of renewable resources being developed today being lower than those of the remote clusters. A study carried out by ROAM Consulting for the Clean Energy Council⁹ (of which AGL is a member) suggests that:

⁹ See ROAM Consulting report to Clean Energy Council, *Transmission Congestion and Renewable Generation*, October 2010.

- it is possible to arrange a sufficient quantity of wind farms to meet the 20% RET by 2020 with minimal transmission congestion or significant transmission augmentation; and
- highly concentrated wind development with substantial transmission development to allow export of generation to the NEM does not appear to be the lowest cost way of meeting the RET.

This modelling suggests that in an optimised least-cost scenario, the cost of the transmission required to support wind investments to meet the 20% RET is small. In other words, costs to consumers will be lower with the existing regulatory framework than if a more interventionist approach in relation to transmission is adopted.

AGL supports the review of DNSP planning requested by the MCE. Increased capital expenditure related to network asset replacement and expansion is the single largest component of price increases identified by AGL research into potential electricity prices in NSW and QLD by 2015¹⁰. Accordingly, it is critical that energy policy makers and regulators ensure that capital expenditure on networks is as efficient as possible.

Conclusion

AGL congratulates the AEMC for identifying strategic priorities for Australia's energy markets. The AEMC has a significant role to play as an expert advisor to the Commonwealth Government, the Council of Australian Governments (CoAG) and the Ministerial Council on Energy. In summary, AGL believes that these key issues require urgent attention by energy policy makers:

- the removal of retail price regulation and the introduction of price monitoring where competition is deemed to be effective;
- the introduction of a long-term climate change policy and appropriate carbon pricing framework;
- development of a sound national energy efficiency policy; and
- the phased introduction of smart meters and dynamic pricing with appropriate safeguards for hardship customers.

Should you have any questions in relation to this submission, please contact me at <u>tanelson@agl.com.au</u> or on (02) 9921 2516.

Yours sincerely,

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¹⁰ Simshauser, P., Nelson, T. and Doan, T. (2011a), "The Boomerang Paradox, Part I: how a nation's wealth is creating fuel poverty", *The Electricity Journal*, 24(1): 72-91.