SUBMISSION TO AEMC SCOPING PAPER FOR REVIEW OF ENERGY MARKET FRAMEWORKS IN LIGHT OF CLIMATE CHANGE POLICIES

Aurora Energy Pty Limited

14 November 2008

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We **do not** want this submission to be treated as **confidential**.

Response to the AEMC Scoping Paper for Review of Energy Market Frameworks in light of Climate Change Polices

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Introduction

Aurora Energy Pty Ltd (ABN...) appreciates the opportunity to comment on the *Scoping Paper for the Review of Energy Market Frameworks in light of Climate Change Policies* ("the Review"). Aurora Energy considers the commencement of the Review as a strong signal of intent to industry and the broader community of the Government's commitment to ensure the sound and effective implementation of the Carbon Pollution Reduction Scheme (CPRS) and an expanded Mandatory Renewable Energy Target (MRET).

Aurora Energy

Aurora Energy (Aurora) is a Tasmanian Government-owned electricity distribution and retail company. We were formed in July 1998 pursuant to the Electricity Companies Act and incorporated under the Corporations Law. Aurora Energy also recently secured an agreement on the sale and purchase of the Tamar Valley Power Station.

General comments & key messages

Overall, Aurora endorses the Scoping Paper and the range of issues outlined in the Paper as material concerns to be considered by the Review. However, Aurora has identified areas of the energy market framework that may also be impacted on by the CPRS and RET, that are not considered by the Paper. Aurora notes these areas of omissions as well as providing additional comments on the questions discussed in the Paper. The following are highlighted as key messages:

- that the paper has a primary focus on generation and transmission and minimal consideration is provided to distribution, retail and consumer issues;
- that although there is a general trend across Australia for gas and electricity markets to converge, Tasmania's energy mix is weighted towards electricity end-use and predominantly hydro electric generation;
- that the Regulatory regimes under CPRS and RET should provide incentives for networks to manage line losses;
- that under the new regime there is a high risk faced by retailers in attempting to pass through CPRS related costs; and,
- that Aurora would be supportive of the inclusion in network pricing guidelines of a mechanism that recognises the benefit from the connection of lower emission assets.

Aurora strongly supports the Review being conducted with regard for existing energy market frameworks and the national market objectives. The national market objectives are an appropriate and balanced guiding hand that provides sufficient direction for conducting the Review.

Aurora also notes that the Energy Retailers Association of Australia, the Energy Networks Association and the Energy Supply Association of Australia have provided

submissions to the Review. Aurora provides broad support to the submissions by these three peak organisations that represent Aurora Energy concerns.

Convergence of gas and electricity markets

Aurora notes the general trend in markets and regulatory structures of a convergence of gas and electricity markets. Aurora believes in discussing this as an issue the varying levels of market maturity and energy mixes between jurisdictions should also be considered. Gas market maturity levels differ across jurisdictions and their realisation in national law also differs, e.g. covered vs uncovered gas pipelines.

In addition, there are different energy mixes across jurisdictions such as in Victoria where there is a relatively even balance between the usage of gas and electricity whereas in other jurisdictions the usage of gas is not so prevalent. Aurora considers it relevant that the AEMC consider the convergence of gas and electricity but notes that the Tasmanian gas market is immature, uncovered and has an energy mix decidedly weighted towards a dominant electricity market. In a regulatory context in Tasmania, gas is regarded as a fuel of choice, which highlights the dominance of electricity. Further, gas-fired electricity generation constitutes a small percentage of the Tasmanian generation output.

Aurora considers the nation-wide increases in gas-fired generation, expected as a result of the introduction of CRPS, will likely have a long-term impact on the market's ability to manage gas reserves and introduce an increasingly volatile gas demand profile. This may test cost-allocation mechanisms in the Short-term Trading Market (STTM). Aurora considers the initial impact of greenhouse mitigation strategies on the convergence of gas and electricity markets in this instance to be minor but that it will increase in significance as the requirement for gas generation grows.

There is also a risk that the market will not quickly facilitate a rapid expansion in the introduction and connection of new gas-fired assets. It is likely that more gas generators will be directly connected into the gas distribution and electricity networks as the CPRS ramps up. Energy networks are dependent upon existing infrastructure and location and may only be able to meet the increased demands to connect these new gas based embedded generators into distribution networks if full cost recovery is realised.

Investing to meet reliability standards and increase use of renewables

Aurora believes the risk of intermittent generation impacting on reliability is high. System voltage fluctuations affect customer reliability and supply quality. However, the level and type of generation will determine the degree of complexity. Tasmania has a growing proportion of wind generation, which is a variable and unpredictable generation source. The variability of this generation type makes forecasting generation complex and together with customer load variability means the balancing of the 'generation versus load' equation becomes difficult. Embedded generation being introduced into the distribution network is another variable component entering into the equation with respect to location, size, infrastructure investment and availability. A clear mitigation approach and agreement on planning and operational responsibilities is required to minimise the impact of Climate Change Policy instruments on energy market frameworks.

Aurora suggests that the AEMC should consider the full range of mechanisms available to maintain reliability under the prospect of a greatly increased renewable component in the Market's generation mix, such as ancillary services and capacity payments while being mindful of the potential impact of such measures on network performance, power quality and consumer costs.

Aurora considers that the Review would benefit from a detailed discussion of issues that could come from potential increases in new technologies such as smart meters, smart grids, and increased demand side participation. Smart grids and smart metering are highly likely to effect rapid consumer response to changes in energy markets. Further, the Paper could provide more commentary on the cost impacts on consumers arising from increased investment and other increased energy costs. Consumers are a key part of the energy sector framework and there appears minimal consideration of the potential impacts on consumers and the regulatory mechanisms that offer consumer protection, both price and non-price. Further, there is minimal consideration of the impact of customer participation and interaction with distribution networks.

Operating the system with increased intermittent generation

Aurora's view is that current regulations may not be adequate for dealing with the challenges posed by a major increase in intermittent generation in the NEM. There will be distinct challenges posed to network operations, particularly in relation to network and safety performance.

The likelihood of challenges to system operation resulting from climate change policies is dependant on the scale of the actual schemes, specifically, the price of permits, the level of the cap and the extent of expansion of the MRET scheme. In the early years of the CPRS and MRET schemes there is likely to be a slow increase of intermittent generation and therefore a manageable impact on system operations such as ancillary services. Hence, a focus of the Review should be to examine the risk matrix of the incline of CRPS and MRET growth against the likely increase in intermittent generation. The Review should seek to establish a likely tipping point for current system operations when their capacity to control the system effectively is diminished.

A mitigation strategy that should be considered by the Review is the allocation of research and development funding for understanding the changes to infrastructure to deal with the volumes of embedded generation or more specifically, two-way flows. Moreover, there should be an assessment undertaken of the impact of distributed generation of the performance of energy networks.

Connecting new generators to energy networks

Aurora considers the risk of decision making being skewed due to differences in connection regimes as material, and the magnitude of change required from a mitigation strategy would be high given the difference between systems in Victoria and the rest of Australia. Overall it would be preferable if investment regimes could be better aligned to provide efficient locational signals to generation developers. As a long-term goal, an efficient approach should be sought to align new generation connection with other major gas / electricity system users such as retailers and distributors.

While Aurora supports a coordinated approach to new generation connection, so as to optimise efficiencies and avoid discrepancies, it rejects the concept of centralising control or planning of new connections. As the Scoping Paper notes, the current process for managing new connections has worked reasonably effectively to date and the motivation for change in this matter is minimal.

A preferred mechanism in attempting to mitigate connection delay would be the establishment of embedded generation connection contracts and operating processes that are cognisant of CPRS impacts. Hence, there is a need to ensure that the relationship between network providers and embedded generation owners is clear, as should be the process for application and acceptance of obligations, liabilities, and sanctions. Aurora supports the adoption of a standard connection process for embedded generation installation provided there is consideration of the potential for networks to be capable of accommodating standard connection parameters.

Augmenting networks and managing congestion

Aurora agrees that large increases in renewable and gas investment and (potential) closure of existing high emission stations are likely to relocate generation intensity from traditional generation centres in the Market to new locations. Significant enough relocation of generation would significantly increase congestion on networks built progressively around the current pattern of generation and load intensity. It would be ideal for the Review to consider the cost to networks that comes from increased congestion and network inefficiency resulting from geographical changes in generation and load intensity, including embedded generation development.

Importantly, Aurora believes that in discussing distribution line losses that there be consideration given to providing incentives to networks to better manage their line losses and their impact on greenhouse gas emissions.

Retailing

The fundamental merit of an emissions trading scheme is the price signal it sends to invest in lower emissions technology. It is the clarity of the price signal, independence of the regulatory and institutional arrangements, and operation of an efficient carbon market that will best assist the entire electricity sector through the introduction of the Carbon Pollution Reduction Scheme. However, this presents a material issue to retailers in attempting to recover costs, and is a critical issue for the review to develop. Exacerbating this is that network charges are likely to increase under CPRS. This will be an issue for retailers whose prices are capped and unable to be amended to allow for cost pass-through.

Financing new energy investment

Aurora believes there could be more investigation into network concerns over the capability to recoup costs for network infrastructure that is introduced to facilitate either connection of CPRS/RET assets or infrastructure items with lower carbon footprints. We note that in this instance there is no mention made of any intent to review AER pricing determination guidelines.

Conclusion

In summary, Aurora Energy is supportive of the AEMC review and scope of issues the Commission has proposed for consideration.

Aurora has provided comments on the questions presented by the Commission in its Scoping Paper, and requests that consideration also be provided in the AEMC's examination to the additional issues identified in this response.

Representatives from Aurora Energy are available should you require any further support to this submission.

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