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23 February 2009

Dr John Tamblyn Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Dear John,

#### Review of Energy Market Frameworks in light of Climate Change Policies

Thank you for the opportunity to comment on the AEMC's First Interim Report published on 23 December 2008.

At this stage of AEMO's establishment we are not in a position to comment on all matters in the Report. Nevertheless, there are some matters which are being, or could potentially be, considered within the scope of this Review that are of particular interest to AEMO.

Our key views are:

- That the prioritising process has unduly focused upon "new" energy market issues that have arisen solely in the context of climate change policy. Instead, the new policy pressures are most likely to exacerbate existing deficiencies that will now need greater attention. Examples of these include:
  - Generator locational incentives;
  - Timely and efficient gas and electricity transmission development;
  - Generator market access; and
  - o The efficiency of the financial arrangements.
- That the interim report indicates possible misconceptions about the scope of AEMO's powers and responsibilities within the current market framework and its capacity to manage some of the operational risks and challenges that may arise in the eastern states energy markets.

We have limited our comments to:

- The prioritising process; and
- Part A: Issues relating to the NEM and eastern states gas markets.

Rather than put forward specific options for change as requested, we have confined our comments to discussion of some principles and objectives that could govern the selection and detailed design of any proposed changes, particularly where they could have a significant impact on AEMO and its operations.

If you wish to discuss any of the matters raised in our submission, please do not hesitate to contact me on (03) 9648 8501.

Yours sincerely

**MATT ZEMA** 

Managing Director and Chief Executive Officer

H. Zem

**AEMO Ltd** 

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# AEMC Review of Energy Market Frameworks in light of Climate Change Policies

### **AEMO Response to the AEMC's First Interim Report**

#### 1. Preamble

The issues being addressed in this Review have the potential to impact on a number of AEMO's roles in the eastern states energy markets including:

- Market and system operator for the NEM;
- Operator of the Gas Transmission System and the gas balancing market in Victoria;
- Administrator of the Bulletin Board and the Short Term Trading Market (STTM) for the gas industry;
- · National Transmission Planner; and
- Central provider of Retail Market Services for both the gas and electricity markets.

We anticipate that the existing bodies currently responsible for each of these functions will be making their own submissions in response to the AEMC. As AEMO is still in the early stages of its establishment process, it has neither the resources nor the expert working knowledge to be able to provide comprehensive and well-informed input into this Review at the detailed operational level.

Rather, the primary concern of AEMO at this stage is to focus on those matters that could significantly change AEMO's expected role in the markets, its relationships with all market stakeholder groups and individual participants, and/or its key corporate risks and priorities, particularly in the short term immediately following its initial establishment in July 2009.

This submission therefore focuses on a number of high level issues and concerns identified by AEMO. In addition, please find attached a brief response to each of the summary questions listed in the Report relating to the NEM and the eastern states gas markets.

### 2. Scope of the Review

The AEMC has defined energy market frameworks to include "the Laws, Regulations and Rules governing the national electricity and gas markets, and other laws and regulatory instruments influencing how participants in energy markets behave, including state-based instruments".

Using this definition, even the potential need for relatively minor changes to NEMMCO's operating procedures could be construed as being "within scope" for the purposes of this Review. Given the proposed time limits for the Review, we accept that the AEMC needs

<sup>&</sup>lt;sup>1</sup> AEMC First Interim Report – Page 1

to prioritise the issues and put some practical limits on the scope of the Review in terms of both:

- · The issues it will address; and
- The extent to which it will deal with each of them.

This Review needs to inform policymakers of the risks of any potentially significant adverse impacts of the proposed CPRS and the Expanded Renewable Energy Target (ERET) arrangements on the energy markets, and assure them that we know how those risks can be mitigated or otherwise managed. We would expect policymakers will be particularly concerned with the changes that may be needed to legislation and/or market policy settings now in place.

In our view therefore, ideally this Review should:

- Identify all of the key issues and challenges facing the energy markets in the short to medium term following the introduction of the CPRS and the ERET arrangements;
- Attempt to quantify in broad terms the significance of those issues and the extent to which they have been created by or exacerbated by the introduction of the CPRS and/or the ERET arrangements;
- Determine which of those issues can be resolved satisfactorily and in a timely fashion without resorting to legislative changes and/or changes to current market policy settings; and
- Identify potential legislative and/or policy change options for satisfactorily addressing the remainder.

This approach would enable the AEMC to provide high quality advice to the MCE strictly in accord with its Terms of Reference with due regard to other key market framework issues and concerns that are likely to arise within the same timeframe.

With this in mind, we make the following observations about the criteria employed by the AEMC<sup>2</sup> for prioritising the issues it intends to address within the scope of this Review.

AEMC Criterion	AEMO Comments
The issue or its consequences ar attributable to the CPRS or expanded REI	Very few if any issues can be attributed entirely to the CPRS or ERET. In most cases, the CPRS and/or the ERET merely exposes what is a pre-existing deficiency in the existing market framework, but one which, for whatever reason, there has been insufficient market impetus or justification to address it.
	Even if the AEMC's final report to the MCE only focuses on those issues where the impact of the CPRS and/or the ERET is likely to be substantial, the Review itself needs to consider these issues within the broader policy context and in conjunction with other matters of significance that are likely to arise within the same timeframe.
Changes to energy market frameworks have the potential to make a difference	Policymakers need to know of energy market related issues of significance, if any, that cannot be adequately addressed by changes to the energy market frameworks.
If the issue materialises, there will be significant economic costs	The economic cost of the CPRS and ERET are likely to be considerable, and policymakers have already accepted this. Minimising it is clearly an aim of the National Electricity and National Gas Objectives. However the current market

<sup>&</sup>lt;sup>2</sup> AEMC First Interim Report – Page 8

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AEMC Criterion	AEMO Comments
	frameworks have evolved with multiple purposes, i.e. to maintain an acceptable level of energy supply reliability, preserve and protect the security of key energy infrastructure, promote competition in the competitive sectors of the industry, apply best practice incentive regulation to the monopoly sectors, and promote economic efficiency within the constraints of clearly defined public policy settings.
There is a high probability that the issue will materialise (under a demanding but credible scenario)	Agreed, however the AEMC must be aware of low probability events with a high impact. eg. an emergency event in both the electricity and gas markets concurrently.
The issues might require significant or complex changes to energy market frameworks or create additional risk if they are not addressed quickly	We would expect that the Final Report to the MCE would focus on issues that, in the opinion of the AEMC, need to be addressed by policymakers in the short term to medium term so that there is a high level of assurance that the energy markets can and will continue to function effectively and efficiently and in accord with the Governments' policies and priorities that have long been the drivers of energy market reform in Australia. In the meantime however, there needs to be further investigation of a broader range of potential issues so that the
	AEMC and other market stakeholders can be satisfied that those additional issues are either insignificant or they can be addressed appropriately without legislative changes and/or revised market policy settings from the MCE.

#### 3. Part A: Issues for the Review – NEM and Gas Markets

#### 3.1. Carbon and Renewable Energy Certificate Markets

The AEMC's recognition of the convergence of gas and electricity markets due to the expected growth in gas-fired generation is welcomed. However there will shortly emerge an Australian carbon market which will also be inextricably linked to the energy markets. Similarly the growing market for Renewable Energy Certificates has a linkage with the National Electricity Market. Given the recent releases of the CPRS White Paper and ERET draft legislation, it is timely to identify any opportunities for efficiencies through linkages, before practices in those emerging markets become entrenched.

A simple example of such an opportunity could perhaps be the use of Australian Emissions Units and Renewable Energy Certificates in lieu of financial instruments as collateral for energy markets prudential requirements.

## 3.2. Consistent regulatory settings for the electricity and gas markets

The modelling work undertaken by MMA, ROAM and ACIL indicates a high degree of uncertainty in respect of the amount of new gas fired generation that may be connected to the network by 2020<sup>3</sup>. Whereas it may be quite minimal, other scenarios suggest it could be as much as 8,000 MW, in which case it would treble annual gas consumption for power generation over the 12 year period.

<sup>&</sup>lt;sup>3</sup> AEMC 2008 Survey of Evidence on the Implications of Climate Change Policies for energy Markets – Page 41

The potential implications of this possible outcome for both gas and electricity markets are not well understood. Currently, each of the eastern states gas markets and the NEM operate quite separately from one another and, under the current market framework, this will continue even after the establishment of AEMO.

Even with the existing amount of gas fired generation, the inter-dependencies between the gas and electricity markets in Victoria and South Australia are already quite strong, and this in fact was the major driver for further reform which lead to the introduction of a new, more dynamic and responsive wholesale gas market in Victoria on 1 February 2007.

Arguably, the quite separate and independent market reform processes that have steered the reforms of the eastern states electricity and gas markets have been very effective, and each has evolved as required to both satisfy its own internal needs and facilitate physical and financial interactions with other relevant markets.

Over the next decade, we are likely to see further development of the eastern states gas markets including:

- An expansion in the number of trading hubs for the STTM; and
- Further evolution of the Victorian balancing market to both provide improved pipeline investment signals and facilitate more dynamic and market responsive cross-border gas trading.

There may also be further development of the STTM to increase the range of services it offers thereby generally increasing the opportunities for more efficient short term trading in the market.

The increasing inter-dependency between the electricity and gas markets is already an important consideration in determining the appropriate market policy settings for each of the markets and how they should evolve over time. The advent of the CPRS should be the catalyst for a more detailed investigation of the need to go beyond key market policy settings to include greater harmonisation of the various markets in the detailed rules and procedures which govern their day-to-day operation.

Deficiencies and/or inconsistencies between market arrangements generally become most apparent at times when either one or both markets are under stress and market prices are high. This suggests that the need for improved harmonisation of the various markets will emerge in the areas of:

- Setting market price caps;
- Defining the conditions under which administered prices shall apply and establishing the level of such prices;
- Defining the intervention options for market and system operators that can be applied in operational timeframes and the triggers for invoking such intervention powers; and
- Arrangements across both markets for prioritising involuntary demand curtailment to protect energy systems infrastructure.

In particular, we believe the AEMC, as part of this Review, should attempt to identify a list of key market features for which future reviews of the prevailing regulatory settings and/or administrative procedures should be combined across both gas and electricity markets

Finally, AEMO is also particularly concerned about the following AEMC statement<sup>4</sup>:

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<sup>&</sup>lt;sup>4</sup> AEMC First Interim Report - Page 16

"Some stakeholders noted as an important issue the risks surrounding energy security (electricity and gas supply). As indicated, we expect the establishment of the AEMO to reduce greatly the potential risks associated with greater reliance on gas-fired generation to meet electricity demand.

The AEMO will only be an improvement on the current arrangements if it has an objective to co-optimise the efficient supply of gas and electricity to consumers. This is a critical issue for consideration of the AEMO Board as it prepares to commence its role as energy market operator from 1 July 2009."

AEMO as market operator is obliged to operate within the rules of each market that it operates. As those rules do not contemplate the market operator co-optimising the efficient supply of gas and electricity, then AEMO is unable to function in the way described.

The context of this statement appears to relate to the management of emergencies and system operator intervention. To the extent that intervention arrangements minimise avoidable market disruptions, they presumably contribute towards delivering efficient market outcomes in each of the individual markets. However, this not their primary intent, and neither is there, nor should there be, any explicit obligation on AEMO to cooptimise gas and electricity market outcomes.

AEMO fully endorses the current market framework in this respect. To the extent that it may be desirable to pursue further economic efficiency gains in energy trading between the various eastern states gas markets and the NEM, this can only be addressed via further enhancements to the market designs and/or the network access arrangements, which would then be reflected in the various rules and procedures with which AEMO must comply.

#### 3.3. Energy systems emergency management arrangements

Under the current market framework for the NEM and the eastern states gas markets, the system emergency management arrangements for gas and electricity are fundamentally different.

For the NEM, AEMO will have the primary responsibility for managing electricity emergencies affecting the main power system and restoring the power system and the wholesale spot power market to normal operation as soon as practicable.

Gas emergencies are now addressed in accord with the National Gas Emergency Response Protocol (NGERP) agreed to by all of the eastern states and territories the Commonwealth Government. Under the NGERP, each jurisdiction essentially retains responsibility for managing any such emergency within its own borders and can apply whatever discretionary powers it has under its own jurisdictional laws to do this.

While the establishment of the Bulletin Board and the NGER Advisory Committee (NGERAC) process are designed to provide high quality information to the relevant Governments, each Government retains the right to manage the emergency in whatever way it believes is in the best interests of its constituents. As a member of the NGERAC, AEMO's role will be confined to informing the relevant Governments of the electricity market impacts, if any, caused by the gas emergency. In addition, the MSO Rules for the Victorian gas market will impose quite specific obligations on AEMO to manage gas system emergencies in Victoria.

This summary of the current market framework clearly shows the limitations of AEMO's powers and responsibilities for energy systems emergency management.

#### 3.4. Locational signals and incentives for network access

Within the current market framework, there are at least 5 areas of the current network access arrangements that warrant further attention to appropriately incentivise economically efficient investment in main transmission infrastructure for both the gas and electricity markets. They include:

- Incorporating appropriate locational signals in electricity transmission access charges for generators, both new and old, as these will impact on both new investment and plant retirement decisions;
- Introducing efficient and effective inter-regional transmission access charges for electricity;
- Developing mechanisms to provide market-based incentives that will encourage timely new investment in the Principal Gas Transmission System in Victoria;
- Generally seeking more consistency between the gas and electricity transmission access regimes so as to avoid any systemic bias in future network investment between the two networks; and
- Clarity of volume access rights for NEM generators, so as to provide some long-term certainty to investors.

In conjuction with these enhancements, where appropriate, more locational pricing should be introduced into the electricity spot market for the purpose of driving more efficient dispatch and bidding behaviour.

Even though all of these issues have been well known for some time and have been addressed already to varying degrees, arguably, with the introduction of the CPRS and the ERET, all of them should now be seen as higher priority issues.

## 3.5. Reliability and Emergency Reserve Trader (RERT) arrangements

Under the current rules governing the operation of the Reliability and Emergency reserve Trader (RERT) arrangements, any decision to invoke the RERT powers relies on a probabilistic assessment of the market conditions that will prevail up to some 12 months ahead (i.e. the 9-month contracting period plus a lead in period for planning and decision-making).

AEMO is of the view that the existing timeframes for invoking the RERT in its present form are probably already at the limit of what is practicable and workable without unduly influencing long term market behaviours and investment patterns.

Almost any form of market intervention with a lead time of 12 months or more requires a much more comprehensive assessment of the future market behaviour including an assessment of its willingness to invest to bring new resources on line to meet impending reserve shortages. While greenfields OCGT's may need up to 22 months lead time<sup>5</sup>, demand side capacity and some smaller supply side resource options could potentially be brought on line more quickly than this.

Therefore we support the AEMC's current thinking which appears to be to retain the RERT arrangements in their current form and not extend the timeframe for longer term application as was suggested by MMA<sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> AEMC First Interim Report – Page 19

<sup>&</sup>lt;sup>6</sup> MMA Report "An Initial Survey of Market Issues Arising from the Carbon Pollution Reduction Scheme and Renewable Energy Target" 16 December 2008 – Page 11

AEMO has not as yet formed a view as to whether or not an additional, longer term intervention mechanism is needed to supplement the current RERT arrangements. If the AEMC decides to recommend such a mechanism, then we urge the AEMC to give due regard to the following:

- The AEMC would need to give very careful consideration to the proposed governance arrangements for such a mechanism. It should not simply assume that the AEMO Board would be the appropriate decision-making body to activate it at any time, nor should the AEMC assume that it would be able to develop and codify simple, quantitative and non-controversial triggers or leading market indicators in the Market Rules that would remove any qualitative input or subjective judgement from the decision to activate the mechanism. In the Board's view, such a decision should be seen for what it is; i.e. a major energy market policy decision, and within the current market framework, responsibility for such decisions resides with the MCE.
- Any such mechanism would need to be designed and implemented in such a way
  that it has minimal impact on the market signals and drivers for investment in new
  capacity and retirement of uneconomic plant inherent in the current market design.
  Otherwise, market participants will adopt behaviours that in effect make it a
  permanent feature of the market even though this was never intended.
- Given the current institutional arrangements for the NEM, AEMO accepts that AEMO would be the logical body to administer such a mechanism and be accountable to the MCE for implementing its decisions and in accord with the rules governing its implementation. However, it should not necessarily be seen as an extension of the RERT role and we would urge the AEMC not to describe it as such.
- Any potential new intervention mechanism which will address medium term (i.e. 18 months to 5 years or so ahead) timeframes, even if it were to be expedited, would not be able to address potential reserve shortfalls in the southern states during the 2010/11 summer.

#### 3.6. System operation and intermittent generation

With the advent of the CPRS and the ERET, there is little doubt the amount of wind generation connected to the eastern states network will increase. While the market modelling7 undertaken by ACIL, ROAM and MMA indicates quite significant variations in the projections for new investment in wind power, an additional 8,000 MW of wind generation capacity being connected to the eastern states network is quite plausible, and it could even be higher.

Experience with the initial RET scheme also indicates that there is some risk that the projected investment in new wind capacity may occur even more quickly than is contemplated by the ERET. If indeed there are hard practical limits on the amount of wind capacity that can be absorbed and managed as part of the main power system in each State, it is likely this will have the effect of accelerating the investment in wind power as project sponsors and investors race one another to have their project approved for connection to the grid before any such limit is reached.

Whereas until now, NEMMCO's semi-dispatch process and the development of the AWEF System are likely to be adequate to manage the intermittency of wind generation in the NEM in the short term, we believe further work is needed as a matter of some urgency to understand the full implications of further intermittent generation on the

<sup>&</sup>lt;sup>7</sup> AEMC 2008 Survey of Evidence on the Implications of Climate Change Policies for energy Markets – Pages 33-37

network and determine if indeed hard limits or other conditions will eventually need to be imposed on new wind generator connections for system security or other reasons.

It may well be that our concerns can be adequately addressed within the current market framework. We also believe that this is a potentially serious issue that should be addressed by the AEMC in this Review. However, if the AEMC finally decides not to do this, then we strongly urge the Commission and/or the MCE to establish a separate work program to address it in more detail.

#### 3.7. National Transmission Planner role

In its role as a TNSP for the Victorian transmission network, AEMO fully endorses the AEMC's intention to further consideration within the Review to transmission connection and congestion management issues.

Throughout its Report, the AEMC has referred in a number of places to the establishment of the new National Transmission Planner function and the development of the NTNDP and the various roles they will or could play in addressing network related issues.

The AEMC should bear in mind the following as it considers these issues further:

- The NTP will take some time to acquire the detailed knowledge and develop the
  various tools it will need to evolve the NTNDP into a highly effective information
  resource for the market. We urge the AEMC not to place undue reliance on what the
  NTP can contribute towards resolving these issues in the short term and where other
  options are available.
- Under the current market framework, the NTP has no direct responsibility for investment decisions and its powers and responsibilities are generally confined to essentially providing advice to the regulator and market stakeholder.

#### 3.8. Demand-Side issues

The AEMC's Review seems to be focussed on the implications of probable changes in the mix and location of large generation sources and what this means for the wholesale power market and the transmission network.

The CPRS and the ERET and other supporting programs are likely to accelerate the proliferation of distributed generation sources to a range of distribution voltages which tend to be less transparent and controllable to AEMO. The materiality of the system operations implications of this as well as its market impact on short-term forecasting of non-scheduled load needs to be better understood.

This issue may be being addressed within the concurrent Demand-Side Participation review. If that is the case, a clarification of that linkage would be useful.

## **Attachment 1**

AEM	C Question	AEMO Response
A1.1	Do you agree that the convergence of gas and electricity markets is not a significant issue	AEMO disagrees and believes this to be a significant issue and appropriate for addressing in the frameworks review. Further, the converged markets should include the emerging carbon and renewable certificates markets.
in the eastern states and therefore should not be progressed further under this Review? If not, what are your reasons for asking us to reconsider this position?	The AEMC may have over-estimated the improvements that the creation of a single combined market operator can deliver on its own. Within the current markets framework, AEMO has very limited powers in this respect and, in fact, the current rules and procedures governing AEMO's full range of functions in each of the markets largely preclude it (see section 3.2). AEMO's role is limited to operating the markets strictly in accord with its legislative charter and the detailed rules and procedures published by the AEMC that govern them.	
		The broad issue of market convergence encompasses a number of quite significant sub-issues including:
		- The potential need for greater consistency between markets for key elements of the market framework including key regulatory settings such as price caps and market intervention mechanisms, and the mix of regulatory incentives and market signals driving infrastructure investment across both markets;
		- Emergency management protocols for each energy market and possible interdependencies between them;
		Appropriate harmonization of the administrative procedures for day-to-day market operations across the markets; and
		Identifying and encouraging opportunities for harmonization of the emerging carbon and renewable markets with the energy markets before practices become entrenched.
		All of these sub-issues are clearly market framework issues, and the first two in particular would require major policy decisions by the MCE.
		At this stage therefore, AEMO is not persuaded by the AEMC's reasoning for dismissing all components of the market convergence issue from further consideration within its Review.
A2.2	Do you agree that the ability for NEMMCO to manage actual or anticipated transitory shortfalls of capacity is	Agreed

AEM	C Question	AEMO Response
	a significant issue that should be progressed further under this Review?	
A2.3	Are additional mechanisms required to complement the Reliability and Emergency Reserve Trader (RERT) and NEMMCO's directions powers, and what characteristics should such mechanisms have?	If additional mechanisms are deemed to be necessary, AEMO is keen to ensure that any such mechanisms:  Do not compromise AEMO's integrity and its capacity to both build a strong reputation in the market and establish effective, healthy working relationships with all key market stakeholder groups; and  Do not undermine the established market signals for new energy infrastructure investment already present within the existing market framework.
A2.4	Do you have any views on the detailed design and implementation of additional mechanisms?	We have concerns about an extension of the currently conceived RERT (see section 3.5).
A3.1	Do you agree that the existing framework based on an energy-only market design with supporting financial contracting is capable of delivering efficient and timely new investment, including fast response capacity to manage fluctuations in outputs resulting from larger volumes of intermittent wind generation? If not, what are your reasons for reconsidering this position?	It would not be appropriate for AEMO to develop and publish a considered opinion on this question. However, it would appear there is a broad consensus amongst the views of market stakeholders which suggests that the investment climate for new energy infrastructure and in particular new power generation will be extremely challenging for the next 3-5 years at least, and that the CPRS and ERET policy decisions will exacerbate rather than alleviate the situation.  In these circumstances, in the absence of any changes to the market framework and/or key regulatory settings, the risk of some form of market intervention being needed in the short to medium term is higher than it has been historically.  Philosophically, AEMO fully supports the MCE policy approach which promotes market based solutions in preference to interventionist mechanisms for achieving economically efficient market outcomes whilst also ensuring the safety and security of our energy systems.
A3.2	Do you agree that the processes supporting the ongoing maintenance of this framework in respect of review and periodic amendment to the market settings, including the maximum	As discussed in our response to Question A1.1, we believe gas and electricity market convergence is a market framework issue, and this Review should be giving further consideration to it. As part of those considerations, we believe the AEMC should investigate the potential benefits of increased coordination of the processes for review and periodic amendment to the market settings across both markets including all price capping arrangements and the application of

AEM	C Question	AEMO Response
	market price, are robust? If not, what are your reasons for reconsidering this position?	administered prices.  AEMO is concerned about the possibility of "exporting" the problems being experienced as a result of one of the markets being highly stressed to the other market by virtue of the potentially significant role of gas fired generation in both. Under these conditions, inconsistent market settings across the two markets could potentially provide quite perverse market signals and exacerbate the operational difficulties in what would already be a very challenging market environment. Also, AEMO's intervention powers vary considerably between the gas and electricity markets, and between the various State-based gas markets.
A4.1	Do you agree that operation of the power system with increased intermittent generation is not a significant issue and therefore should not be progressed further under this Review? If not, what are your reasons for reconsidering this position?	With the advent of the CPRS and the ERET, particularly now that unlimited banking has been allowed, it is clear that wind generation connected to the eastern states network will increase dramatically.  At this stage, we are concerned that the full implications of this from a market and system operations perspective are not properly understood. It may well be that any of those implications can be adequately addressed within the current market framework. However, in our view, it would be premature to reach that conclusion. Therefore, if the AEMC finally decides not to consider the issue any further as part of this Review, then we strongly urge the Commission and/or the MCE to establish a separate work program to address it in more detail.
A5.1	Do you agree that the connection of new generators to energy networks is a significant issue that should be further progressed under this Review? If not, what are your reasons for reconsidering this position?	AEMO, particularly in its future role as a TNSP for the Victorian transmission network, agrees with the AEMC's position on this issue.  Even in its role as electricity market operator, improved coordination of generator connections to the network within localized generation centres has the potential to facilitate the administration of AEMO's rather limited role in negotiation process.
A5.2	Would any of the models identified in this chapter ensure the more efficient delivery of network connection services? In particular, with relation to these models:  - How should the risks of connection	As a general principle, we would agree that the AEMC should be investigating a range of options for improving network connection policies and procedures aimed at providing more efficient network connection services.  In this respect, we make the following general observations:  - Multiple reviews and subsequent amendments to the transmission network connection and access arrangements over the past 10 years or so have progressively reduced and all but eliminated network planning risk within the TNSP businesses, and this is now

AEM	C Question	AEMO Response
	be most appropriately spread across new connection parties, network businesses and	presumably reflected in the current ARRs for the regulated network services component of each of the network businesses. We do not believe the introduction of the CPRS and ERET arrangements, on their own, justify a reversal of this now well established policy trend.  - Achieving efficient locational price signals in network
	end use consumers?  - How do the connection charges change for connecting new generation plant	charges for new generation investments of any type must necessarily involve a holistic approach to both the connection pricing arrangements and access charges, and ideally this should provide for consistency across both the gas and electricity networks.  - AEMO is already facing many challenges in the short term over its full range of functions and responsibilities in
	and what benefits may arise?  - How do the costs for end use customers change and what benefits may arise?	the period immediately following its establishment in July 2009. One of these is the establishment of the new NTP function and the progressive development of the National Transmission Network Development Plan into an effective platform that will add considerable value to the market. The AEMC should be mindful that this will take time to achieve.
		- An overly simplified economic test such as the suggested minimum 50% cost recovery from the initial parties connecting to the proposed NERG would not adequately address the potential risks and future returns for those parties who will be called upon to fund the remainder of the NERG costs. The focus of any such test should be from the perspective of those being compelled to provide that funding and therefore are bearing the stranded asset risk.
		The network connection issue should include consideration of potential issues in distribution and subtransmission networks as well as the main transmission system.
A5.3	Are there any other potential models that we should consider to address this issue?	No comment
A6.1	Do you agree that the issue of network congestion and related costs requires further examination in this Review to determine its materiality? This includes considering whether the existing frameworks provide signals that are clear	AEMO endorses the AEMC's proposal to examine further the materiality of the network congestion issue. We note in section 3.4 that a number of energy market deficiencies that have been well known for some time should become higher priority with the introduction of CPRS and ERET.

AEMO	C Question	AEMO Response
	enough and strong enough in the new environment where congestion may be more material. If not, what are your reasons for reconsidering this position?	
A7.1	Do you agree that the current inflexibility in the retail price regulatory arrangements is a significant issue that should be progressed further under this Review? If not, what are your reasons for this position?	AEMO agrees with the AEMC's concern in this matter. The success of the various energy markets are critically dependent upon:  • The ability for energy retailers to recover efficient and prudent costs which are increasing as a result of CPRS and ERET. Failure to adequately recover higher costs increases the difficulty of providing AEMO with prudential collateral and/or the likelihood of retailer failure; and  • Opportunity for retail competition.
A7.2	Do you agree that the limitations with current RoLR arrangements are a significant issue that should be progressed further under this Review? If not, what are your reasons for this position?	AEMO agrees with the AEMC that the current ROLR arrangements across both markets may not be robust enough in the event of the failure of a large energy retailer. This should extend into the various gas markets.  There is likely to be scope to improve the prudential arrangements both within each market and potentially across markets including the emerging carbon and renewable certificate markets. Such improvements should seek to both lower the cost burden and reduce the risk of RoLR being triggered.  AEMO believe these issues need to be investigated further in the short term, either as part of this Review or separately. In particular, more innovative prudential management arrangements could potentially reduce the overall level of exposure of credit providers to the energy utilities whilst also reducing the risk of retailer failure.
A7.3	Are there any additional options that could supplement the processes currently under investigation to address these issues?	See comments above.
A8.1	Do you agree that the current energy market frameworks do not impede the efficient financing of the	Previously addressed in our response to Question A3.1.

AEMC Question	AEMO Response
significant increase in investment implied by CPRS and expanded national RET? If not, what are your reasons for this position?	