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6 August 2009

Australian Energy Market Commission  
Colin Sausman  
PO Box A2449  
Sydney South NSW 1235

Dear Colin

**Re: EMO 0001 - Review of Energy Market Frameworks in light of Climate Change Policies: 2<sup>nd</sup> Interim Report June 2009**

The Clean Energy Council (CEC) is the peak body representing Australia's clean energy and energy efficiency industries.

Its priorities are to:

- Create the optimal conditions in Australia to stimulate investment in the development and deployment of world's best clean energy technologies
- Develop effective legislation and regulation to reduce energy demand and improve its efficient use, and
- Work to reduce costs and remove all other barriers to accessing clean energy.

The objective of the 2<sup>nd</sup> Interim Report is to look in more detail at the draft recommendations made in the 1<sup>st</sup> report. These draft recommendations have been influenced by submissions to the review and the workshops held by the review. The CEC has participated in the workshops held by the Commission, reviewed the 2<sup>nd</sup> Interim report including its draft recommendations and is pleased to provide comments.

Ultimately, the CEC views the NERG, G-TUOS and retail pricing as the key points within this review and has formulated a response concentrating mainly on the issues surrounding these topics.

### NERG service provision

Generally, the CEC is concerned with the NERG model approach. However, the CEC is not seeking a subsidy or distortion from the market, but a correction of potential market failures. Firstly, a high level process is being proposed which must outline the coordination and planning process that is to be undertaken when choosing a potential NERG.

The review requires additional information on the initial steps when identifying the sites. The CEC believes it is important that AEMO's is provided with a set of clear criteria and/or guidelines to direct their initial site identification decisions. During the identification process, AEMO will need to distinguish what makes one potential site a better option than another.

It is also important that the costs of a network extension be funded by the connecting generator for connection assets and by customers (subject to application of RIT-T) for deep network augmentation.

The CEC notes that there are two possible approaches to identify resource rich areas. These are; the planner can proactively identify and seek to propose a suitable NERG to candidates. Alternatively the planner could propose a NERG based on candidates that had indicated they were interested in an area. It is important that a clear set of criteria is provided to assist in this decision making process.

### Generator Transmission Use of System (G-TUOS) charges

The CEC considers that elements of the existing framework outlined in this review are inadequate as it will ultimately do nothing to improve the performance of the transmission networks. Even though the concept of G-TUOS charges to provide a cost reflective signal that can inform both location and retirement decisions for all generators, the CEC has significant objections to the G-TUOS proposal; both from a theoretical and practical perspective. Key objections are:

- that no shared transmission is augmented;
- future costs are uncertain; and,
- existing generators cannot respond to the locational price signal.

The CEC recognises that in the description of the G-TUOS charges there is no discussion of mechanisms which will address the key problem of congestion and where it occurs. Unless the G-TUOS is very large, it will have little impact on the market. If the G-TUOS is large then the market will have an increased perceived sovereign risk, reducing security in generation investment and reducing the value of assets.

The CEC recommends that the Commission considers excluding the clean energy generators from the TUOS charge. That is, the CEC sees that the model outlined in this review will eventually make the current system worse rather than improving the current system.

The CEC is concerned that as the G-TUOS will be a variable year to year value, the changing value will be irrelevant to the market signal once a generator is built and locked into the market. Therefore, the CEC does not support variable G-TUOS values. The value should be locked in for the life of the project as per the connection agreement of that plant. Already there are a number of signals in the market place; marginal loss factors and intra regional constraints in the network.

As summarised in D. Biggar's report<sup>1</sup>, at present generators in the NEM pay for 'shallow' connection charges. This means that each generator is only required to pay the cost of any transmission assets specifically and exclusively associated with that generator, that is, for their connection assets. Generators pay no other general transmission charges, known in the NEM as TUOS charges.

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<sup>1</sup> Biggar, D., *Framework for Analysing Transmission Policies in the Light of Climate Change Final Report, 2009*

However, as several aspects of the Commission's G-TUOS proposal remain undefined, and as the whole concept is regarded as a draft, there are opportunities for improvements and changes to be made prior to it being finalised.

Although the current policy of requiring generators to pay for connection assets provides some locational signals, it is a relatively weak and imperfect signal which only provides incentives to locate close to the shared transmission network, rather than incentives to locate in the optimal location on the shared transmission network.

Generators in the NEM face some risk that those transmission charges that they do pay will change in the future. Mechanisms should be developed to ensure that generators have a reasonable assurance that their transmission charges will remain stable over the life of their investment. This is even more important for renewable generators as they need assurance that the network will be sufficient to take their additional generation.

The CEC looks forward to continuing to work with the Commission in order to find a workable solution to these issues.

#### Congestion issues

Intelligent Energy Systems undertook modelling<sup>2</sup> for the Commission to test the current framework for how the transmission system would expand and new generation would enter the market against some hypothesised alternative models. The aim was to provide insight into how the power system may develop under (a) the current regulatory arrangements for transmission and (b) generator decisions about investment locations within this framework, compared to other possible frameworks in light of the substantial changes that will occur with the introduction of the RET and CPRS.

There is a potential market failure where investors are not able to identify congestion issues when they are planning to build on a site. The NERs need to include fully transparent rules so that investors can be made fully aware of congestion issues they face.

There are existing locational signals in the market for constraints. The CEC would like the RIT-T and other mechanisms to be fully valuing the clean energy technologies.

This confirms to the CEC that further analysis is required on how the transmission network will support the additional generation associated with the RET will be planned and achieved.

#### Inter-regional transmission charging

The Commission's 2<sup>nd</sup> interim review has recommended that "transmission investment to support flows between and across NEM regions is likely to increase in significance as a result of market responses to the CPRS and expanded RET."

The CEC agrees with this statement and recommendation.

It is noted that in the medium term, the large amount of wind resource is likely to manifest itself in close proximity to existing transmission. However, reinforcement of interconnectors and the existing transmission network is likely to be the most effective means of bringing renewable resources to market. The CEC emphasises that existing constraints on the backbone transmission network and interconnectors need to be resolved so that the grid is able to accept additional generation from new generators. The adjustment required from the energy industry is the most significant change in its long history and will no doubt have an enduring influence on the country. The CEC believes this is the most critical issue in this review. The CEC therefore supports the concept that new generation is likely to

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<sup>2</sup> Intelligent Energy Systems, Future Congestion Patterns and Network Augmentation, Report on Assignment A: Transmission Development Framework Scenarios, 25 June 2009

cluster in geographic areas. The CEC would like the Commission to identify who should pay for this increased investment.

The CEC would like to see the review stating how efficient transmission investment across and between regions is to occur. The expanded RET will increase the need for transmission network investment and this network investment needs to be planned in advance. There is a chicken and egg scenario in what extent should generators be expected to commit in regards to supply into a constrained system and trust the regulatory process to deliver on that basis, versus the other approach of over-building on transmission and assuming that the highway will be used. This scenario is linked to that of the regulatory process; that is, should a transmission line be justified on expected generation projects more than just relying on committed projects<sup>3</sup>.

The CEC has currently undertaking work to investigate the issues in relation to the future development of the electricity transmission system in Australia. The investigation has focused on the National Electricity Market (NEM) but also considered the markets in West Australia and Northern Territory. The CEC will send through the report commissioned to McLennan Magasanik Associates (MMA) as soon as it is finalised.

#### Regulated retail prices

The CEC does not support regulating retail prices and recognises that retail price caps fall outside the jurisdiction of the Commission, however we encourage the Commission to recommend that the states and territories relax their current retail price caps.

The CEC supports free application of the market place and removing regulated price caps is a good mechanism that will lead to competition to encourage investment into the market.

Retailers also have a key role to play in encouraging energy efficiency and helping to overcome the current barriers to the uptake of cost effective energy efficiency measures.

While this is outside this review, the CEC is pleased to see that COAG agreed to remove regulation of retail prices where effective competition can be demonstrated in light of the CPRS and the RET.

#### Demand Side Participation (DSP)

Demand Side Participation (DSP) is any activity or measure undertaken on the customer side of the connection point that results in a reduction in energy consumption at the connection point or, a reduction in the use of primary fossil fuel based energy. It includes measures that result in the use of less energy to perform a given task, and the use of embedded generation. It is important because energy use and greenhouse gas emissions from energy use continue to rise.

A key barrier to investment in sustainable energy is that the full environmental costs are not included in the price of energy. The CPRS seeks to address this by creating a price for carbon. However, a price signal alone will not deliver significant energy efficiency improvements.

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<sup>3</sup> Biggar, D., *Framework for Analysing Transmission Policies in the Light of Climate Change Final Report, 2009*, pg 29 – “research suggests that in fact transmission planners *must* engage in a degree of “locational planning” and should not rely exclusively on “decentralised decision-making” by generators when it comes to location decisions. However, in practice, this approach raises certain issues, particularly regarding access to information. In effect, the transmission planner must decide which generation locations will be exploited in the long-term efficient expansion path and which locations will not be socially beneficial to exploit. The transmission planner therefore must indirectly determine which potential generation resources will and will not be exploited. To enable the transmission planner do this task properly, information on the location, type, cost, and size of all possible future generation expansion opportunities is needed. While this information may have been available to a transmission planner in a vertically-integrated industry, vertical separation of transmission and generation limits the information the transmission planner has about future generation opportunities. One of the primary benefits of vertical separation is that it creates strong incentives for private generation entrepreneurs to discover and make use of new information, which includes new possible generation locations, new technologies, or new ways of operating old technologies. The problem lies with how this information is communicated to the transmission planner.

The current package of measures aimed at improving energy efficiency in Australia is a complicated mix of State and Federal initiatives that includes information schemes, grants and/or rebates, regulations and minimum standards. These individual initiatives have been developed to address one or other of the identified barriers to energy efficiency, or specifically to help consumers respond to the expected effect of the CPRS.

The CEC is developing an energy strategy where measures for energy efficiency, including the CPRS, will not be sufficient to reverse the expected growth in energy demand. Short-term, further encouragement of DSP will overcome any shortfalls in generation. As recommended in our submission to the 1<sup>st</sup> Interim report, there is significant opportunity for demand side response to assist in managing the system and balancing the variable customer demand and generation. The Commission should work to identify and overcome the barriers to expand demand side participation in system operation. The CEC looks forward to working with the Commission on developing this framework further.

#### Load Shedding Management

The CEC and its members believe that load shedding will sooner or later cause a distortion in the market. There is a misrepresentation with load shedding as retails have to wear this procurement, however this will eventually affect all players in the market and it will unfairly subsidise some demand side participants over others.

If you are seeking clarification or answers to any questions that arise, please do not hesitate to contact the undersigned on (03) 9929 4105 or email [rjackson@cleanenergycouncil.org.au](mailto:rjackson@cleanenergycouncil.org.au)

Yours sincerely

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