

Australian Geothermal Energy Association



Response to Review of Energy Market Frameworks in light of Climate Change Policies 2nd Interim Report

31 July 2009

Overview and Executive Summary:

AGEA believes that geothermal energy, complemented with other renewable technologies including solar, wind and other emerging technologies, has potential to represent a viable mitigation measure that will address the environmental and economic challenges of climate change.

The AEMC proposal for the development of Network Extensions for Remote Generation (NERG) will provide for the realisation of large scale renewable energy technologies in remote regions of Australia.

AGEA supports the recommended planning, charging and revenue recovery arrangements for NERG facilities, but does not support the concept of these assets being a contestable service. AGEA are of the view that NERG assets should be developed by a regulated network service provider consistent with the long term interests of customers.

AGEA believes that the proposed development framework for NERGs is appropriate and will serve to mitigate customer risk. The proposed arrangements would provide for a coordinated approach to large scale generation renewable generation rather than the fragmented development outcomes that would otherwise occur.

While the NERG development model proposed by AEMC will see customers carry some development risks, it should be acknowledged that the risks associated with a fragmented approach will have potential to see greater costs being carried by customers in the longer term.

AGEA does not support the concept of rival service providers seeking to deliver NERG services and are of the view that NERG services are best provided using regulated network service providers.

AGEA recognises that the efficient utilisation of limited network assets is represents a key issue for all stakeholders and acknowledges that changes are required to the current arrangements to provide for efficient development outcomes.

The establishment of G-TUOS charges on the basis proposed by the AEMC may not provide for reliable or functional development outcomes and will necessitate development of supplementary controls in the form of a “congestion management scheme”.

AGEA proposes that cost recovery arrangements are varied from a neutral condition (zero) to an alternative arrangement that will provided for augmentation funds that can be used negate network limitations (positive). The level of G-TUOS charge required could be varied based on forecast generation and network developments.

Importantly, AGEA supports the recommendation that G-TUOS charges are based on a fixed charge per kilowatt and not on actual generated

volumes. This is appropriate given that generator installed capacity is the key factor behind transfer capacity limitations of the network.

These modified arrangements would not require the introduction of a second tier fix in the form of a short term “congestion pricing mechanism” proposed by the AEMC.

AGEA acknowledges deficiencies identified by the AEMC in the existing framework for inter-regional price charging. AGEA strongly supports the draft recommendations for TNSPs to levy a new load export charge on TNSPs in adjacent regions. We are of the view that these arrangements should be implemented as soon as practicable across the NEM to improve cost-reflectivity of pricing signals, but cannot offer specific advice in relation to the viability of the proposed timetable.

AGEA has provided comments with respect to Chapter 2: Connecting remote generation, Chapter 3: Efficient utilisation and provision of the network and Chapter 4: Inter-regional transmission charging. The following sections provide more detailed response in relation to these issues.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'T. Kallis', written in a cursive style.

Terry Kallis

Chairman, AGEA NEM Policy Committee.
AGEA Representative to the AEMCs Stakeholder Committee – Review of Energy Market Frameworks in light of Climate Change policies.

Chapter 2:

Connecting remote generation

The draft AEMC recommendations propose the introduction of a new framework in the Rules for the planning, pricing and funding of transmission (or distribution) investment to create connection “hubs” in specific remote area where there is sufficient demand for new generation connections as a result of the expanded RET.

The AEMC draft recommendations seek to ensure that extensions to the network are sized efficiently for future generation such that customers can benefit from cost savings. The recommendations recognise that customers would have limited exposure to costs if forecast generation does not materialise. In addition, the recommendations reflect the view that the existing bilateral negotiation framework for connections is unlikely to provide for optimal investment.

Question 2a

Will the recommended model adequately address the deficiencies in the existing framework?

The draft framework proposed by the AEMC will support efficient connection of remote generation capacity to both transmission and distribution networks. The arrangements are strongly supported by AGEA as they will provide a basis for planning, charging and revenue recovery and will facilitate development of Network Extensions for Remote Generation (NERG).

Importantly, the recommended NERG arrangements could support projects having different development timelines.

AGEA acknowledged that, under the proposed framework, customers would underwrite the cost of additional capacity in excess of that required to connect the first generator that is considered appropriate.

The concept of a standard contract is also supported that provides for minimum technical and commercial requirements.

However, AGEA does not support the concept of NERG facilities being a contestable service. AGEA support development of NERG facilities as non contestable service as this will provide for least cost long term solutions consistent with customer interests. This approach is appropriate given that customers are required to underwrite development of these facilities.

It should be recognised that the role of NERG facilities may change over time and these network assets may potentially assume strategic significance due to other developments including connection of new loads, adoption of new technologies and system augmentations. The development and operation of these facilities by regulated network

service providers, would provide the best long term outcome for customers.

AGEA consider that the existing regulatory rate of return for NSPs is adequate and is commensurate with the investment risk profile associated with developing and operating NERG facilities. AGEA sees little justification for an NSP rate of return being greater than that for regulated assets for NERG facilities.

In summary, AGEA supports the recommended planning, charging and revenue recovery arrangements for NERG facilities, but does not support the concept of these assets being a contestable service. NERG assets should be developed by a regulated network service provider consistent with the long term interests of customers.

Question 2b

Does the recommended assessment process appropriately balance customer risk with potential customer benefits?

AGEA believes that the proposed development framework for NERGs is appropriate and serves to mitigate customer risk. The proposed arrangements would provide for a coordinated approach to large scale generation renewable generation rather than the fragmented development outcomes that would otherwise occur.

Regulated NERG development will have potential to provide for the maximum utilisation of limited network transfer capacity and facilitate a coordinated response to large scale renewable generation technology.

While the NERG development model proposed by AEMC will see customers carry some development risks, it should be acknowledged that the risks associated with a fragmented approach would have potential to see greater costs being carried by customers in the longer term.

Question 2c

Is there merit in allowing rival service providers to deliver network extensions for remote generation?

AGEA does not support the concept of rival service providers seeking to deliver NERG services.

AGEA is of the view that NERG services are best provided using regulated network service providers. The development of NERG facilities by regulatory network service providers will support least cost long term development of the network. These arrangements would more readily

support integrated system operation, future network extensibility and co-ordination of operation.

The establishment of multiple NERG suppliers and operators will most likely lead to fragmented services and complex co-ordination issues that may not be in the best long term interests of customers.

Chapter 3:

Efficient utilisation and provision of the network

The draft AEMC recommendations proposes the introduction of a new generator transmission use of system (G-TUOS) charge for all generators and considers the need for a complementary short term congestion pricing controls to mitigate transfer capacity limitations.

It is proposed that G-TUOS charges are based on a location dependent transmission charge that reflects the long run marginal cost of new generation connection in each zone. In effect, this will be the cost of transporting one megawatt from each zone to the regional reference node. The G-TUOS charge can be positive or negative depending on the generation location. The AEMC propose that net charges recovered from G-TUOS be neutral.

The short term congestion price controls are intended to signal potential network transfer capacity limitations and facilitate efficient connection of generating plant in the network. These controls seek to communicate congestion costs to generators and provide for more efficient decisions in the location of generating plant. The AEMC consider that network transfer capacity limitations will become more acute as a result of the expanded REG and to a lesser extent CPRS.

Question 3a

Do you agree that we have accurately identified which elements of the existing framework are considered inadequate and therefore require change?

AGEA recognises that the efficient utilisation of limited network assets is represents a key issue for all stakeholders. The AEMC recommendation to introduce G-TUOS will provide for a long term control for cost reflective price signals and mitigate the potential for network congestion.

AGEA acknowledges that these arrangements will provide for increase certainty for generators and will contribute to reduced development risks for renewable energy resources.

AGEA accepts that changes are required to the current arrangements to provide for efficient development outcomes.

Question 3b

Would the G-TUOS charging option design improve pricing signals to promote efficient location and retirement decisions in the most efficient way? Are there any design variations that may improve the signals?

The AEMC propose introducing charging arrangement that provided for a total cost recovery through G-TUOS charge at zero. These arrangements are intended to impart neutral G-TUOS outcomes. Potentially, generators connected in remote locations of the network may therefore be required to pay G-TUOS charges to other generators located in close proximity to the regional reference node.

While the driver for this charge is understood, AGEA does not support introduction of G-TUOS charges on the proposed basis.

Although the draft arrangements will provide strong incentive to establish generation capacity in close proximity to the regional reference node, the practical outcomes may result in increased network congestion and system fault level limitations near the regional reference node. In anticipation of this potential outcome, the AEMC propose introduction of a congestion management scheme to address these issues.

In summary, the establishment of G-TUOS charges on the basis proposed by the AEMC may not provide for reliable or functional development outcomes and necessitate development of supplementary controls in the form of a “congestion management scheme”.

AGEA propose that cost recovery arrangements are varied from a neutral condition (zero) to an alternative arrangement that will provided for augmentation funds that can be used negate network limitations (positive).

In effect, G-TUOS charges would not be transferred between generators, but used instead to manage network limitations. The level of G-TUOS charge required could be varied based on forecast generation and network developments.

In summary, the alternative AGEA option would provide for:

- 1. An efficient price signalling mechanism that would influence the entry of new generating plant;*
- 2. Funding to address generation dispatch limitations; and*
- 3. A simplified approach to congestion management.*

These arrangements would not require the introduction of a second tier fix in the form of a short term “congestion pricing mechanism” proposed by the AEMC.

AGEA supports the recommendation that G-TUOS charges are to be based on a fixed charge per kilowatt and not on actual generated volumes. This is appropriate given that generator installed capacity is the key factor behind transfer capacity limitations of the network.

AGEA recognises that the above arrangements represent long term controls. However, the above arrangements combined with good forward planning will provide for reliable development outcomes that will reduce potential for generation dispatch constraints.

Question 3c

Given that G-TUOS is a preferred option, what additional value would a congestion pricing mechanism add? If such a mechanism is required, what design variations should be considered to improve signals to manage short-term intra-regional congestion in the most efficient way?

As mentioned in AGEAs response to Question 3b, AGEA does not support the concept of developing a congestion pricing mechanism in addition to the G-TUOS charging arrangements. The proposed arrangements reflect a "short term" fix and do not provide for the sound strategic development of generation capacity.

AGEA is of the view that short term congestion pricing mechanisms are not required if changes to the proposed G-TUOS arrangements are made as outlined in our response to Question 3b.

Chapter 4:

Inter-regional transmission charging

The draft recommendations proposed by the AEMC introduce an obligation on transmission businesses to levy a “load export charge” on the transmission business in each adjacent region. The charge would capture the costs of providing transmission capacity to transport flows to the adjacent region.

The recommended changes seek to improve the overall cost-reflectivity of transmission charges, and remove existing implicit cross-subsidies between customers in different regions. The recommendations are based on findings that transmission investment to support flows between and across NEM regions is likely to increase in significance as a result of market responses to CPRS and expanded RET.

Question 4a

Is the proposed design for the load export charge appropriate as an effective mechanism to address the identified problems?

AGEA acknowledges deficiencies identified by the AEMC in the existing framework for inter-regional price charging.

AGEA strongly supports the draft recommendations for TNSPs to levy a new load export charge on TNSPs in adjacent regions, for inter-regional flows into these regions.

AGEA does not propose any changes to these arrangements.

Question 4b

Is our suggested commencement date of 1 July 2011 achievable?

AGEA supports the view that load export charge arrangements should be implemented as soon as practicable across the NEM to improve cost-reflectivity of price signals, but cannot offer specific advice in relation to the viability of this timetable.