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Australian Energy Market Commission
PO, Box A2449
Sydney South, NSW, 1235
Lodged electronically

RE: ERC0141 (Small Generator Aggregator Framework)

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 improve energy efficiency and opportunities for the clean energy industry
- work to reduce costs and remove all other barriers to accessing clean energy

The CEC works with members and the government to identify and address the barriers to efficient industry development in the energy efficiency and stationary energy sector. The clean energy industry contributes to the generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector including solar hot water and cogeneration.

The CEC welcomes AEMO's proposed rule change and congratulates AEMO for taking decisive action on the kind of innovative reform which is required to enhance opportunities for small clean energy and low emissions generation technologies in the NEM. Whilst the CEC recognises that significant barriers to small scale distributed generation remain, ERC0141 represents a real opportunity for the further development of these technologies.

The CEC also thanks the AEMC for the opportunity to participate in the rule change process and look forward to the future benefits that this amendment will bring to the NEM. The following sections outline our direct comments in response to the AEMC's consultation paper. Please do not hesitate to contact the undersigned for any queries relating to this submission.

Yours sincerely,

Russell Marsh | Policy Director
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1 Does the existing registration process create barriers to small generators entering the NEM?

The CEC understands that there are a number of barriers which prevent the development of small generation projects. Some of these were highlighted in the AEMO's 2010 work¹ and others relate to asymmetries in the connection processes.

To date very few small generators which qualify for exemption participate in the NEM. The costs associated with registration are expected to create a significant barrier to this participation. AEMO indicates that there are currently eighteen registered participants² who operate market non-scheduled generating units with nameplate ratings less than 5MW with capacity totalling 90MW from 43 units. Investigation of the AEMO generation resource data also indicates that only seven of these participants operate multiple assets³ and only four of these own assets across jurisdictions.

In 2011 the Energy Supply Association of Australia (ESAA) identified that 5.5GW of 'embedded and non-grid generation' is already installed in Australia⁴. Even if only one quarter of this was eligible to participate under the new registration category, there is clearly room for enhanced competition in this sector and barriers do exist. Participation costs are a clearly evident barrier.

2 Will introducing a Small Generation Aggregator promote greater participation in the NEM by small generators? Is this consistent with the NEO?

As introduced by AEMO and supported by the above discussion, opportunities for currently under-utilised generation assets to be incorporated into the NEM are significant. Work done by AusGrid in 2008 indicates that there is approximately 309MVA of standby generation which could be adapted for grid parallel operation in the inner metropolitan Sydney region⁵. Whilst some of this capacity may face insurmountable interconnection costs it is expected that the impact of this barrier will be reduced if registration costs can be reduced as proposed by AEMO, providing greater opportunities to participate in the NEM.

25% of the costs required to manage the NEM's transmission and distribution system is utilised for approximately 40 hours of the year during peak demand times⁶. Thus, considerable savings can result from better management of peak demand. As the majority of small scale generation expected to register in the new category will be located closely to commercial and industrial loads it is well placed to achieve this outcome. We expect that a significant saving can be achieved from a limited contribution from small generators reducing peak demand, with further contributions resulting in further increased savings.

The benefits of generating close to load centres are well documented. These can include a reduction in energy losses and hence generation costs from reduced transmission distances and enhanced security of supply. While these factors indicate that the enhancement of the contribution from small

¹ AEMO, 2010, *Minimising Barriers to Cost Effective Small Generator Participation in the NEM: Discussion Paper*, available: www.aemo.com.au.

² AEMO, 2011, *National Electricity Rule Change Request – Small Generator Aggregator Framework*, p. 5.

³ AEMO, 2011, Generation Information Web Page, see: <http://www.aemo.com.au/data/gendata.shtml>

⁴ ESAA, 2011, *Facts in Brief:2011*, available: <http://www.esaa.com.au>.

⁵ EnergyAustralia (AusGrid), 2008, *Demand Management and Planning Project: Final Report*, p. 6., available: www.ausgrid.com.au.

⁶ Australian Government, Department of Resources, Energy and Tourism, 2011, *Draft Energy White Paper 2011*, p. xxii.

generators to the energy mix will better facilitate the NEO, further benefits can be recognised when considering the potential reductions in system-wide emissions in conjunction.

On this basis the CEC agrees with AEMO's statements outlining the expected benefits with respect to the NEO. We also expect that the new registration category will promote greater participation in the NEM by small generators by reducing the costs faced by these technologies.

3 Do entities currently exist, or will they enter the market, to fill the role of Small Generation Aggregator?

As indicated previously only a limited number of market participants currently provide a service to generators which closely reflects that of the proposed Small Generator Aggregator in the NEM. Although these participants have overcome the costs associated with registering individual generators under the current scheme, alleviation of this cost will naturally generate greater market interest which may come in a range of models and offerings.

These could include:

- Existing or new-entry generation developers or even DNSPs may seek out small generator development sites and offer a build, connect and operate contract, thus acting as the Small Generator Aggregator and being rewarded by the benefit of high spot prices during peak times whilst bearing some risk from fixed payments to the generator owner.
- DNSPs may seek to use aggregated generators for demand reduction, whilst also receiving an additional revenue stream. Thus DNSPs may recognise incentives to increase the usage of distributed generation in planning, whilst increasing revenue.
- A retailer may enter into a contractual arrangement with a number of customers, thus acting as the Small Generator Aggregator.
- Property developers may seek to become Small Generator Aggregators as an additional revenue stream.

Based on the points above we expect that significant opportunities will be created both for existing and new-entry entities to register under the new category.

4 Is there an alternative way to reduce administrative costs to small generators that would better encourage NEM entry by small generators?

We expect that AEMO's proposal is the most efficient with regards to reducing administration costs as it utilises many of the existing functions applied to aggregated market customers. We do not expect an alternative option would bring equivalent efficiency benefits.

5 Under the proposed framework, is it appropriate for Small Generation Aggregators to be exempt from reporting requirements under the CDEII?

The CEC agrees with this approach in the initial application of the new registration category for the following reasons:

- A large majority of small generation in Australia will consist of low emission technologies such as co-generation or tri-generation, or renewable resources such as bio-generation, photovoltaic

systems, small hydro or community wind. Many of these technologies are already promoted by emission reduction incentives, such as NABERS and RECs.

- The contribution from small generation technologies is, and will remain small as compared to large generation technologies.
- As proposed by AEMO There are clear benefits in reducing the administration costs associated with the entry of small generators in the NEM.

We also recognise that the contribution from small generation technologies to the NEM may become significant to the extent that consideration under CDEII may be required. However, that outcome is expected to be a considerable way into the future, allowing significant time to reconsider the exemption prior to any impacts of it becoming material.

6 Will this rule change lead to positive benefits to NEM participants?

We believe that there is significant benefit to be gained in the long term from enhanced access to the NEM by small generators. Along with those aspects mentioned by AEMO⁷ we believe that the new registration category will enhance competition between small generation aggregators and lead to reduced costs for small generator owners wishing to participate in the NEM.

With regards to other NEM participants, a real opportunity could present in savings on network investment to manage peak demand at the transmission level. In conjunction DNSPs could offset investment through enhanced opportunities for non-network solutions for planning. An objective which closely aligns with the AEMC's ongoing work on demand side participation⁸ and the MCE's Distribution Network Planning and Expansion Framework rule change proposal⁹.

7 Are there any additional benefits that the rule change is likely to facilitate?

In conjunction with benefit to market participants the removal of this barrier to the enhanced use of small generators will bring benefits to the owners of such generators. Access to an income stream from the market will enable many owners of small generating systems to utilise what otherwise could be a stranded private asset. For example there may be incentive to utilise standby generators for short peak demand periods which would otherwise be operated only during network outages.

8 To what extent are the potential issues identified by the proponent likely to impose significant costs on market participants?

While we recognise that the rule change could increase the administration burden for DNSPs, forthcoming amendments to the National Electricity Rules permit DNSPs to recover the costs needed to manage each connection¹⁰. Thus, as of July 1 2012 the rules will provide sufficient financial support for DNSPs to ensure that they are equipped to manage this burden, should it eventuate.

⁷ AEMO, 2011, *National Electricity Rule Change Request – Small Generator Aggregator Framework*, p.p. 10-11.

⁸ AEMC Market Reviews, 2011, *Power of Choice – Stage 3 DSP Review*, available: www.aemc.gov.au.

⁹ Ministerial Council on Energy, 2011, *Distribution Network Planning and Expansion Framework Rule Change Request*, available: www.aemc.gov.au.

¹⁰ Australian Government, Department of Resources, Energy and Trade, 2010, *National Electricity (Retail Connection) Amendment Rules 2010*, available: www.ret.gov.au.

9 Are there any other costs that are likely to result from implementing this rule change?

Air quality issues could arise in the long term if substantial levels of diesel generation is utilised in central business district areas. However, work undertaken by AusGrid has already assessed that the potential for air pollution levels which exceed regulated levels is of a low probability, and can only occur under conditions where a large number of diesel generators operated in unison in Sydney's central business district whilst coinciding with days where very high levels of pollution already existed¹¹. Thus we expect that these costs are not significant when compared to benefits created by the rule change.

10 Are there any perceived risks to the rule commencing operation prior to the clauses referred to above being prescribed as civil penalty provisions and if so, how significant and likely are such risks?

The CEC expects that the incidence of applications during the delay period before the South Australian Governor prescribes the civil penalty provision will be very low. In conjunction any energy generated or consumed by Small Generator Aggregators during this period will be very low to the extent that any perceived risk will remain negligible.

11 Are the transitional arrangements proposed by AEMO appropriate?

We accept that the proposed transition arrangements are necessary. However, they will only have a negligible impact on any proposed Small Generator Aggregator and are expected to be appropriate for the interim period.

12 Closing

Once again the CEC would like to congratulate AEMO on this innovative approach to enhancing access to the NEM for small generators. We believe that this is an important step in the removal of barriers for small generation developments across the NEM and look forward to the outcome of this work and to the removal of many other barriers in the future.

¹¹ New South Wales Department of Planning, 2008, *Air Quality Impact Assessment: The Integrated Generators Project*, p. 20., available: www.ausgrid.com.au.