

Mr John Pierce Chairman Australian Energy Market Commission Level 5, 201 Elizabeth Street Sydney NSW 2000

8 August 2013

Re: ERC0147 Draft Rule Determination: National Electricity Amendment (Connecting Embedded Generators) Rule 2013

Dear Mr Pearce

The Energy Efficiency Council welcomes the opportunity to provide input on the *Draft Rule Determination: National Electricity Amendment (Connecting Embedded Generators) Rule 2013* (the 'Draft Determination'). The Energy Efficiency Council is the peak body on energy efficiency, cogeneration and demand-management, and represents experts in energy efficiency from industry, academia and the public sector.

The Council congratulates the Australian Energy Market Commission (AEMC), Property Council, Climate Works and Seed Advisory for their work on the Rule Change. If the Rule Change proposed in the Draft Determination is accompanied by a number of other changes, it will help to reduce some of the barriers to connecting embedded generators. The Energy Efficiency Council supports the following proposals in the Draft Determination, subject to a number of key changes:

- The requirement for each Distribution Network Service Provider (DNSP) to publish an 'information pack', subject to the AEMC developing a list of requirements about what constitutes minimum contents in an information pack.
- A new two-stage connection enquiry process, consisting of a preliminary enquiry stage followed by a detailed enquiry stage, subject to applicants being able to voluntarily bypass the preliminary enquiry stage and subject to the 'agreed project' from the detailed enquiry being valid for 12 weeks, to allow applicants more time between detailed enquiries and formal applications.
- A requirement for a connection offer on an 'agreed project' within 20 business days, subject to clarification of the definition of an 'agreed project'.
- The publication of technical requirements by DNSPs, noting that where a DNSP has not developed this guidance it must not hold up the processing of applications.
- The introduction of an expert appraisal process to resolve technical disputes, subject to the AEMC developing a system to ensure that experts are accessible that are independent of DNSPs and the connection proponent.
- The ability for DNSPs to charge a reasonable enquiry fee for detailed enquiries, subject to fees being articulated in the preliminary enquiry stage or within 10 days of lodging a detailed enquiry, with a right of appeal to the AER regarding fees.

However, the proposed Rule Change will only be effective if it is accompanied by a number of other complementary changes. Critically, while the Rule Change sets out guidance around what constitutes a reasonable connection process, 'reasonable' connection processes will only be implemented if Distribution Network Service Companies (DNSPs) are motivated or policed to ensure that the recommended processes are followed.

In addition to policing the proposed process, the Australian Energy Regulator (AER) will need to ensure that DNSPs follow existing rules, such as the recently introduced requirement for DNSPs to publish Distribution Annual Planning Reports that include adequate detail on constraints, capacity and load forecasts at the sub-transmission and zone substation level.

Furthermore, while the Rule Change sets out appropriate high-level guidance in the connection process, it will need to be accompanied by detailed guidance on a number of matters.



Finally, the Council reiterates its call for a major review of the way that both energy users and generators are charged for connecting to, and using, the network. The current process for charging embedded generators to connect to the network was developed before embedded generation was considered a major component of the energy system and, as currently implemented by DNSPs, is ad hoc, inequitable and does not encourage efficient investment in electricity services.

Therefore, the Energy Efficiency Council recommends that that AEMC:

- Pass its Draft Determination with a number of key changes:
 - Specify that the AEMC or another body will develop a list of minimum requirements for the information pack, developed through a workshop with interested parties.
 - Allow applicants to voluntarily bypass the proposed preliminary enquiry stage.
 - Extend the maximum time between applicants receiving detailed enquiry responses and lodging their connection application to 12 weeks.
 - Clarify the definition of an 'agreed project', so that minor changes in a proposal do not require moving back to the detailed enquiry phase.
 - Ensure that DNSPs do not use the absence of a technical guide to delay applications, and require DNSPs to list all equipment previously required, including protection and other equipment, with previously accepted equipment on the online registers.
 - o Develop a register of independent experts for the expert appraisal process.
 - Require DNSPs to report timelines, enquiry charges and connection charges to the AER via annual reports.
 - Require DNSPs to write a formal justification to the applicant and seek permission from the AER if they wish to oppose export from an embedded generator.
- Commence a major review into the way that energy users and generators (embedded and non-embedded) are charged for connecting to, and using, the network.
- Direct either AEMO or another body to undertake a study on the last 50 embedded generator connections in the National Electricity Market (10kW to 30MW) to determine the costs and benefits to the network, whether the costs incurred by the network were efficient and whether the connection charges and ongoing charges reflected costs and benefits.
- Ensure that the AER actually enforce appropriate behaviour by DNSPs, including the release of adequate Distribution Annual Planning Reports.
- Reform the incentive structure for DNSPs to ensure that their profits are not reduced by reductions in energy flows or reduced requirements to augment the network. These reforms should include decoupling profits from energy throughput, but must not involve a shift to higher 'fixed charges', as these provide exceptionally inefficient price signals.

The Energy Efficiency Council is committed to working with the AEMC to ensure that Australia's energy markets support the National Electricity Objective. Unlocking the barriers to embedded generation and ensuring that investment, operation and use of generation is efficient will deliver better lower energy bills and boost the quality, safety, reliability, and security of supply of electricity.

Please contact me on 03 8327 8422 or ceo@eec.org.au should you require further information on any of the issues raised in this submission.

Yours sincerely

Rob Murray-Leach Chief Executive Officer

Attachment – detailed response to rule change



1. Need for Embedded Generator Connection Process Reform

While there is uncertainty around the exact proportion of electricity supply that will come from embedded generation in future years, it is widely agreed that embedded generation will play a much larger role in electricity supply. This means that, to meet the National Electricity Objective, it will be critical to ensure that investment in, operation of and use of distributed generation takes place in the most efficient manner.

The process for connecting embedded generators to the electricity network is currently characterised by:

- DNSPs having a high level of power, discretion and autonomy over the connection process and connection charges. DNSPs are regional monopolies that face incentives that do not encourage them to facilitate connection of embedded generation to the network.
- Significant variations in practices between DNSPs and, in some cases, *ad hoc* arrangements by particular DNSPs. While some DNSPs have engaged constructively in connection negotiations, others lack clear processes and have introduced unacceptable costs and delays into the connection process.
- A lack of clarity, transparency and fairness in the way that generators are charged for connecting to, and using, the distribution network.

This has created significant and unnecessary barriers for the deployment of embedded generation, significantly reducing the efficiency of investment in, operation of and use of distributed generation. Therefore, there is a strong case for reforms that provide greater clarity, fairness and certainty around the process for connecting distributed generation. The Draft Determination addresses a number of the barriers to efficient connection, but must be accompanied by:

- Clarification of a number of areas, such the contents of the information pack and what constitutes a reasonable fee for service;
- Much more proactive enforcement of both existing and proposed rules by the AER;
- Reform of the incentives faced by DNSPs, so that they are encouraged, or at least neutral, to supporting the connection of embedded generation; and
- Reform of the way that energy users and generators are charged for connecting to, and using the network.

2. Information Pack

The Draft Determination proposes:

each distributor is to publish an 'information pack' setting out information to guide connection applicants on the process requirements; provide example costs; and a model connection agreement. The information pack will improve the clarity and transparency of the connection requirements and allow connection applicants to more effectively participate in the connection process. (p ii)

The Energy Efficiency Council supports this proposal, but recommends a number of supporting changes. Under the current proposal the quality of DNSPs information pack could be insufficient to meet applicants needs.

Therefore, the Council recommends that the Rules state that the AER has full discretion to direct a DNSP to redevelop its information pack if it is not deemed sufficient. To support this, the Council recommendation is that the AEMC hold a workshop with DNSPs, Energy Efficiency Council members, energy users and other experts to develop minimum requirements for the contents of these information packs.

The Council notes that some DNSPs have already released guidance materials that, while not perfect, are very useful, such as Endeavour Energy's PDI 5000 and guidance materials from CitiPower / Powercor and Ausgrid. These existing materials could serve as a good starting place for the development of a national 'model information pack'.



3. Enquiry Process

The Draft Determination proposes:

a new two-stage connection enquiry process of a preliminary enquiry stage followed by a detailed enquiry stage. For connections that do not require shared network augmentation, the detailed enquiry is to be completed within three months. These provisions are to improve the timeliness and certainty of connection enquires.

The Council supports this process, including the following timelines:

Preliminary enquiry - Acknowledgement of receipt within 2 business days

- Provision of information within 15 business days

Detailed enquiry - Acknowledge the receipt within 2 business days;

 Clarification of whether the application is complete within 10 business days

 Detailed enquiry response within 30 business days for projects that do not require shared network augmentation; or four months for projects that are likely to require shared network augmentation

The Energy Efficiency Council supports these timelines as they represent a substantial improvement over the current arrangements.

However, unless the AER takes a proactive regulatory approach, DNSPs will still have multiple options for bending the rules and creating unnecessary delays. Therefore, the Council strongly urges that the AER cease derogating its responsibilities and take a more active regulatory approach.

To foster a more active compliance culture, the Council recommends that the AEMC should require DNSPs to submit a very basic annual report to the AER that sets out the times that they have taken to respond to each preliminary and detailed enquiry timeline. This will enable the AER to identify specific DNSPs that may be failing to fulfil their obligations to negotiate in good faith and make best efforts to facilitate network connections in a timely manner.

4. Application Process

The Draft Determination proposes:

under a revised connection application process, for connection applications based on 'agreed projects', a distributor will be required to make a connection offer within 20 business days. The 20 business day limit will provide certainty to connection applicants.

The Council supports the AEMC's recommendations, but believes that greater clarity must be given over what constitutes an 'agreed project', as DNSPs could use cosmetic, irrelevant or minor changes to an application to justify delays or changes to a connection agreement. As with the enquiry process, this process also needs to needs to be monitored and policed by the AER.



5. Technical Information

The Draft Determination proposes:

in the absence of automatic or minimum access standards for embedded generators for the National Electricity Market, distributors are to publish a register of generating plant that meets their minimum technical requirements. This will increase transparency and allow connection applicants to better understand the relevant requirements in connecting to a distribution network.

The Council supports this proposal, but given that this may take some time, we recommend:

- DNSPs should be required as soon as possible to list all equipment previously required, including protection and other equipment, with previously accepted equipment on the online registers;
- Energy market bodies and DNSPs should expedite both the development of automatic or minimum access standards for embedded generators and a register of generating plant that meet their minimum technical requirements
- DNSPs must <u>not</u> be allowed to use their lack of a published register (of generating plant that meeting their minimum technical requirements) as a rationale for delaying a response to a connection enquiry or refusing to offer a connection agreement.

6. Expert Appraisal Process

The Draft Determination proposes:

the introduction of an expert appraisal process will allow connection applicants or distributors to appoint an independent engineer to assist in the assessment of the reasonableness of any technical requirements and aid in the resolution of technical disputes. The costs of an independent engineer will be shared equally by the connection applicant and distributor.

The Council supports this proposal, but notes potential complexities, given the small number of experts in the space and the potential for their independence to be compromised where they undertake regular work for DNSPs or the connection proponent. Therefore, we seek a meeting with the AEMC staff to identify possible options for ensuring that independent experts are available, such as requiring experts to voluntarily sign on to a panel of independent experts. At the very least, this will provide regulators and the market with an understanding of the number of independent experts that are available.

7. Enquiry Fee

The Draft Determination proposes:

distributors will be able to charge an enquiry fee for preparing detailed enquiry responses. The enquiry fee is to recover the reasonable costs incurred by a distributor. This differs from the consultancy style 'fee-for-service' arrangements proposed under the rule change request. Connection applicants can already enter into commercial arrangements with distributors for such services. This option has not been removed by the draft rule.

The Council supports this proposal, but notes that in the past some DNSPs have charged excessive fees and /or only advised applicants of the scale of fees at the end of the enquiry. This is unacceptable and contravenes the existing clause 5.3.3(c)(5) of the National Electricity Rules, which states that the amount of this application fee should not be more than necessary to cover the reasonable costs of all work anticipated to arise from investigating the application and preparing the associated offer to connect. To address these problems we recommend that:

- Applicants be advised of the likely scale of the fee at the preliminary enquiry phase or within 10 days of receiving a detailed enquiry; and
- There must be a right of appeal to the AER; and
- In their annual report to the AER, DNSPs be required to set out the detailed enquiry charges that they have proposed and/or collected.



8. Exporting to the Grid

The Draft Determination proposes:

there are no changes to provide embedded generators with the automatic right to export electricity into the connected distribution network. Whether the network is able to safely and reliability accommodate electricity exported by embedded generators will need to be assessed during the connection application process. However, distributors are already required to use reasonable endeavours to provide an applicant with the access arrangements they seek.

The Energy Efficiency Council agrees that embedded generators should not have an automatic right to export to the grid, unless they choose to become a registered market participant.

However, we believe that the current arrangements are unacceptable and require change. DNSPs currently have far too much discretion in determining whether an embedded generator can export to the grid, and have sometimes told proponents very late in the enquiry or agreement process that export will not be permitted.

Therefore, the Council proposes changing the process so that the burden of proof lies on DNSPs if they determine that an embedded generator should not be allowed to export to the network. The Council proposes that, if a DNSP proposes to not allow an embedded generator to export to the grid, they must justify their proposal to the proponent and seek permission from the AER.

9. Augmentation costs, connection costs and network charges

The Draft Determination proposes:

there are no changes to exempt embedded generators from contributing to shared network augmentation costs. Appropriate price signals would be achieved by allocating costs to parties that benefit from a service. Also, if embedded generators were exempt from contributing to shared network augmentation costs, other users of the network would have to bear these costs.

While the Energy Efficiency Council believes that embedded generators should pay a reasonable contribution to the augmentation and maintenance of networks, the current system of charges (including augmentation charges, connection costs and network charges) is not transparent or fair and does not provide efficient price signals for investment in, operation of or use of electricity services.

The Council disagrees with the statement in the Draft Determination that embedded generators should pay for any deep augmentation costs as this would be in 'conflict with the general principle that where a user in the NEM creates a burden on a network then that user should contribute their share of the relevant cost would be created'. We do not believe that this principle, as stated, is enforced consistently, fairly, or efficiently. For example, if a large user wishes to connect to the network, they are rarely required to pay for deep augmentation costs.

Therefore, we recommend:

- In this Rule Change, the AEMC require DNSPs to inform the AER of all connection charges that they impose on embedded generators in annual reports, and gives generators a right to appeal connection charges proposed by DNSPs
- The AEMC undertake a major review of the way that both energy users and generators are charged for connecting to, and using, the network. This is a major review that is far beyond the scope of this Rule Change. This major review should take place separately from this Rule Change, and should not delay this Rule Change.
- The AEMC direct either AEMO or another body to undertake a study on the last 50 embedded generator connections in the National Electricity Market (10kW to 30MW) to determine the costs and benefits to the network, whether the costs incurred by the network were efficient costs and whether the connection charges and ongoing charges reflected these costs and benefits.