

**SUBMISSION TO THE
AUSTRALIAN ENERGY MARKET COMMISSION**

**RULE CHANGE PROPOSAL –
CONNECTION OF EMBEDDED GENERATORS UNDER
CHAPTER 5A OF THE NATIONAL ELECTRICITY RULES**



**This submission is made in response to a draft determination
by the Australian Energy Market Commission on
connection of small and medium embedded generators
under Chapter 5A of the National Electricity Rules.**

Introduction

The City of Sydney (the City) welcomes the opportunity to make a submission to the Australian Energy Market Commission (AEMC) following a rule change request submitted by the Clean Energy Council (CEC) about arrangements for connection of small and medium generators to electricity distribution networks.

(Note: Small and medium generators means embedded generators up to 5 megawatts in capacity but does not include micro-generators such as household solar installations.)

The intent of CEC's rule change proposal is to improve the connection process for small and medium generators.

These applications are conducted under Chapter 5A of the National Electricity Rules, i.e. the National Energy Customer Framework. This was introduced *inter alia* to improve certainty and transparency for small and medium ("retail") energy customers. In practice, this may include anything from a single household up to the size of a large shopping centre, education campus or industrial site.

Context

The rule change from CEC is complementary to an earlier rule change request relating to large embedded generators (generators larger than 5 megawatts that are connected to electricity distribution networks e.g. sugar mills, large solar farms).

The earlier rule change request was submitted by the Property Council and Climateworks and Seed Advisory, and was supported by the City and many other organisations.

As a result, changes are being introduced to Chapter 5 of the National Electricity Rules from October this year. The changes are expected to lead to significant improvements in the regulatory framework for connecting larger embedded generators.

Among the key elements of the CEC rule change request are:

- Improving the amount of information available to connection applicants as a matter of course and within specific time frames
- Placing a less onerous burden of costs on embedded generation proponents. This includes both the costs of making an application, and the level of costs for proceeding with the application
- Providing additional formal dispute resolution arrangements, in the event that agreement cannot be reached, or timeframes are not met

AEMC draft determination

The AEMC has now published its own preferred draft rule change and sought comment on the preferred rule change.

The City notes that the AEMC proposal differs in several respects from the proposal put forward by CEC.

In summary, AEMC's proposal is that embedded generation applicants should have the option of connecting under the newly revised Chapter 5, which are primarily aimed at larger ("wholesale") customers.

It is acknowledged that the newly revised Chapter will include a higher level of prescription as to the connection process, improves the level of clarity for both applicants and distribution networks and allows connection applicants more time to review and accept connection offers.

The opportunity to use Chapter 5 as an alternative to Chapter 5A is welcome, and is likely to be taken up by larger, more sophisticated embedded generation applicants (typically, but not exclusively, those above 500 kilowatts of generation capacity).

The AEMC also proposes to improve the level of information that is expected to be made available to all applicants as a matter of course, including for example, what embedded generation connections have been made in a particular network within a specified period.

The City also welcomes this innovation and understands that current discussions with the CEC may extend the scope of information that must be provided by distribution networks under Chapter 5A (not just Chapter 5).

The AEMC has not however addressed some other concerns raised by the CEC and appears to have a preference instead for such matters to be settled by negotiation between connection applicants and distribution networks.

Reviewing the AEMC draft determination against the CEC proposal

For the following reasons, the City believes that AEMC's preferred rule change (while welcome) does not fully meet the intent of the CEC proposal:

1 – The number of more sophisticated relatively larger applicants (typically above 500 kilowatts) is relatively small. The alternative of applying for connection under Chapter 5 (“wholesale” connections) is unlikely to be of benefit to the many more connection applicants that are in the range between 30 kilowatts and 500 kilowatts. This is, after all, sufficient to meet the base load electricity requirement for a substantial office block or neighbourhood shopping complex with a supermarket, or a very large rooftop array on a factory/ warehouse. Such applicants are collectively likely to provide most of the embedded generation in the near future.

2 – AEMC’s approach does not take sufficient account of the very marked asymmetry of power in the relationship between connection applicants and electricity networks. The opportunity to negotiate can be meaningless if it is not accompanied by sufficient prescription as to the obligations of networks - both what they must do and when they must do it.

3 - AEMC’s approach does not have sufficient regard to the reasonableness of costs, and the reasonableness of requiring small embedded generators to fund relatively large network works. There ought to be an obligation on the distribution networks to provide infrastructure that is suitable for contemporary and emerging ways of generating and supplying power. After all, networks are (and have always been) in a privileged position as monopoly providers, they have received enormous levels of funds from consumers and the public purse over time, and as the providers of essential infrastructure the regulatory framework should ensure that they plan for the future and do not preclude new, more cost-effective technologies and entrants. Accordingly, connection applicants should not be expected to fully fund deficiencies arising from past practices and reliance on a particular and increasingly obsolete form of technology i.e. large scale remotely located energy-inefficient coal fired power plants.

4 – Ultimately, the AEMC’s approach does not achieve the desired outcomes of improved certainty, shorter timeframes and greater simplicity for customers. Clearly, not all connection applications can be simply resolved; nonetheless, the introduction of standardised connection requirements (in the same manner as for micro-generators) would be a major step forward in improving the connection applicant experience. Too often, an embedded generator application represents a learning experience for a network. Embedded generation is where most new sources of energy to power our electricity grids are likely to come from in the future; it is essential that networks are ready and prepared to respond in a timely and positive manner as connection applications are made.

Additional safeguards for small and medium embedded generators

The City therefore proposes that at a very minimum the following extra obligations should be placed on distribution networks under Chapter 5A:

1 - Distribution networks should be required to develop a set of standardised connection package offers to cover major embedded generation classes, such as reciprocating gas engines, medium-scale solar installations, small hydro works etc. In the interim, the cost of distributors “learning on the job” or bringing network practices up to scratch should be borne by (or at least shared with) distribution networks. Connection applicants should not have to cover the cost on their own.

If necessary, distribution networks should allocate additional resources to the process of organisational learning and make an allowance for this in the costs of operation for which they seek approval from the Australian Energy Regulator.

2 - The scale of costs for connection imposed by networks should be contained. Essentially, they should not exceed the costs that would be incurred by a network that was appropriately designed and reasonably equipped to meet current and emerging network challenges - not the costs to fully rebuild networks (or network elements) which are close to the end of their economic life or indeed overdue for replacement or reconfiguration. Networks should not be able to transfer to embedded generators the costs for networks upgrades that would otherwise be required.

3 – Consideration should be given to introducing additional formal resolution mechanisms to hold networks to account in relation to connection applications. It is self-evident that the balance of negotiating power is firmly on the side of networks; all customers will benefit from networks becoming more responsive to and facilitative of embedded generation, as this will be an increasingly important part of the electricity supply system of the future.

Conclusion

The City thanks the AEMC for the opportunity to comment on its preferred rule change for connection of small and medium embedded generators, and the City welcomes the improvements that are contained within the preferred rule change.

However, for the reasons outlined above, the City considers that the AEMC's proposal does not go far enough in redressing the imbalance between the interests of incumbent networks and the interests of emerging small and medium scale electricity generators.

Accordingly, the City commends a number of further innovations to AEMC. In particular:

- networks should be required to introduce standardised connection arrangements for major classes of embedded generators;
- a better balance on cost obligations should be achieved between connection applicants and networks; and
- the imbalance in negotiating power should be addressed via additional dispute resolution mechanisms.

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SUBMISSION TO AEMC - - CONNECTING EMBEDDED GENERATORS UNDER CHAPTER 5A

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Mr Paul Smith
Chief Executive
Australian Energy Market Commission
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Attn: Neil Howes
By email: neil.howes@aemc.gov.au

Dear Mr Smith,

Draft Determination – Connecting Embedded Generators under Chapter 5A

The City of Sydney thanks the Commission for the opportunity to make a submission on connection of small and medium generators to electricity distribution networks.

The City welcome AEMC's proposal to give small and medium generators the option of applying to connect under the same process as larger embedded generators. The City also welcomes the AEMC's proposal to increase the information made available to connection applicants. However, the City believes AEMC's proposals do not fully meet the objective of the rule change originally proposed by the Clean Energy Council.

The process needs to be simpler, more certain and less time consuming. Accordingly, the City commends further changes for your consideration:

- networks should be required to introduce standardised connection arrangements for major classes of embedded generators;
- a better balance on cost obligations should be achieved between connection applicants and networks; and
- the imbalance in negotiating power between connection applicants and networks should be addressed via extra dispute resolution mechanisms.

Further information is set out in the City's submission. Additional detail can be provided by Chris Barrett on (02) 9265 9004 or at cbarrett@cityofsydney.nsw.gov.au.

Yours sincerely



Kim Woodbury
Acting Chief Executive Officer

Enclosure: Submission - Connecting Embedded Generators under Chapter 5A

city of villages