



8 August 2013

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

Submitted by online: [www.aemc.gov.au](http://www.aemc.gov.au)

Dear Mr Pierce

### **ERC0147 - Connecting Embedded Generators**

Origin Energy (Origin) appreciates the opportunity to provide comments to the Australian Energy Market Commission (Commission or AEMC) Draft Rule Determination for Connecting Embedded Generators. Origin has a particular interest in the framework for connecting embedded generators and experience in connecting embedded co- and tri-generation systems through Cogent, an Origin subsidiary. We recognise the draft determination by the AEMC is in addition to work undertaken and commissioned by the Department of Resources, Energy and Tourism towards facilitating the connection of embedded generation.<sup>1</sup>

Origin offers in-principle support to the initiatives to facilitate the connection of embedded generation in the draft determination. A significant amount of work is undertaken in relation to being able to develop a proposal prior to making a connection enquiry, including the accurate identification of the costs of connecting an embedded generator to a distribution network. An important element of this is the actual connection to the grid that generally has two unknown aspects: the connection costs and the time required to carry out the connection. We consider the draft determination identifies some options that could, in-principle, address these problems.

Origin considers there are practical problems with the draft determination associated with the use of definitions under the proposed Part A. The reliance on definitions, as opposed to generator size,<sup>2</sup> could potentially result in different connection frameworks applying to separate connection proponents seeking to connect an identical generating system to the grid. This is because the applicable connection framework could depend on the relevant proponent's registration status with the Australian Energy Market Operator (AEMO). The use of such definitions could also create confusion and regulatory gaps where jurisdictional differences exist between Embedded Generators, Distribution Networks and applicable Local Network Service Providers.

#### *In-principle benefits of the draft determination*

The draft determination addresses some of the barriers to the connections framework for embedded generators through proposed amendments to the connections process, provision of information and costs. Origin offers in-principle support for these amendments as they have the ability to address some of the barriers to connecting embedded generation. While we do not intend to comment on all amendments identified

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<sup>1</sup> AECOM, Mid-Scale Embedded Generation Connection Standards - Feasibility Study Interim Report, Sydney, April 2013.

<sup>2</sup> Ibid. p. 20.

by the AEMC in the draft determination we will offer some comments on the timeframe under the connections process and costs.

Origin is supportive of the two stage connections process, identified in the draft determination, as providing a mechanism to reduce the time taken to connect an embedded generator to the grid. We consider, however, that despite timeframe requirements to respond to connection proponents, these could be managed in such a way as to frustrate the timeframe requirements. In practice, this could occur through resetting time periods which would effectively delay responses to connection proponents. Consequently, there is the potential for the connections process to literally run for an indeterminate period of time.

Origin considers there is a wide disparity in relation to generator connection enquiry costs. In some instances, these costs can range from as low as \$5,000 to as high as \$20,000. Proponents incur relevant connection enquiry costs irrespective whether their proposed connection is approved. Origin recognises that different networks, as well as projects, will have different costs. We consider, however, that it appears unreasonable that these costs should vary 3 or 4 fold between different applications, as has been observed.

Origin considers the cost of connection fees could act as a disincentive and barrier to connecting embedded generators. The Commission has noted that negotiated services, such as enquiry fees, are not regulated by the AER, falling outside of the direct control of classification for distribution services included in the revenue determination process.<sup>3</sup> An option could be to fix a maximum cost for an enquiry fee. The establishment of a maximum cost for the enquiry fee could allow the connection proponent to budget a more accurate or manageable figure in project costs that could also assist in shortening the periods required for obtaining an offer to connect.

Origin recommends, with a view to aiding compliance, that the AEMC require Distribution Network Service Providers (DNSPs) to submit an annual report to the Australian Energy Regulator (AER) that sets out the fees and charges they have invoiced and the time taken to respond to each preliminary and detailed enquiry timeline. This could enable the AER to identify specific DNSPs that may not be meeting the targeted timeframes and to negotiate in good faith to facilitate network connections in a timely manner.

Origin considers that embedded generation could assist in potentially deferring the need for network augmentation and the associated cost to the market. We consider a register or map of the fault level headroom at network connection points be published and regularly updated, perhaps as part of a DNSPs Annual Planning Report. The provision of this information may allow the connection proponent to better understand the network and any potential contribution the generator may make to local fault levels. The proponent will therefore be better placed to target its connection enquiries to network areas that are more likely to lead to approval for it to connect.

#### *Interpreting definitions under the National Electricity Rules*

The Commission is to implement the draft determination through a carve-out of Chapter 5 of the National Electricity Rules (NER or Rules) through the proposed Part A. By electing to insert a carve-out of Chapter 5, as opposed to developing a separate chapter for mid-scale embedded generation, we consider the Commission has increased the complexity

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<sup>3</sup> AEMC 2013, Connecting Embedded Generators, Rule Determination, 27 June 2013, Sydney. p. 78.

under Chapter 5. The use of ambiguous definitions to support the carve-out also increases the potential for misinterpretation under the Rules.

The use of definitions to capture connection proponents under the embedded generator connections framework could lead to inconsistent treatment of generator proponents. To be processed under Part A, a participant would be required to be unregistered. While individual generation systems may be eligible for exemption from registration, a business may seek to register with AEMO for legitimate business reasons. In this instance, two separate connection proponents seeking to connect identical generating systems could be processed under separate connections frameworks depending whether they are registered with AEMO. Such inconsistent treatment of proponents runs counter to the objective of reducing barriers to connecting embedded generators.

Under the proposed Part A, an Embedded Generator connecting to a Distribution Network is to direct connection enquiries to the Local Network Service Provider (LNSP). We consider there is the potential for misinterpretation of the definitions under the Rules as to the type of generation system that could be classified as an Embedded Generator as opposed to the embedded generation system envisaged under the proposed embedded generator framework. In circumstances where a LNSP is not classified as a DNSP, it may be unclear as to which connection framework (Part A or Chapter 5) is applicable. Such regulatory confusion will further undermine the objective of reducing barriers to connecting embedded generators.

#### *Conclusion*

Origin offers in-principle support for the AEMC draft determination for connecting embedded generators. The amendments identified could enhance the connections process through the provision of information and providing greater certainty around the costs of connecting an embedded generating system to the grid.

However, by implementing the connections framework through a carve-out under Chapter 5, relying on definitions rather than a quantifiable size of a connecting generating system, we consider the proposal could increase the complexity of Chapter 5, leading to the potential inconsistent application of the proposals and other unintended consequences.

Should you have any questions or wish to discuss this information further, please contact Hannah Heath (Manager, Wholesale Regulatory Policy) on (02) 9503 5500 or [hannah.heath@originenergy.com.au](mailto:hannah.heath@originenergy.com.au).

Yours sincerely,



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