

18 June 2012

The Presiding Commissioner  
Productivity Commission  
Inquiry into Electricity Network Regulation  
GPO Box 1428  
Canberra City, ACT, 2601  
Sent electronically: [electricity@pc.gov.au](mailto:electricity@pc.gov.au)

Dear Sir/Madam,

**RE: Inquiry into Electricity Network Regulation**

I am writing to you with regards to the forthcoming *National Electricity (Retail Connection) Amendment Rules 2010* (amendment). This legislative change will be incorporated into the National Electricity Rules (Rules) as a component of the wider *National Energy Customer Framework* legislation package for commencement on July 1 2012.

We hope that you are able to consider this letter as a supplementary note to our previous detailed submission to your inquiry. In particular the discussion in Section 4 of our submission is of relevance. Publication of this letter is not necessary.

In particular the amendment changes the way in which embedded generators connect to distribution networks within the NEM<sup>1</sup>. For some time now embedded generator developers have faced barriers related to the connection process. Generally these can cause significant delays and disproportionately high costs but they also can often be project-breaking, and are almost always counter-productive and inefficient.

Usually these barriers stem from the inability to negotiate effectively with distribution network service providers (DNSP) because these businesses do not see any material benefit from the connection process. However, the breadth and impact of this issue is far too large for this letter. I refer you to the Victorian Competition and Efficiency Commission's (VCEC) *Inquiry into Feed in Tariffs and Barriers to Distributed Generation*<sup>2</sup> for more comprehensive detail. Their draft report is available and the final is due for release in mid-July.

The following sections detail our concerns with the amendment.

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<sup>1</sup> Embedded generators for this purpose are rated to sub 5 megawatt, but greater than 100kW and connected to a distribution system.

<sup>2</sup> <http://www.vcec.vic.gov.au/CA256EAF001C7B21/pages/vcec-inquiries-current-inquiry-into-feed-in-tariffs--barriers-to-distributed-generation>

## Development of the amendment

CEC members have raised serious concern about the way in which the amendment was developed in consideration of the potential impact that this change will have on their businesses.

The objective of the amendment was to simplify the way in which customers and embedded generators connect across the NEM. While we welcome restructuring of the currently fragmented jurisdictional approaches to connections, we also recognise that there is an urgent need for reform to the frameworks for the connection of new embedded generators (as demonstrated by the VCEC).

The consultation process for the amendment was undertaken through the National Energy Customer Framework package under the direction of the Ministerial Council on Energy (now DRET).

I'm sure you are aware that the usual path for amendments to the Rules is through the AEMC. As a result of this alternative development pathway the consultation process went unseen by embedded generation proponents. It was however very well informed by DNSPs.

As observed by VCEC, and widely understood by the industry DNSPs have the capacity to game generator connections as a result of full cost pass-through arrangements. They also are strongly incentivised to meet customer supply obligations. But they do are not incentivised to meet a generator connection applicant's objectives of economically efficient connection arrangements is achieved in conjunction.

The consultation process was flawed and an asymmetric outcome has resulted.

## Outcomes

The CEC has a number of concerns in relation to the outcomes of the consultation process as the amendment as written.

### Issue 1: Access Provisions

There is some discrepancy between the wording that is used in the amendment and that which is used in other parts of the Rules relating to generator connections (Chapter 5 in particular which relates to registered generator connections. Note that this process is not affected by the amendment but is used here as a benchmark example).

The relevant statements include:

- Chapter 5 - One of the stated purposes of Chapter 5, in 5.1.2 (a) (2) (iii) is "to address a Connection Applicant's reasonable expectations of the level and standard of power transfer capability that the relevant network should provide". This expression "power transfer capability that the relevant network should provide" is used throughout Chapter 5.

- Amendment - Schedule 5A.1 Part A (a) (2) states that a connection offer must amongst other things contain “the maximum capacity of the connection”. The meaning of “connection” is not clear<sup>3</sup> - however this maximum capacity appears to relate to a point outside the *distribution system*.

Chapter 5 also makes quite clear that the network service provider must use ‘reasonable endeavours’ to provide the distribution network user access arrangements that are being sought by the connection applicant. The amendment does not.

The clause above taken from the amendment does not obligate the DNSP to provide capacity in the *network* for the generator to export its energy through the network’s *power transfer capacity* – this is only defined at the generator’s *connection point*.

While this is a subtle difference it is one which absolves the DNSP of any responsibility to enable embedded generators to sell the energy they generate.

The ‘open-access’ arrangements in the NEM mean that a generator’s energy must be sold to a retailer, in the market or used on site. The wording in the amendment implies that there is no mechanism in place to ensure that the generator can get its energy to the market at all. Investment in a generation project is unlikely when there is little to no confidence that that the generator can return sufficient revenue.

Not only is this expected to have a significant impact on future embedded generator investment. It also goes against the current views of the AEMC and other market participants as expressed in the Transmission Frameworks Review. This review is targeting options for a future NEM structure. Options which are almost completely focussed on providing generators with firmer access rights, not reducing access rights as proposed by the amendment.

## Issue 2: Connection Charges

The amendment also makes provision for the DNSP to charge an embedded generator connection applicant for augmentation to the network on the basis that it is needed for load growth. This charge may be recovered within 7 years *if* sufficient new load connects.

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<sup>3</sup> The exact meaning of “the maximum capacity of the connection” is not clear because the defined term “connection” has not been used, however assuming that the defined meaning of connection should be used i.e.

- “*connection* means a physical link between a *distribution system* and a *retail customer's* premises to allow the flow of electricity.” and
- “*distribution system*, A *distribution network* together with the *connection assets* associated with the *distribution network*....”

The “maximum capacity of the *connection*” means the maximum capacity of the physical link between a *distribution network* together with the *connection assets* and a *retail customer's* premises to allow the flow of electricity.

I remind the Commissioner that DNSPs earn their regulated revenue based in part on their forecasts of network augmentation required for load growth. They then carry the risk and are rewarded for doing so with the reward being the driver to ensure that a DNSP's load growth forecasts are reasonable and accurate.

The amendment creates the opportunity for DNSPs to transfer the financial risk of network expansion on to connection applicants.

This anomaly has the capacity to substantially increase the connection costs for many embedded generator connections. As connection applicants also do not have access to a DNSP's planning information there is little chance to contest a requirement placed on a connection for this additional cost.

Thus, the amendment creates counter-productive incentives for both efficient connections and network investment.

### Issue 3: Combined Impact

I now ask the Commissioner to consider the combined impacts of Issues 1 and 2.

Firstly, the DNSP can force the connection applicant to fund upgrades to the network but there is no corresponding obligation ensuring that there is capacity in their network. Therefore, the connection applicant does not retain any right to utilise the additional capacity which they have funded to create.

The compounding of these two issues clearly breaches of the intention of the NEM's open-access arrangements and confuses the responsibilities of the parties involved.

### Issue 4: Unresolved Barriers

As the Commissioner will note by reviewing the referenced work by the Victorian Competition and Efficiency Commission there are a great deal many barriers to the expansion of the small to medium scale embedded generation industries.

The vast majority of these barriers stem from information asymmetries and the misalignment of objectives between DNSPs and connection applicants. The creation of the amendment has made absolutely no regard to these barriers in its development and finalisation.

### **Summary**

A changing policy landscape has seen significant interest generated in the commercial solar and cogeneration industries along with other emerging technologies including community wind and ocean wave projects. The explosion of the solar industry alone is a great example of the massive potential for embedded generation in Australia.

Yet, somehow counter-productive processes to amend the Rules have imposed additional barriers to connections and the continued development of such an industry. We expect that the amendment as written will create many conditions where projects which may be viable today, will no longer be viable after July 1.

While we agree with the objective of having national standardised connection agreements for small generators or customer connections as intended by the amendment. We feel that this is a clear-cut case of failed regulatory processes. The intended outcome has been compromised by deficiencies in relation to the generator access provisions, a failure to recognise existing issues and the creation of new large barriers to connections.

We urge the Commission to seriously consider recommending that the implementation of this amendment be delayed and consultation be re-commenced. As a result a wider range of participants can contribute to collect a balanced view.

We note that three of the NEM participant states have refused to implement the National Energy Customer Framework citing customer protection as their key concern. Despite this the amendment will be written into the Rules as of July 1. We see that there is an opportunity to stall the implementation of the amendment and undertake consultation immediately. This could then be finalised prior to the full commitment to all states agreeing to implement the National Energy Customer Framework.

Yours sincerely,

**Tom Butler** | Network Specialist