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Mr John Pierce
Chair
Australian Energy Market Commission
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Our Ref:

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Dear Mr Pierce

DPI submission on embedded generation connection rule change proposal

The Victorian Department of Primary Industries (DPI), as the portfolio agency responsible for energy market development in Victoria, is pleased to make this submission in response to the Australian Energy Market Commission's consultation paper on the rule change request received from Climate Works Australia, Seed Advisory and the Property Council of Australia on the connection of embedded generators.

Any queries in relation to the submission should be directed to myself by email at mark.feather@dpi.vic.gov.au or by phone on (03) 9658 4793.

Yours sincerely

Mark Feather
Executive Director
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SUBMISSION TO THE AEMC'S CONSULTATION PAPER (ERC0147)

National Electricity Amendment (Connecting embedded generators) Rule 2012

The Victorian Department of Primary Industries (DPI) welcomes the opportunity to make a submission¹ to the Australian Energy Market Commission's (the Commission's) Consultation Paper on the rule change request received from ClimateWorks Australia, Seed Advisory and the Property Council of Australia (the proponents).

In this submission, we have provided comment on:

- Information requirements;
- Technical standards;
- Right to connect to the grid;
- Optional fee for service; and
- Shared network augmentation costs.

We have focused our submission on embedded generators up to 5 MW which represent the majority of applications for grid connection in Victoria. These projects often experience a greater level of difficulty in seeking approval to connect to the grid.

Information requirements

DPI supports the publication of information on the connection process by network service providers, but notes the overlap with the distribution network planning and expansion framework. In particular DPI supports the publishing of the following information as outlined in the rule change request:

- Detailed information on the process to connect to the grid to be provided on the websites of DNSPs.
- Information on offers to connect, including a breakdown of connection charges.
- Greater clarity of the 65 day time limit for consideration of applications to connect and how it is applied².

The timeframes required for a decision to be made by the distributor are a source of concern for proponents of embedded generation projects. Distributors often fail to meet these time limits and there is a view from embedded generation proponents that delivery dates for connection offers are either not provided or not adhered to. Consideration should be given to implementing and enforcing a regulatory timeframe for connection offers.

¹ The Victorian Competition and Efficiency Commission (VCEC) completed an inquiry into distributed generation (September 2012) which recommended the Victorian Government prepare a submission to this rule change process. In particular, this submission relates to VCEC's recommendations 5.1 and 6.1.

² In Victoria a 65 day limit is a condition of the Victorian electricity distribution licence, section 7.1. However how this is communicated to proponents and how it is enforced is not clear.

Increasingly, parties are seeking to connect embedded generators to the electricity network that do not have a detailed understanding of the electricity supply system and impact of the connection of embedded generators on the electricity supply system. Any information published by the network service providers needs to be written in plain English to facilitate this understanding. In the absence of this information, significant costs are imposed by those interested in connecting to the network on a range of parties, including DPI, to explain the connection process.

Stakeholders would benefit from more information about the role of the Australian Energy Regulator (AER) in assisting with connection disputes. DPI is aware that many embedded generation project proponents are not contacting the AER in relation to disputes over connection.

Technical standards

DPI supports in principle the development of technical standards for medium-scale embedded generators up to 5 Megawatts (MW). When Chapter 5A of the National Electricity Rules (NER) is enacted in Victoria, these embedded generators will be connected to the distribution network in accordance with Chapter 5A.

DPI also notes that the proponents have not included an actual proposed technical standard or suggestions of how it may be developed or by whom. DPI would support the development of technical standards that can be considered for connecting medium-scale embedded generators, noting that a range of technical standards will be required to accommodate the diversity in generators. The standards development should be overseen by the AEMC and may involve Standards Australia.

Right to connect to the grid

DPI supports in principle the right of embedded generators to connect to the grid. However, this right to connect should not have an adverse impact on the reliability and security of supply to other customers nor impose undue costs on other customers. In particular care should be taken that an automated right to connection does not result in increased network costs for customers, particularly on the basis of theoretical new connections to the network system causing reliability and security of supply issues. Embedded generators up to 5MW are automatically exempted from registering with AEMO as a generator and will therefore be connected in accordance with the new Chapter 5A, once enacted in Victoria. DPI notes that while each small embedded generator (of capacity less than 5MW) in isolation has a relatively small impact on the system, the aggregate impact of 23 potential embedded generators for the CBD, Docklands and city fringe areas³ is more significant, particularly with the existing fault levels in these areas.

Chapter 5A provides for the development of a standard connection service. As the volume of a particular type of embedded or distributed generator increases, it will become more efficient to develop a standard connection service under Chapter 5A rather than to negotiate individual connections. The development of a standard connection contract is likely to be a time consuming

³ Climate Works, Seed Advisory, Property Council of Australia, *Submission to the Australian Energy Market Commission: Proposal to amend the National Electricity Rules for connecting embedded generators*, April 2012, page 19

process and would need to focus initially only on those sizes and types of generators which are being installed in high volumes, such as natural gas fuelled cogeneration systems less than 5 MW.

Optional fee for service

The proponents have proposed that an optional fee-for-service be introduced to provide a greater incentive to collaborate with an applicant on a connection application. The proposal is modeled on Chapter 5A which allows the Distribution Network Service Provider (DNSP) to charge a reasonable fee to cover expenses, directly and reasonably incurred by the DNSP, in assessing the application and making a connection offer.

It is noted that there is already a similar provision in Chapter 5. Rule 5.3.3(c)(5) states that the Network Service Provider must provide to the Connection Applicant written advice on the information required to assess an application to connect including the amount of the application fee which is payable on lodgment of an application to connect, such amount not being more than necessary to:

- i. cover the reasonable costs of all work anticipated to arise from investigating the application to connect and preparing the associated offer to connect; and
- ii. meet the reasonable costs anticipated to be incurred by AEMO and other Network Service providers whose participation in the assessment of the application to connect will be required.

DPI supports the facilitation by AEMC to enable a voluntary fee for service approach to connections by ensuring no regulatory barriers are in place to such an approach. One option may be to introduce a flat fee per MW for all connections up to 5MW that reflects the average cost to the distributor. Such an arrangement would provide greater certainty for embedded generation proponents.

Shared network augmentation costs

DPI supports providing clarity on the cost sharing arrangements that would support a right for medium-scale distributed generators up to 5MW to connect and export. This includes details on cost components and how these are calculated.

DPI notes that the proponents appear to be of the view that shared network augmentation costs cannot be recovered from embedded generators in Victoria. This is not correct.

Under Section 3.2 and Section 3.3 of the Essential Services Commission of Victoria "Electricity Industry Guideline No 14", distribution businesses are entitled to recover a capital contribution from customers in circumstances where the incremental cost in relation to the connection offer is greater than the incremental revenue.

The incremental costs in respect of any augmentation are calculated as the difference between the incremental costs the distributor will incur in undertaking the augmentation at an earlier date as a result of the customer having connected to the distribution system, and the incremental costs the distributor would otherwise incur in undertaking that augmentation at a later date (see section 3.3).

As such, in these limited range of circumstances, the distribution business is entitled to levy an upfront capital contribution from the customer.

Outside of the need for a capital contribution in these limited circumstances, DPI agrees in principle with the position that the costs of connection should not include shared network augmentation costs. In particular, the introduction of deep connection charges have the potential to impose significant costs on individual customers with respect to augmentations that may benefit other customers in the future.

DPI also notes that the current Victorian regime does not allow the connection charge to include deep augmentation charges for embedded generators.⁴

It is however important to note that whilst deep connection charging is undesirable and potentially discriminatory, there will be circumstances where connecting parties such as large loads or connecting generators may trigger significant shared network augmentation costs on the distribution system. In view of this, consideration needs to be given to mechanisms under which a *proportion* of these costs can be targeted back to these parties. In the absence of such a mechanism there is a risk that embedded generation connections are subsidised by all customers without regard to the costs that they may be imposing on the network.

DPI therefore considers that there is merit in developing mechanisms that ensure that there is improved targeting of the shared network augmentation costs that embedded generators may cause. Perhaps the most efficient option is to provide for annual use of system charges to embedded generators set to recover the long run cost of augmentations. In effect, this would be a form of generator use of system charge, a concept that has not been embraced to date in the National Electricity Market. Nevertheless, this would be a more transparent, efficient, equitable and certain way of targeting costs to the shared network which are driven by the connection of embedded generators. DPI notes more generally, that the AEMC is considering the concept of generator charging in the context of the electricity Transmission Frameworks Review. To the extent that proposals are developed for generator charging in this review, consideration should be given to applying these principles to all classes of generators.

⁴ Clause 3.3.2(b)(1)(B), Essential Services Commission. Connection of embedded generation (guideline no. 15 - electricity industry). On The Web, July 2004.