

9 August 2012

Mr Steven Graham
PO Box A2449
Australian Energy Market Commission
Sydney South NSW 1235

Dear Steven

AEMC Consultation Paper - National Electricity Amendment (Connecting embedded generators) Rule 2012.

Please find below ETSA Utilities' response to the 'Proposal to amend the National Electricity Rules for connecting embedded generators' (rule change request) submitted by ClimateWorks Australia, Seed Advisory and the Property Council of Australia (proponents) and the associated AEMC Consultation Paper.

ETSA Utilities is responsible for a major and essential part of South Australia's infrastructure, with the electricity distribution network delivering electricity to more than 829,000 South Australian customers. As a monopoly electricity distributor, ETSA Utilities is required to provide a specified level of service in return for a reasonable commercial return. This outcome is overseen through economic and service regulation, administered by the Australian Energy Regulator (AER) and the Essential Services Commission of South Australia (ESCoSA).

The process for connecting embedded generators to the distribution network should be in line with the National Electricity Objective (NEO) "to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers". Any potential benefits that the increased connection of embedded generators may bring to consumers and markets must be assessed against the challenge of maintaining a safe, reliable and secure electricity distribution network.

ETSA Utilities' key messages

- ETSA Utilities supports the uptake of embedded generation, demonstrated through in excess of 320MW of embedded generation (both export and non-export) connected to our distribution network (Note the South Australian peak demand is 3,424MW);
- ETSA Utilities will continue to assist embedded generators to ensure they achieve a connection to the distribution network that meets their requirements and also maintains the safety and security of the network for our other customers;
- ETSA Utilities believes that a well documented connection process and clearly defined technical requirements may further encourage the uptake of embedded generation;
- ETSA Utilities maintains that the cost of any distribution network upgrade required to accommodate a specific embedded generation connection must be met by that embedded generator. The exception to this is as per section 7 of the AER's Connection Charging Guideline, such that "the DNSP's normal asset management

may lead to a DNSP funding such shared network augmentation if there is a demonstrable net benefit to other network users"; and

- ETSA Utilities, as a member of the Energy Network Association (ENA), wholly supports the ENA position on this rule change request.

ETSA Utilities response to the AEMC Consultation Paper

With respect to the specific questions raised within the AEMC Consultation Paper, ETSA Utilities completely endorses the response presented by the ENA in their submission on this subject.

ETSA Utilities' response to a selection of the questions in the AEMC Consultation Paper is presented as Attachment 1.

ETSA Utilities position on the proponents' rule change request

With reference to section 5 of the proponent's rule change request, ETSA Utilities agrees with the following principles:

- National technical standards for the actual generation plant and protection and control equipment (described in section 5.1). Note this does not constitute ETSA Utilities' support for an automatic right of connection to the Network;
- A stream lined connection process (described in section 5.2);
- Optional fee for service for the distribution network service provider (DNSP) (described in section 5.3); and
- Publishing of an annual report on network capacity (described in section 5.4)

ETSA Utilities maintains that the majority of the improvements listed above are covered in some manner by current or proposed reforms (NECF, DSP3, RIT-D).

ETSA Utilities does not agree with the following components of the rule change request and believes that they do not contribute to the NEO:

- An automatic right to connection for embedded generators (described in section 5.1); and
- A standardised unit charge for augmentation in relation to connection charges (described in section 5.2).


ETSA Utilities considers that an automatic right to connection cannot exist with respect to embedded generators as one size does not fit all and the impact that embedded generators can have on the safety and security of supply of the Network can be significant and in any case always needs to be examined.

The NEO would require embedded generators to pay for the augmentation required to connect the embedded generators where the costs exceed the benefits to customers. Exceptions, where the benefits to customers exceed the costs of connecting the embedded generators, should be handled as part of the DNSP's normal asset management strategy and any regulatory obligations regarding demand management.

ETSA Utilities' detailed response to the rule change request is included as Attachment 2.

ETSA Utilities appreciates the opportunity to provide comment on this rule change request and AEMC Consultation Paper and we look forward to continued dialogue on this matter. Should you wish to discuss any aspects of our response further, please contact Grant Cox on (08) 8404 5012.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Sean Kelly', with a long horizontal flourish extending to the right.

Sean Kelly
GENERAL MANAGER CORPORATE SERVICES

Attachment 1: ETSA Utilities' response to questions raised in the AEMC Consultation Paper
Attachment 2: ETSA Utilities' detailed response to the proponents' rule change request

Attachment 1

ETSA Utilities' response to questions raised in the AEMC Consultation Paper

The following responses are in addition to the response provided by the ENA, and reflect ETSA Utilities' specific experiences in our role as the DNSP in South Australia.

Question 3 Publishing details of information requirements

(a) What are the costs and benefits to distributors and embedded generators in requiring distributors to publish information on its connection process including an application form and information on application fees and calculation of connection costs?

In ETSA Utilities' opinion the costs are the time and effort spent by the DNSP in publishing their information requirements. The benefit to both the DNSP and the Customer is a reduction in time and effort during the preliminary enquiry phase, as both parties should be adequately informed of the DNSP requirements.

In recognition of this benefit to distributors and embedded generators, ETSA Utilities has, since 2005, published on its website guidelines on the connection of generators to the network and will update these to reflect the new Chapter 5A of the NER.

Question 7 Providing an offer to connect within 65 business days

(a) What are the factors that affect the timeframe within which offers to connect may be made? What are the factors that impact the process for negotiating negotiated access standards?

In ETSA Utilities' experience the following factors contribute to the time taken to prepare an offer to connect:

- Extent of involvement with the impacted transmission network service provider (TNSP);
- Complexity of the augmentation works that are required to be met by the Customer;
- Negotiation between the DNSP and the Customer regarding generator performance standards. The lack of a suitably qualified consultant advising the Customer has the potential to cause lengthy delays; and
- Negotiation between the DNSP and the Customer regarding the terms and conditions of the offer, in particular indemnity and liability clauses.

In situations where the timeframe is likely to exceed ETSA Utilities' obligated timeframe for response, ETSA Utilities always aim to be upfront with Customers regarding the expected timeframe for the provision of an offer to connect and are open to negotiations.

Question 8 Terms and conditions of connection

(a) How are the current provisions under clause 5.3.6(b)(2) being applied? That is, are the terms and conditions for connection of the kind as set out in schedule 5.6?

The terms and conditions for any offer to connect that ETSA Utilities prepares is in line with ETSA Utilities' commercial and governance risk profiles. This captures the NER clauses 5.3.6(b)(2) and Schedule 5.6.

In addition ETSA Utilities has adopted a standard suite of terms and conditions for various class and type of generators to be used as a starting point for negotiations. This not only has benefits for ETSA Utilities but also provides a simplified process for customers who have previously agreed on one of the standard documents.

Question 10 Embedded generators having an automatic right to export to the grid

(a) Under what circumstances have embedded generators not been allowed to export electricity to the network?

In ETSA Utilities experience, embedded generators have been allowed to export electricity to the network where:

- The appropriate network analysis has been undertaken to confirm the safety and security of the distribution network;
- Any required network augmentation to facilitate the export of electricity has been undertaken; and
- A Network Connection Agreement, including a maximum export capacity, has been signed by ETSA Utilities and the Customer.

The success of the above simplified process is demonstrated through the fact that ETSA Utilities has approximately 300MW of export embedded generators connected to our distribution network.

ETSA Utilities is adamant that neither an automatic right to export to the grid nor an automatic right to connection should exist for embedded generators.

A 'one size fits all' approach is not valid for embedded generators of the size that is being contemplated by the proponents, ie up to 30MW. For example even a 5MW embedded generator would have a greater capacity than a large number of ETSA Utilities' substations and the automatic right to connection for an embedded generator of this size would cause considerable network and other customer issues.

Attachment 2

ETSA Utilities' detailed response to the proponent's rule change request

Section 5.1 – Develop automatic access standards for embedded generators

- ETSA Utilities supports the publishing of automatic access standards for the generating units and associated protection and control equipment only. This will simplify the process of assessing the generating system that is to be installed, which is one part of the assessment process.
- The second component of the assessment process is to determine the potential impact on network safety and security of supply and any augmentation required to address this. As this assessment must be done on a case by case basis there is no opportunity to allow an automatic right of access.
- An example of the success of a standard such as this is AS4777 (Inverters), which governs the generating units themselves but does not address the network impact.

Section 5.2 – A streamlined connection process

Timeframes, Standard Information Requirements and Contract Terms

- ETSA Utilities believes that the underlying principle for this component of the rule change request is the concept of an 'informed customer'. That is a customer who understands not only the timeframes of the application process but also what information is reasonably required from them and the terms and condition of any possible connection.
- Furthermore the new Chapter 5A of the NER, specifically Clause 5A.C.3(a)(3), requires that "*Distribution Network Service Provider must provide the connection applicant with information the connection applicant reasonably requires in order to negotiate on an informed basis*".
- On enactment in the South Australian Parliament, ETSA Utilities will meet all our obligations under the new Chapter 5A, and in doing so we believe we will meet the intent of this component of the rule change request.
- It is ETSA Utilities' opinion that a streamlined connection process will be provided through the new Chapter 5A and as such this component of the rule change request is superfluous.

Connection Charges

- ETSA Utilities maintains that the cost of any distribution network upgrade required to accommodate a specific embedded generation connection must be met by that embedded generation Customer. The exception to this is as per section 7 of the AER's Connection Charging Guideline "*the DNSP's normal asset management may lead to a DNSP funding such shared network augmentation if there is a demonstrable net benefit to other network users*".
- With respect to this rule change request and the proponent's claim for standardised unit charges for augmentation, it is ETSA Utilities' opinion that unless a contractual obligation is in place with the embedded generators, the embedded generators will

still require to rely on the Network to supply their capacity in the event of a failure of the embedded generators, ie there is no reduction in peak demand. With no reduction in peak demand there is less practical to be a net benefit to justify a higher price for other customers.

- ETSA Utilities also notes and supports the AER's final decision on connection charge guidelines.

Section 5.3 – Optional Fee for service payable to DNSPs

- ETSA Utilities supports this concept and believe that where the Customer engages the DNSP as early as possible then any embedded generation component of the project is more likely to be delivered successfully.

Section 5.4 – DNSPs required to publish an annual network capacity report

- ETSA Utilities publishes the Electricity System Development Plan (ESDP) in accordance with section 2 of the ESCOSA Electricity Industry Guideline No. 12 - Demand Management for Electricity Distribution Networks. The ESDP contains substantial information on network capacity and planning methodologies.
- As noted by the proponent, this requirement of the rule change request is unnecessary as it is already covered under the "AEMC's Draft Rule: National Framework for Electricity Distribution Network Planning and Expansion", which requires DNSPs to publish an Annual Planning Review identifying capacity constraints.